#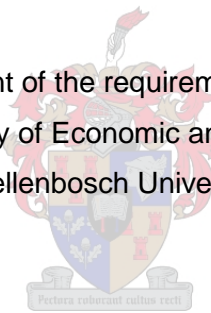 Managerial and leadership considerations for the process of integrating small innovation acquisitions at the team level

by

Katelyn Ann Anderson

Thesis presented in fulfilment of the requirements for the degree of Master of Commerce in the Faculty of Economic and Management Sciences at Stellenbosch University

Supervisor: Prof Gert Human

Co-supervisor: Dr Awie Vlok

April 2019

QUOTATIONS

How wonderful it is that nobody need wait a single moment before starting to improve the world.

ANNE FRANK

The essence of the independent mind lies not in what it thinks, but in how it thinks.

CHRISTOPHER HITCHENS

DECLARATION

By submitting this thesis electronically, I, Katelyn Ann Anderson, declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

April 2019

DECLARATION REGARDING TECHNICAL CARE

Herewith, I, Katelyn Ann Anderson, declare that my final research script has been consulted regarding technical care and language by language editor, Clerissa Visser.

Contact details of Clerissa Visser:

Date: November 2018

DECLARATION REGARDING ETHICAL CLEARANCE

Herewith, I, Katelyn Ann Anderson, declare that ethical clearance was obtained from the Research Ethics Committee (REC) in order to conduct the research. See Addendum A at the end of this document on page 307 for proof of ethical clearance.

Ethics Reference Number: ONB-2018-6702

Date: January 2019

ABSTRACT

The subject of innovation inspires much inquiry due to its lucrative and strategic applications in industry, its exciting means of continually engaging consumers as well as its potential to create a desirable basis for a modern competitive advantage. The mergers and acquisitions (M&A) literature shows that these transactions are increasingly driven by innovation, which may be undertaken for the purpose of acquiring innovative value offerings, for instance. Scholars submit that commercialisable, innovative value offerings are most effectively created through an innovation execution process undertaken by a skilled innovation team. Among the prescriptions for developing this team is the undertaking of a small innovation acquisition. Yet, M&A are known for their high rate of failure; one common cause is the strategy and implementation of the post-acquisition integration process (PAIP), which is arguably the most problematic stage of the M&A process. Scholars advance that, for successful integration to be achieved, forms of both management and leadership are necessary. As the PAIP is a common cause of failure in M&A, it is likely necessary that this process of integrating the small innovation acquisition at the team level requires attention by the managers and leaders of the team.

As it pertained to the team level of post-acquisition integration, the existing research was found lacking. As such, the study had the overarching aim to explore managerial and/or leadership considerations for the process of integrating small innovation acquisitions (with more than one individual) at the team level. A cross-case study was undertaken with three cases selected through purposive sampling; these cases availed five research subjects with managerial and/or leadership responsibilities in their teams to the study, all of whom acquiesced to participate anonymously. These cases are referred to as "Egypt", "Greece" and "Rome" to protect the identity of the organisations, natural persons and innovations examined within these cases. The reviewing of literature led to devising an in-depth, semi-structured interview guide with which the research subjects were interviewed and probed. The data collected through the audio-recorded interviews was transcribed verbatim and analysed using interpretative phenomenological analysis. This presented eight key thematic findings that were of interest across two or more of the cases studied.

The cross-case key thematic findings that emerged from the primary research were: unaltered process approach; relationship-building as integration; innovative teams need complementary skills; weekly meetings manage expectations; founder-only meetings; entrepreneurs want autonomy; team consensus; and technology readiness level. These were translated into recommendations for team level integration managers and leaders with a view to benefit future integrations. The main contribution of this study is in its exploration of an underrepresented area. Thus, it contributed findings regarding managerial and/or leadership considerations for team level integrations of small innovation acquisitions and served to initiate a dialogue about the subject.

As M&A often fall prey to failure as a result of unsuccessful PAIPs, this study was undertaken to endeavour to further the collective knowledge of researchers and practitioners undertaking the PAIP, with a focus on integration at the team level. It identified how three cases of small innovation acquisitions, partial or full, can provide a starting point for enlightening other organisations. A failed innovation acquisition may lead to eroding the value of the investment as well as strained relationships with the acquired organisation. To honour the innovation that consumers will purchase and the individuals who made that value offering possible, small innovation acquisitions should be given more attention in future studies and practice.

Keywords: innovation; innovation execution process; innovation acquisitions; leadership; management; mergers and acquisitions; post-acquisition integration process; teams.

OPSOMMING

Die onderwerp van innovasie trek aandag as gevolg van die winsgewende en strategiese toepassings in die bedryf, die opwindende manier om voortdurend verbruikers te betrek, asook die potensiaal om 'n wenslike basis vir 'n moderne mededingende voordeel te skep. Die literatuur van samesmeltings en verkrygings toon dat hierdie transaksies toenemend deur innovasie gedryf word; dit kan byvoorbeeld onderneem word om innoverende waardeaanbiedings te verkry. Geleerdes beweer dat kommersiële, innoverende waardeaanbiedings mees effektiewelik geskep word deur 'n innovasie-uitvoeringsproses wat deur 'n vaardige innoveringspan onderneem word. Een van die voorskrifte vir die ontwikkeling van hierdie span is die onderneming van 'n klein innovasie-verkryging. Tóg is samesmeltings en verkrygings bekend vir hul hoë persentasie van mislukking; een algemene oorsaak is die strategie en implementering van die ná-verkryging integrasie-proses, wat waarskynlik die mees problematiese stadium van die samesmeltings-en-verkrygings-proses is. Geleerdes stel voor dat, om suksesvolle integrasie te behaal, vorms van bestuur en leierskap nodig is. Aangesien die ná-verkryging integrasie-proses 'n algemene oorsaak van mislukking in samesmeltings en verkrygings is, is dit waarskynlik nodig dat hierdie proses van integrasie van die klein innovasie-verkryging op spanvlak die aandag van die bestuurders en leiers van die span vereis.

Die bestaande navorsing, met betrekking tot die ná-verkryging integrasie op spanvlak, is beperk. Dus het die studie die oorkoepelende doel gehad om bestuurs- en/of leierskapsoorwegings te ondersoek vir die proses om klein innovasie-verkrygings (met meer as een individu) op spanvlak te integreer. Om dit te ondersoek, is 'n kruisstudie onderneem met drie gevalle wat deur doelgerigte steekproefneming gekies is en vyf navorsingsvrywilligers met bestuurs- en/of leierskapsverantwoordelikhede. Almal van hulle het verneem om anoniem aan die studie deel te neem. Hierdie word na verwys as die Egipte, Griekeland en Rome gevalle om die identiteit van die organisasies, natuurlike persone en innovasies binne hierdie gevalle te beskerm. Die hersiening van literatuur het gelei tot die samestelling van die in-diepte, semi-gestruktureerde onderhoudsgids waarmee die navorsingsvakke onderhoude gevoer en ondersoek was. Die data wat deur die klankopnames van onderhoude versamel was, was woordeliks op skrif gestel en geanaliseer met behulp van interpretatiewe fenomenologiese analise. Dit het agt sleutel-tematiese bevindinge aangedui wat oor twee of meer van die gevalle van belang was.

Die tematiese sleutel-tematiese bevindings wat uit die primêre navorsing na vore gekom het, was: onveranderde proses benadering; verhoudingsbou as integrasie; innoverende spanne benodig komplementerende vaardighede; weeklikse vergaderings bestuur verwagtinge; stigter-alleenlike vergaderings; entrepreneurs wil outonomie hê; span konsensus; en Tegnologie Gereedheidsvlak. Hierdie is omskryf in aanbevelings vir spanvlak-integrasiebestuurders en leiers met die oog daarop om toekomstige integrasies te bevoordeel. Die belangrikste bydrae van hierdie studie is in die verkenning van 'n onderverteenwoordigde area. Die doel van die studie was om bevindinge oor

bestuurs- en/of leierskapsoorwegings vir spanvlakintegrasies by te dra en om 'n sinvolle dialoog daaroor aan te moedig.

Aangesien samesmeltings en verkrygings dikwels as gevolg van onsuksesvolle ná-verkryging integrasie-prosesse misluk, is hierdie studie onderneem om die gesamentlike kennis van navorsers en praktisyne wat die ná-verkryging integrasie proses onderneem te bevorder, met die klem op integrasie op spanvlak. Dit het aangedui hoe drie gevalle van klein innovasie-verkrygings, gedeeltelik of volledig, 'n beginpunt van insig kan wees vir ander organisasies. 'n Mislukte innovasie verkryging kan lei tot die erosie van die waarde van die belegging sowel as gespanne verhoudings met die verkrygde organisasie. Om die innovasie wat verbruikers koop en die individue wat daardie waardeaanbieding moontlik gemaak het te eerbiedig, moet klein innovasie-verkrygings meer aandag geniet in toekomstige studies asook in praktyk.

Sleutelwoorde: innovasie; innovasie uitvoering-proses; innovasie verkryging; leierskap; bestuur; samesmeltings en verkrygings; ná-verkryging integrasie proses; spanne.

ACKNOWLEDGMENTS

First and foremost, to my mother and father, Lizette Louise and Mark Robert Dunbar Anderson, for unconditional love, support and the great privilege of education.

To my grandmother, Rachelle Bredenkamp, for always being proud of me and having my work on her coffee table.

To my best friend, Michelle Sheahan, for the most generous friendship, across an ocean.

To my supervisors, Gert Human and Awie Vlok, for assisting me to tackle a mountain and take it one molehill at a time. I appreciate all your guidance, support and enthusiasm. I am indebted to your advice and supervision in this undertaking.

To my anonymous interviewees, for graciously opening their doors and sitting down to some eye-opening discourse. I have learned invaluable lessons from you.

Last, but certainly not least, to my wife, Paula Werth.
This one's for you.

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LIST OF ABBREVIATIONS

BCE	before the Common Era
CA	chartered accountant
CEO	chief executive officer
CINO	chief innovation officer
COO	chief operations officer
CTO	chief technology officer
CSF	critical success factor
DESC	Departmental Ethics Screening Committee
DT	dedicated team
FOMO	fear of missing out
HRM	human resource management
IP	intellectual property
IPA	interpretative phenomenological analysis
KSF	key success factor
M&A	mergers and acquisitions
MOU	memorandum of understanding
N/A	not applicable/available
NASA	National Aeronautics and Space Administration
NPD	new product development
PAIP	post-acquisition integration process
PE	performance engine
PwC	PricewaterhouseCoopers
R&D	research and development
REC	Research Ethics Committee
RBV	resource-based view

SCA   sustainable competitive advantage

SIN   systems integration and networks

SS   shared staff

TMT   top management team

TRL   technology readiness level

CHAPTER ONE

OVERVIEW OF THE STUDY

1.1   INTRODUCTION

In the new millennium, gaining a sustainable competitive advantage (SCA) has become far more challenging than in previous years (DeNisi, Hitt & Jackson, 2003). In fact, recent academic discourse has suggested that the traditionally impenetrable strategic strength, the SCA, has become increasingly transient and irrelevant; that is to say, presently strategic advantages could arguably be characterised as transitory and brief (Conner, Manogharan, Martof, Rodomsky, Rodomsky, Jordan & Limperos, 2014; McGrath, 2013; McLay, 2014). While many forces have led up to this altered organisational reality, the onus is now on organisations to take note of these changes for the purpose of effective future competition; particularly, organisational capabilities and value propositions in the innovation milieu are being recognised as the growth frontier for the years to come (Taylor, 2016). However, organisational innovativeness is often the product of an organisation's knowledge base and it relies on the ability to question conventional wisdom openly (Kuratko, Morris & Covin, 2011).

Various solutions have been advanced in literature, such as hiring outsiders with fresh perspectives, creating less-hierarchical organisational structures, making resources more freely available to employees who show initiative and undertaking small innovation acquisitions which develop and add to the acquirer's portfolio of innovation ventures and value offerings (Govindarajan & Trimble, 2010a; Schmidt, Rosenberg & Eagle, 2015). The latter solution is of interest to the current study. However, a failed innovation acquisition may lead to an erosion of the value of the investment and strained relationships with acquired human resources.

This study proposes that managing and leading the integration of these acquisitions possibly pose unique considerations for managers and leaders; thus, the aim of this study is to isolate and explore the managerial and/or leadership considerations for the process of integrating small innovation acquisitions at the team level. Considerations might assist the managers and/or leaders of the team integration in honouring the innovation that consumers will purchase and the people who made that possible with the innovative idea they built their organisation around.

1.2   BACKGROUND OF THE STUDY

This section provides the reader with a background of the study by way of discussing and stating the problem the study is occupied with as well as defining concepts relevant to the thesis.

1.2.1   Problem statement

Mergers and acquisitions (M&A) have been conducted in waves since the late nineteenth century (Viviers *et al.*, 2014). More recently, they have increasingly centred on innovation acquisitions as the push for innovation as the basis for a modern competitive advantage grows (Ahuja & Novelli, 2014).

Yet, for successful innovation to be achieved, Tidd and Bessant (2013) advance that it is primarily a matter of managing the process well, considering that most innovation failures result from issues of process. If organisations are considering executing an innovation that requires more research and development, for example, then relying only on historical data is inadequate; in which case organisations should consider embarking on simple business experiments (Anderson & Simester, 2011). Moreover, Govindarajan and Trimble (2010a) have put forth a framework for operationalising the execution and experimentation of innovation through internal corporate venturing (Virta, 2017). This framework allows established organisations to execute innovations through a partnership between a dedicated team (DT) and the performance engine (ongoing operations) of an organisation. Highly effective dedicated teams are made up of both insiders and outsiders to the organisation and all promising sources should be considered to find the best possible team members. Internal transfers, external recruitment and acquisitions of smaller organisations should be considered in order to formulate the dedicated team (Govindarajan & Trimble, 2010a; 2010b). The latter source of small acquisitions is relevant to this study.

Small innovation acquisitions provide larger organisations with a number of advantages, such as bringing in outsiders who can challenge widely-held assumptions, as well as acquiring patents and other intellectual property rights (Govindarajan & Trimble, 2010a; 2010b). Despite the popularity of acquiring innovative start-ups and SMEs, acquiring organisations continually find that post-acquisition integration can erode the very innovative capabilities which initially justified the acquisition (Birkinshaw *et al.*, 2000; Graebner, 2004; Puranam *et al.*, 2009; Puranam, Singh & Zollo, 2003; Ranft & Lord, 2002). Moreover, scholars have cited the integration process as a reason for smaller acquisition failure, drawing attention to the significance of the decision on integration approach, which further shapes subsequent integration actions (Haspeslagh & Jemison, 1991; Pablo, 1994; Puranam *et al.*, 2009; Zollo & Singh, 2004). Therefore, as such small acquisitions may fail due to a problematic integration process, the implementation of this process requires careful consideration.

Little is known about the managerial and/or leadership considerations necessary to address the unique challenges posed by integrating small innovation acquisitions (with more than one individual) at the team level. Thus, the broad aim of the study was to explore the managerial and/or leadership considerations for integrating small innovation acquisitions at the team level. Given this discussion of the research problem of interest to the study, the following section defines key concepts.

1.2.2   Definition of key concepts

In this section, the key concepts of the study are defined to acquaint the reader with its broad subject matter given the background to the research problem presented above. As little is known about the managerial and/or leadership considerations necessary to address challenges posed by team

integrations of small innovation acquisitions (with more than one individual), concepts relevant to the research problem are defined in this section. Firstly, a distinction is made between the definitions of management and leadership, which are considered here as this study is concerned with managerial and/or leadership considerations. This section is followed by defining the team as the team level of analysis is considered in the study. Moreover, concepts related to mergers and acquisitions are defined as the study aims to uncover considerations for integration undertakings. Finally, relevant innovation concepts are defined as innovation acquisitions are of interest to the study.

1.2.2.1 The concepts of management and leadership

As this study focusses on the managerial and/or leadership considerations for the process of integrating small innovation acquisitions at the team level, the concepts of management and leadership are discussed in this section. The terms management and leadership are often used interchangeably, which is erroneous as they differ (Maccoby, 2000); therefore, these concepts are defined and discussed.

(a) Management

Henri Fayol (1955) was one of the earliest to apply their minds to defining management. In 1916, he advanced the definition of management as follows (cited in Ward, 2009:78):

> To manage is to forecast and plan, to organise, to command, to coordinate and to control.

Thus, Fayol draws attention to and identifies different elements which make up management, namely planning, organising, commanding, coordinating and controlling (Fayol, 1955). Fayol details the former three elements as follows (cited in Ward, 2009:78):

> To foresee and provide means of examining the future and drawing up the plan of action. To organise means building up the dual structure, material and human, of the undertaking. To command means maintaining activity among the personnel.

Planning for potential eventualities, organising human and physical inputs for organisational processes and continuing productivity among human resources are the first of Fayol's five management elements (Fayol, 1955). The final two elements are as follows (cited in Ward, 2009:78):

> To coordinate means binding together, unifying and harmonising all activity and effort. To control means seeing that everything occurs in conformity with established rule and expressed command.

Coordinating the efforts of all human resources as well as controlling the standardising of outputs are the last two elements of management of Fayol's (1955) five. However, Maccoby (2000) describes management as a task-orientated and, predominantly administrative role, encompassing planning,

budgeting, evaluating and facilitating. More expressly, he intimates that management should be conceptualised as a function whereas, in contrast, leadership should be considered a relationship (Maccoby, 2000). Thus, the concept of leadership will be explored in the following section.

(b) Leadership

Conkright (2015) states that two of Fayol's elements of management – commanding and coordinating – can together be understood as leading. Other authors perceive the concept of leadership as entirely independent, such as Maccoby (2000) and Zaleznik (1992). The concept of leadership can further be described as an influential tool for change at various levels of analysis, including the organisation, the team/group and the individual, which can be accomplished through providing motivated direction, as effective leadership is in many cases defined as energising and motivating people (Maccoby, 2000; Zaleznik, 1992). Lopez (2014) puts forth that ideal leadership qualities include vision, influence and the ability to motivate themselves and others, which together make up the foundation for an effective leader-follower relationship. In the team level of analysis, which this study is concerned with, team leaders are responsible for attaining team engagement and motivating them to accomplish goals (Pauleen, 2003); therefore, the following section defines the concept of the team itself.

1.2.2.2 The concept of the team

Through their synthesis of previous research on teams, Cohen and Bailey (1997) arrive at a definition for the concept of the team, which is accepted as the standard definition in the current study. They describe the team as: a collected assembly of individuals who interdependently work on tasks; who share accountability for results; who view themselves and who are viewed by others as a separate social unit that forms part of a larger social system(s); and who navigate their relationships with team members across boundaries of the organisation (Cohen & Bailey, 1997). As the process of integrating small innovation acquisitions is of interest to the study, concepts related to mergers and acquisitions are defined in the following section.

1.2.2.3 Mergers and acquisitions concepts

Mergers and acquisitions (M&A) can be primarily defined as corporate finance transactions that can be both successful and beneficial given that they are strategically planned and managed (Mulherin, 2012). Today, many organisations are undertaking mergers and acquisitions for various strategic reasons, one of which is to incorporate innovations of other organisations in the portfolio of value offerings of the acquirer (Hagedoorn & Duysters, 2002; Hitt, Hoskisson & Ireland, 1990). Although mergers and acquisitions represent a combined discipline, the two differ from one another (Nandy & Baag, 2009). As a result, this section serves to define mergers, acquisitions and partial acquisitions as well as M&A activity, innovation acquisitions and acquisition champions.

(a) Mergers

Mergers are essentially corporate financial transactions that see two organisations join forces to become a new economic unit (Bruner, 2004; Coyle, 2000; Dangelo, 2005; Viviers, Erasmus & Mans-Kemp, 2014). Two organisations are brought together by mutual negotiation and agreement on the acquiring organisation buying up the stock of the target organisation. The acquiring organisation achieves this through offering the securities of the merged organisation to the target organisation's stockholders (Bruner, 2004; Nandy & Baag, 2009). Viviers *et al.* (2014) also put forth that the smaller of the two organisations usually dissolves into the larger organisation; most commonly the target organisation is the former and the bidder organisation is the latter. Gaughan (1996) points out that the concept of a merger differs from consolidation, in which case an entirely new organisation is formed. In this case, the previously sovereign organisations lose their individuality and continue as one post-merger (Galpin & Herndon, 2007). In addition, Viviers *et al.* (2014) propose that they are only undertaken if they meet technical, legal and regulatory requirements, due to their potentially anti-competitive nature. Mergers are one component of the concept of M&A. Acquisitions are a related yet different form of the same phenomena, and are discussed in detail below.

(b) Acquisitions

Acquisitions, also referred to as 'takeovers' (Viviers *et al.*, 2014:7), describe the purchase made by one organisation of another, either in full or in part. As such, it can be said that one organisation takes over another by securing and controlling a majority interest in the acquired organisation, or target organisation (Bruner, 2004; Coyle, 2000; Galpin & Herndon, 2007; Nandy & Baag, 2009). Thus, in an acquisition, the acquirer effectively subsumes the target organisation into the broader corporate parent (Nandy & Baag, 2009).

According to Viviers *et al.* (2014), the majority of acquisitions conclude in the target organisation becoming a subsidiary of the acquirer or parent organisation. Acquisitions are similar to mergers in that they can also be horizontal, vertical and conglomerate in nature (Haunschild, 1993). Moreover, the acquisition or takeover can occur by friendly or hostile means (Morck, Shleifer & Vishny, 1988). Friendly acquisitions are deals that are negotiated between parties and are, essentially, mutually beneficial agreements for all involved (Aiello & Watkins, 2000; Viviers *et al.*, 2014). Hostile takeovers, however, are often the result of acquisition proposals that are rejected by the target organisation. Rather than withdrawing efforts to acquire the organisation, the bidder circumvents the target board of directors to approach target stockholders to solicit and buy a controlling interest from them. In this way, the acquirer has secured a majority share through somewhat nefarious means, or "hostile", as the literature puts it (Duggal & Millar, 1994:387).

Nonetheless, Vasilaki and O'Regan (2008) describe acquisitions as dynamic, enduring phenomena that directly impact both the members and performance of an organisation. Acquisitions can be undertaken by full or partial means (Jakobsen & Meyer, 2008), the latter of which is discussed below.

(c) Partial acquisitions

Similar to a full acquisition, a partial acquisition is dependent on an existing organisation and enjoys the various advantages and disadvantages associated with this dependence (Jakobsen & Meyer, 2008). The acquirer, however, does not secure a full claim to the partially-acquired organisation's earnings, nor does the former hold full equity control: the acquisition is only partially undertaken through the acquiring organisation purchasing an equity stake in the target organisation, rather than securing full ownership of it (Jakobsen & Meyer, 2008). Mergers, acquisitions and partial acquisitions are among the terms that are encapsulated under the umbrella term known as M&A activity, which is discussed below.

(d) M&A activity

M&A activity involves that of both mergers and acquisitions as well as everything that accompanies such dealings; the terms "mergers" and "acquisitions" are commonly used interchangeably due to the realisation of the same eventual state: one organisation taking over another (Malik, Anuar, Khan & Khan, 2014:521). Given the definitions of the concepts of mergers, acquisitions, partial acquisition and M&A activity, the following section serves to discuss the concept of the innovation acquisition.

(e) Innovation acquisitions

According to Aguilera and Dencker (2004), one other type of M&A that is practised by industry is a substitute for research and development (R&D) in the organisation. In this case, the acquirer pursues the target to gain entry to new R&D knowledge as well as to secure capabilities that it likely would not have without the procurement. These procurements can be referred to as "innovation acquisitions" (Chaudhuri, 2004:12) and they are undertaken to save the acquirer from expending time and valuable resources to ideate and create these innovative value offerings in-house (Aguilera & Dencker, 2004). Typically, the acquirer is larger than the target and has significant experience in M&A; examples of acquirers of innovative organisations are Cisco Systems and Microsoft (Aguilera & Dencker, 2004; Granstrand & Sjolander, 1990).

(f) Small innovation acquisitions

Graebner, Eisenhardt and Roundy (2010) have put forth that acquisitions undertaken for innovative purposes – such as for gaining technological innovations and related capabilities within the workforce of the acquired organisation (Toppenberg, 2015) – are commonly small and are targeted because they are entrepreneurial initiatives with potential for growth if effectively developed. Thus, this study refers to these procurements as small innovation acquisitions. Moreover, in some acquisitions, a champion of acquisition is the leader of the integration post-acquisition (Dagnino & Pisano, 2008:51).

(g) Champions of acquisition

Dagnino and Pisano (2008) describe the acquisition champion as a strategic individual (or group thereof) that is charged with leading the process of integration and being held accountable for its success and performance. A study by Teerikangas, Véry and Pisano advances the importance of this figure, calling them the "integration manager" (2011:651). Effective integration managers play several roles, including: "maverick" (Dagnino & Pisano, 2008:53), transformational leader; organisational buffer; and network facilitator (Dagnino & Pisano, 2008). The maverick role of the effective integration manager is carried out in their unconventional behaviour supporting the championing of the acquisition; acting as a transformational leader for those who are being integrated; being an organisational buffer between the previously separate entities; and, lastly, facilitating the network of individuals that are interacting with the acquired employees (Dagnino & Pisano, 2008).

As a result of the definition of this role, this study refers to the innovation acquisition champion as the individual held accountable for integrating the small innovation acquisition (with more than one individual) at the team level; this is further discussed in section 1.2.2.4(d), which defines the concept of the champion of innovation. Given this discussion of the acquisition champion, the following section deals with the integration process.

(h) The post-acquisition integration process

According to Meglio, King and Risberg (2017), the post-acquisition integration process (PAIP) commences when a deal is legally finalised and results in a pair of previously sovereign organisations becoming one consolidated organisation. These authors emphasise it as being the phase with the most complexity, as it requires the management of both human and task integration simultaneously (Birkinshaw, Bresman & Håkanson, 2000) to achieve the aims of the acquisition. The PAIP only culminates at such a time when the preferred integration level and goals are achieved (Meglio *et al.*, 2017). As small innovation acquisitions of interest to this study, relevant concepts related to innovation are defined in the subsequent section.

1.2.2.4 Innovation concepts

Concepts regarding innovation are hereafter defined and briefly deliberated on, including innovation itself, innovative ideas, innovation execution and champions of innovation.

(a) Innovation

Earlier definitions of innovation draw attention to novel applications or changes made to existing value propositions by entrepreneurs. Schumpeter (1934), for instance, introduced a new dimension to the definition of the entrepreneur in the mid-1930s when he suggested that entrepreneurs are essentially opportunists who achieve novel combinations of resources to offer something different and original – a concept that would be classified as innovation today (Carland, Hoy, Boulton &

Carland, 1984; McCraw, 2007). This reference to novel applications in the marketplace is the essence of innovation (Davila, Epstein & Shelton, 2013).

Schilling (2008) describes innovation as the pragmatic implementation of a novel idea to eventuate in a marketable product or service offering. According to Smith (2010), an innovation can only be considered as such if it is indeed commercialised and diffused into the market. Tidd and Bessant (2013) draw attention to the importance of the process of implementation that transforms innovative ideas into commercialised value offerings; this process is considered successful if value is captured from the innovations in market. Furthermore, the main thesis of Tidd and Bessant (2013:21) is that the whole process of innovation must be managed effectively for the likelihood of success to be made probable.

Govindarajan and Trimble (2010a:3) advance an overarching formula for the definition of innovation, which is the sum of the innovative "idea" and its execution, the latter being a combination of an innovation "leader", "team" and "plan" (Govindarajan & Trimble, 2010a:15). To illustrate this, Figure 1.1 below depicts the innovation formula that Govindarajan and Trimble (2010a) have advanced; the following section discusses the concept of the innovative idea.
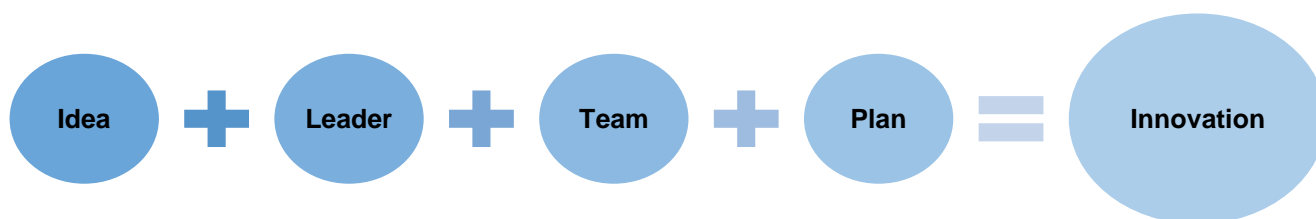
FIGURE 1.1: The innovation formula
(Source: Adapted from Govindarajan & Trimble, 2010a:15)

(b) Innovative ideas

Innovative ideas are novel ideas with commercial application(s) that range from incremental to breakthrough in nature; incrementally innovative ideas build on the current value proposition to add something that organisations are certain consumers may desire in their products and services (Smith, 2010; Tidd & Bessant, 2013). However, breakthrough ideas can be described as more radical, disruptive ideas, which have the potential to upend industries or even go as far as to create new industries (Henderson & Clark, 1990; Kim & Mauborgne, 2005).

Govindarajan and Trimble (2010a; 2013) as well as Kaye and Klepic (2012) put forth that there is a key misconception about innovation with regards to innovative ideas. The fundamental misapprehension is that people mistake innovation for the idea alone rather than considering the

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challenging process that must take place to commercialise the idea (Govindarajan & Trimble, 2010a; 2013; Kaye & Klepic, 2012).

(c) Innovation execution and the innovation execution process

The innovative idea is essentially translated into an offering of value for the consumer, the commercialisation of which is considered challenging enough to be problematic (Gans & Stern, 2003:333). Furthermore, Howell (2005:108) suggest that the vast majority of raw ideas – 90 per cent, in fact – never make it past the desk of the idea generator. Of those that do succeed in being submitted, only three per cent manage to get the funding and resources necessary to establish the proposed project (Howell, 2005:108). Of those undertakings, only one third of these are commercialised and make it to market; therefore, one per cent of innovative ideas eventuate in marketed innovations (Howell, 2005:108).

Thus, it can be said that founding a project for the purpose of commercialising an innovative idea (Howell, 2005) is similar to innovation execution, which requires an initiative to be established (Govindarajan & Trimble, 2010b): including a "team", "plan" and "leader" as well as the innovative "idea", according to Govindarajan and Trimble (2010a:15). This is what Govindarajan and Trimble (2010a) refer to as the "innovation execution process" in the copy displayed on their book jacket for *The Other Side of Innovation: Solving the Execution Challenge* (Govindarajan & Trimble, 2010c). Thus, the execution of innovation is referred to in this thesis as the implementation of a project or initiative that serves to create and develop a marketable or commercialisable innovation. According to Lokuge and Sedera (2014), the execution of innovation is a significant area of study as it ensures that innovations reach their full potential, which Govindarajan and Trimble (2010a) state is the challenging part of innovation. Thus, Lokuge and Sedera (2014) define the innovation execution process as the means by which organisations bring the innovation potential info effect.

Although the innovation execution process is a way of exploiting the potential of novel ideas, few ideas eventuate in a project resourced for this purpose; Howell (2005:108) maintains that a possible reason for the abovementioned high rate of failure of novel ideas is that they failed to attract a "champion of innovation" (Dagnino & Pisano, 2008:51), without which innovative ideas might remain undeveloped and latent for future innovation execution projects and processes (Frost & Egri, 1991).

(d) Champions of innovation

"Champions of innovation" advocate for an innovation they are passionate about, and are dedicated to its success (Dagnino & Pisano, 2008:51). For the innovation to be executed, champions must have the support of their organisation, as they will need access to various human and project resources to get the idea to market (Dagnino & Pisano, 2008). Mansfeld, Hölzle and Gemünden (2010) explain the role of the innovation champion as an exponent for the innovation endeavour within an organisation, acting as a role model and an intrapreneur. These scholars put forward

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personal traits that generally characterise the innovation champion, including enthusiasm for the innovation, altruism towards organisational peers and a strong intrinsic motivation (Mansfeld *et al.*, 2010). As a result of the definition of the role of champion of innovation, this study refers to the innovation acquisition champion as the individual held accountable for integrating the small innovation acquisition (with more than one individual) at the team level, which was previously discussed in section 1.2.2.3(g), which defined the concept of the champion of acquisition.

Given the background of the study and the definitions of key concepts presented in this section, the following presents the research questions the study poses.

1.3   RESEARCH QUESTIONS

The study's overarching primary and secondary research questions determined the direction of the research undertaken. In exploratory studies, research questions should be broad in order to gain insightful and wide-ranging early findings on the topic (Zikmund & Babin, 2010). The exploratory research questions, both primary and secondary, are presented below.

1.3.1   Primary research question

What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?

1.3.2   Secondary research questions

The secondary research questions of the study are outlined below.

1.3.2.1 Secondary research question 1

Do innovation acquisition champions integrate small innovation acquisitions (with more than one individual), either fully or partially, similarly or differently to how they integrate acquired individuals into the team?

1.3.2.2 Secondary research question 2

What managerial and/or leadership considerations should innovation acquisition champions take into account while integrating small innovation acquisitions (with more than one individual) at the team level?

As this section has presented both the primary and secondary research questions of the exploratory study, the following argues for the importance of the study.

1.4   IMPORTANCE OF THE STUDY

Through an extensive review of the literature pertaining to innovation-related M&A, Ahuja and Novelli (2014) have identified a number of significant gaps in scholarly research. One such underexplored gap deals with mergers and acquisitions undertaken for innovation purposes. These appear to have been under-studied in terms of corporate transactions which are conducted so as to gain a high-risk,

high-reward value proposition, or to obtain new technology that can become commercialisable within a wider portfolio of innovation ventures managed by the acquirer (Ahuja & Novelli, 2014). This gap in the literature is noteworthy as the proposed study aims to add to the literature of small innovation acquisitions.

In the realm of scholarly research – particularly regarding acquisitions – emphasis has recently been placed on purchases made of an innovative nature that are mostly accompanied by technological innovations and related capabilities within the workforce of the acquired organisation (Toppenberg, 2015). According to Graebner *et al.* (2010) these acquisitions are usually very small in stature and are targeted on the basis that they are entrepreneurial organisations with growth potential if developed effectively, which are the small innovation acquisitions referred to in this study.

Moreover, Sitkin and Pablo (2004) pointed out that the field of mergers and acquisitions was found lacking with regards to a focus on leadership. Govindarajan and Trimble (2010a; 2010b) have devised a framework for the successful execution of innovation ventures within established organisations in which the authors deal with many leadership principles and prescriptions for implementing their framework. However, these exclude any potential recommendations around sourcing skilled outsiders for innovation acquisition champions who must deal with the process of integrating a small acquisition in a dedicated team.

Ahuja and Novelli (2014) put forth that in the effort to realise innovative goals and objectives, significant amounts of valuable corporate resources are expended. The more resources the corporate parent invests in the venture, the more risk it carries for a substantial payoff (Ahuja & Novelli, 2014). For these reasons, carefully carrying out the execution of innovation is important so that the organisation pursuing these goals and objectives is not losing money, time or other resources if the innovation initiative is not undertaking the demands of innovation execution as effectively, efficiently and inexpensively as is required (Govindarajan & Trimble, 2010a). This poses important research and managerial implications. For researchers, the means of conducting the execution of innovation to gain the greatest reward in relation to the risk taken by the organisation should be studied. For the top management of organisations, instituting the recommendations that result from these types of studies may lead to greater value capture and creation.

This study is exploratory in nature as the researcher has endeavoured to discover if any research has been done on the basis of leading the integration of an acquisition from a team perspective. The search for an existing study of this subject matter has resulted in finding a study of this nature. Therefore, the apparent lack of available literature on the subject, particularly as it takes place in teams aimed at executing innovative ideas, leads the researcher to assume that the exploratory study is specifically appropriate and essential to undertake (Collis & Hussey, 2014).

Graebner, Heimeriks, Huy and Vaara (2017) argue that M&A activity remains rampant in the industry, despite many poor past outcomes. These authors believe that the post-acquisition integration process is a vital factor in successful M&A, like many others (Haspeslagh & Jemison, 1991). Teerikangas *et al.* (2011) put forth that the importance of effective management of the acquisition process is widely acknowledged in literature, whereas there has been less focus on the issue of the integration manager's actions in this process. These researchers make an argument for studies that are more actor-based and conducted at the micro-level (Teerikangas *et al.*, 2011), which is in keeping with the problem statement of the current study, as well as the research methodology undertaken in this study (see the next section 1.6 below).

In addition, Puranam, Singh and Chaudhuri (2009) advance that bidder organisations undertaking small innovation acquisitions for their technological capabilities often find that post-acquisition integration can erode or entirely eradicate the technological and innovation capabilities which first made the target organisation attractive. Moreover, Braun, Peus, Weisweiler and Frey (2013) state that teams dominate modern organisational structures and that leadership at the team level of analysis is scant and needs to be more strongly considered across the literature (Avolio & Bass, 1995; Yammarino, Dionne, Chun & Dansereau, 2005). As such, it is argued that the undertaking of this study is important as it considers leadership at the team level.

Lastly, West, Hirst, Richter and Shipton (2004) submit that developing innovation at the more micro level of the team contributes to augmenting the consolidated organisation's ability to apply and concentrate resources effectively, fittingly and faster than its rivals. This is because it allows and qualifies all organisational members to react to the need for change as well as to make apposite changes at a more localised level (West *et al.*, 2004). As this section has presented a discussion of the importance of the study, the following provides an overview of the research methodology undertaken in the study.

1.5   RESEARCH DESIGN AND METHODS

The methodology explains the techniques and means by which the research study has been undertaken. These have been deployed to gather and consider the desired information for the identified research problem and objectives (Collis & Hussey, 2014). The existing body of knowledge has been examined to afford this thesis a review of the body of literature as it pertains to the research problem. Various relevant sources were consulted, including academic journal articles, scholarly and other non-fiction books as well as credible internet sources, as determined by the researcher. The secondary research undertaken culminated in the form of a literature review, which is presented in the three chapters following this introductory chapter.

Moreover, the primary research design of the study has emerged from the consideration of the most appropriate factors relevant to the nature of the research. This exploratory study was designed and

conducted with a view to realise its purpose of initiating a dialogue regarding the unique or idiosyncratic considerations innovation acquisition champions take into account (or ought to) when integrating a small innovation acquisition into a full or partial acquirer (Zikmund & Babin, 2010). Moreover, the process of the research study was qualitative in nature and entailed a series of semi-structured, in-depth interviews (Flick, 1998:368; Roberts, Hopp, Sørensen, Benrimoj, Williams, Chen, Aslani & Herborg, 2003; Zikmund & Babin, 2010) with innovation acquisition champions. As no existing framework or specified problem exists in the field, in which case applied research would be more appropriate, the research outcome of the study was basic or pure in nature (Collis & Hussey, 2014).

In addition, the interpretivist research paradigm was used in this study, which deals with social studies and undertakes humanistic, qualitative methods (Maxwell, 2012) to attempt to understand subjective perceptions and experiences from the individual's point of view (Krauss, 2005). Interpretivists use methodologies oriented around meaning and implication (such as interviews or observation), methods which rely on subjective relations between researchers and research subjects (Hirschman, 1986). The interpretivist paradigm was relevant to the study as it seeks to engage by means of personal interaction so as to understand social phenomena in a specific context (Collis & Hussey, 2014). According to Collis and Hussey (2014), there are four interpretivist approaches to choose from, including qualitative, subjective, humanist and phenomenological. The latter was selected for the study. The phenomenological approach aimed to explore and describe the essences of the phenomena (Creswell, 1998; Dahlberg, 2006; Patton, 2002) related to how the innovation acquisition champion deals with the team consisting of both insiders and outsiders to the organisation.

Furthermore, the qualitative research method selected was a series of semi-structured, in-depth interviews (Flick, 1998:368; King & Horrocks, 2010; Roberts *et al.*, 2003; Zikmund & Babin, 2010). The resulting qualitative data from the execution of these techniques were in the form of verbatim transcriptions (Collis & Hussey, 2014) and observed notes (Ritchie & Spencer, 2002). This collected data was analysed according to interpretative phenomenological analysis (IPA) (O'Neil & Koekemoer, 2016), which was used to design a cross-case study format in which the findings were discussed (Collis & Hussey, 2014).

Few innovation acquisition champions availed themselves to the study. A cross-case was designed with three cases and five research subjects, three of which were innovation acquisition champions. The case study research design undertaken was an exploratory cross-case study, which served to address the lack of knowledge existing on the subject matter (Collis & Hussey, 2014). Research questions with a main focus on "what?" can be justifiably well-answered by the research design of an exploratory case study, especially in cases where the study hopes to develop important

hypotheses from the research questions and propose future avenues of research (Yin, 2003), such as this study. As such, the overarching research question of this study was answered by means of an exploratory case study, as recommended by Yin (1994). Analysing the primary qualitative data was approached by means of cross-case and interpretative phenomenological analysis. The former concerns analysing data for a number of cases. This form of analysis allowed the researcher to amass independent accounts of events and perspectives as well as phenomena, which together were employed to determine patterns (Collis & Hussey, 2014).

Moreover, the latter, interpretative phenomenological analysis, was conducted by searching through the first of the interview transcripts and identifying findings that arose in it. Thereafter, the researcher forged connections, which led to the isolation of superordinate findings for the first case. Once the initial case had been analysed, the researcher moved on to the second and repeated the above IPA analysis strategy until all three cases had been systematically searched through. Thereafter, the researcher sought patterns between the cases with the goal of finding themes across the Egypt, Greece and Rome case studies, which are presented with quoted examples of each theme to support it in the findings chapter (Smith & Osborn, 2004), culminating in cross-case key thematic findings. Thus, the primary research methodology undertaken in this exploratory study eventuated in a cross-case study format with phenomenological findings. Given the argument for the emerging primary research methodology presented above as well as the secondary research undertaken, the following section provides an orientation of the thesis.

1.6   CONFIGURATION OF THE STUDY

The study culminated in seven chapters; this section concisely details each chapter and serves to outline the sequence in which the study is presented.

1.6.1   Chapter one: Overview of the study

The first chapter has served as an introductory chapter, providing an overview of the study in the following matters: defining key concepts; stating the problem; posing research questions; arguing for the importance of the study; briefly providing context regarding the emergent exploratory research methodology undertaken; noting both the ethical considerations and DESC risk classification of the study; and, finally, presenting a chapter configuration to the thesis.

1.6.2   Chapter two: The innovation execution process

The second chapter is the first of three chapters that serve to present the reviewed literature. In this chapter, levels of analysis are first discussed. Secondly, organisational level elements that support innovativeness are addressed. Moreover, the dedicated team and its externalities as well as the framework for experimenting with and executing innovation as put forth by Govindarajan and Trimble (2010a; 2010b) are presented. Furthermore, the rigorous innovation experimentation prescribed by these scholars and the criteria for holding the innovation team leader accountable for learning are

also dealt with in this chapter. Finally, the chapter is concluded with a summary of the Govindarajan and Trimble (2010a; 2010b) framework. As the framework suggests that organisations should consider procuring and integrating small acquisitions into a team, a subject which has not yet been addressed in the literature, the next chapter reviews the literature pertaining to mergers and acquisitions.

1.6.3   Chapter three: Acquisitions, the post-acquisition integration process and its challenges

This chapter deals with mergers and acquisitions, beginning with M&A motives and M&A failure. Secondly, as the process perspective was selected for the study, the post-acquisition integration process is reviewed. Various challenges and tasks in the post-acquisition integration process are discussed.

1.6.4   Chapter four: The team development process and relevant theories of management and leadership to the study

This is the final chapter pertaining to the literature review. It deals with organisational management and leadership, focusing specifically on strategy, innovation, projects, transformation, change and teams. The various prescriptions given to managers and leaders from these styles are summarised.

1.6.5   Chapter five: Research methodology

This chapter involves the thorough explanation of the research methodology undertaken in the study. The secondary research design is discussed. Subsequently, the exploratory primary research methodology is detailed; it was an exploratory cross-case study arrived at by means of a series of qualitative, semi-structured, in-depth interviews (Flick, 1998:368; Roberts *et al*., 2003), which were transcribed verbatim and underwent interpretative phenomenological analysis by the researcher to uncover key thematic findings across the cases under analysis. Finally, conclusive remarks follow.

1.6.6   Chapter six: Findings

The research undertaken has eventuated in key findings within each case and eight key thematic findings across two or more of the cases. However, as the study's nature is exploratory, these findings are expected by no means to be conclusive, quantifiable or exhaustive. Thus, they might simply provide an impetus for the possible inception of a dialogue about the study's findings.

1.6.7   Chapter seven: Summary, recommendations, limitations and future research

The final chapter summarises all earlier chapters and provides several early recommendations in the sub-field founded in the overlap of the three literature reviews. In addition, the limitations of the study are considered and future research suggestions are proposed. To culminate, a final conclusion is presented.

1.7   CONCLUSION

This introductory chapter presented an overview of the study. This included: a background of the study; defining the key concepts; stating the research problem; delineating the research questions; discussing the importance of the study; presenting an overview of the research methodology undertaken; and, finally, providing an orientation of the thesis. Given this overview of the study, the following chapter is the first in a series of three which presents the reviewed literature relevant to the current study. Particularly, the literature related to innovation and the innovation execution process will be reviewed and presented. Moreover, the levels of analysis under consideration in the second chapter are the organisational and team levels as both of these are related to the organisational structure put forth by Govindarajan and Trimble (2010a).

CHAPTER TWO

THE INNOVATION EXECUTION PROCESS

2.1   INTRODUCTION

If successfully executed, innovations which require greater levels of research and development (R&D) than simple incremental improvements can add to organisations' short-term financial performance, long-term profitability and the creation or continuation of competitive advantage, perhaps significantly (Alexander & van Knippenberg, 2014). The prevalent vehicle organisations use for executing innovation activities, such as R&D, is the dedicated team (Barczak, Griffin & Kahn, 2009). In addition, the management of teams, such as dedicated teams, is vital for successful innovation execution to take place (Hülsheger, Anderson & Salgado, 2009).

This chapter reviews literature related to the subject of managing innovation execution. Firstly, levels of analysis found in organisations are introduced. Secondly, the link between the organisation level of analysis and elements that support innovation is discussed. Thirdly, the team level of analysis is considered with regards to the dedicated innovation team, particularly its formation. Moreover, given the thesis' process perspective, the six generations of innovation management processes since the mid-twentieth century are examined and more recent twenty-first century models are also discussed. From this review of innovation management process models, the framework for innovation execution proposed by Govindarajan and Trimble (2010a; 2010b) is adopted in the study. This is because it is the only model that instructively encompasses the process of innovation execution that a dedicated team undertakes. Thus, innovation experimentation as well as its criteria for assessing this team's organisational learning are discussed.

2.2   ORGANISATIONAL LEVELS OF ANALYSIS

Research studies in the milieu of organisational management have taken place at various levels of analysis (Vergne & Wry, 2014); the commonly used levels are presented in Figure 2.1 below. These consist of: the organisational level; the group (or team) level; and the individual level (Litchfield, Ford & Gentry, 2015). The current study explores post-acquisition integrations of small innovation acquisitions at the team level of analysis, a research gap which appears scant. The literature regarding the organisational level is considered first in the reviewing of previous research in this chapter. Thereafter, literature on the lower level of the team is reviewed.
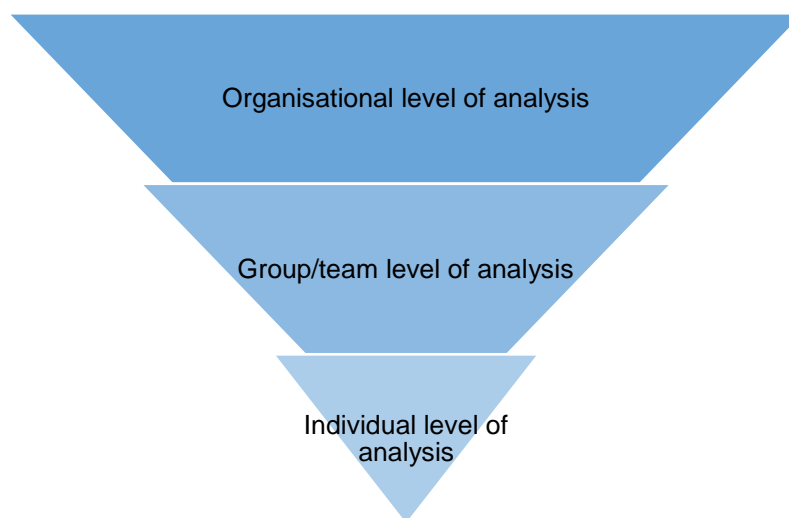
FIGURE 2.1: Levels of analysis

(Source: Adapted from Litchfield *et al.*, 2015:287)

Studies regarding innovation at varying levels of analysis have been undertaken to date (Anderson, Potočnik & Zhou, 2014; Gupta, Tesluk & Taylor, 2007; Hülsheger *et al.*, 2009). Thus, this chapter's review of the literature deals firstly with organisational level elements and thereafter with the team level (Barczak *et al.*, 2009), such as the dedicated team (Govindarajan & Trimble, 2010a).

In addition, the literature review related to the innovation execution process presented in this chapter is concerned with organisational level elements as a result of the institutional leadership which operates in top management positions (Washington, Boal & Davis, 2008) as these individuals play an important role in the post-acquisition integration process (Datta, 1991; Haspeslagh & Jemison, 1991; Li, 2014). In addition, organisational management is considered important in the stakeholders of the innovation project team, especially the positions of chief executive officer and chief operations officer (Govindarajan & Trimble, 2010a:28-48). As a result, this chapter serves to present reviewed literature on innovativeness and relevant subject matter as pertains to the organisational level of analysis.

Moreover, the team level of analysis is considered in the literature reviewed on innovation and the innovation execution process, particularly regarding the dedicated team as put forward by Govindarajan and Trimble (2010a) (Virta, 2017). The team level of analysis is relevant to the study as the research problem concerns managerial and/or leadership considerations for team integrations of small innovation acquisitions. Thus, subject matter relevant to both the organisational and team levels is presented in this chapter.

2.3   ORGANISATIONAL LEVEL: ELEMENTS FOR ORGANISATIONAL INNOVATIVENESS

Many organisations today are investing large amounts of money and time in the pursuit of innovation initiatives even though these often fail (Pisano, 2015). Thus, pursuing innovation is very seldom an

easy task (Holmstrom, 1989) because its various process components are a challenge to manage (Saren, 1984). At its core, it requires questioning long-held assumptions and mobilising human efforts behind the cause, which is a complicated strategic task that requires a certain amount of diplomacy and a proclivity for risk-taking (Morris, Kuratko & Covin, 2008; Naldi, Nordqvist, Sjobërg & Wiklund, 2007). If any given organisation succeeds in achieving a portfolio of innovations and exhibits these requirements, it can be said to be an innovative organisation (Morris *et al.*, 2008).

Organisational innovativeness is determined by its different, novel or unique organisational activities; in addition, organisations that evaluate innovativeness on a continuous basis are more likely to improve overall innovation performance over time (Morris *et al.*, 2008). Therefore, analysing the innovativeness of an organisation is important due to its relationship with organisational strategy and performance (Borocki, Orcik & Cvijic, 2013).

Successfully fostering innovativeness demands the attention and focus of senior management to promote it throughout the organisation by setting an agenda for strategic innovation to which all aspects of the organisation are aligned for the purpose of achieving this strategic intent (Govindarajan, 2011). Figure 2.2 below presents a synthesis of the literature pertaining to organisational level elements that facilitate organisational innovativeness, presented as a useful top-down lens with which to view the management's task of fostering innovation throughout the organisation (Davila *et al.*, 2013). In the figure, this can be seen at both a macro- (organisational) and micro level (team and individual). The figure below demonstrates the strategic alignment necessary for the top management team (TMT) to drive innovativeness forward in an organisation (Davila *et al.*, 2013).
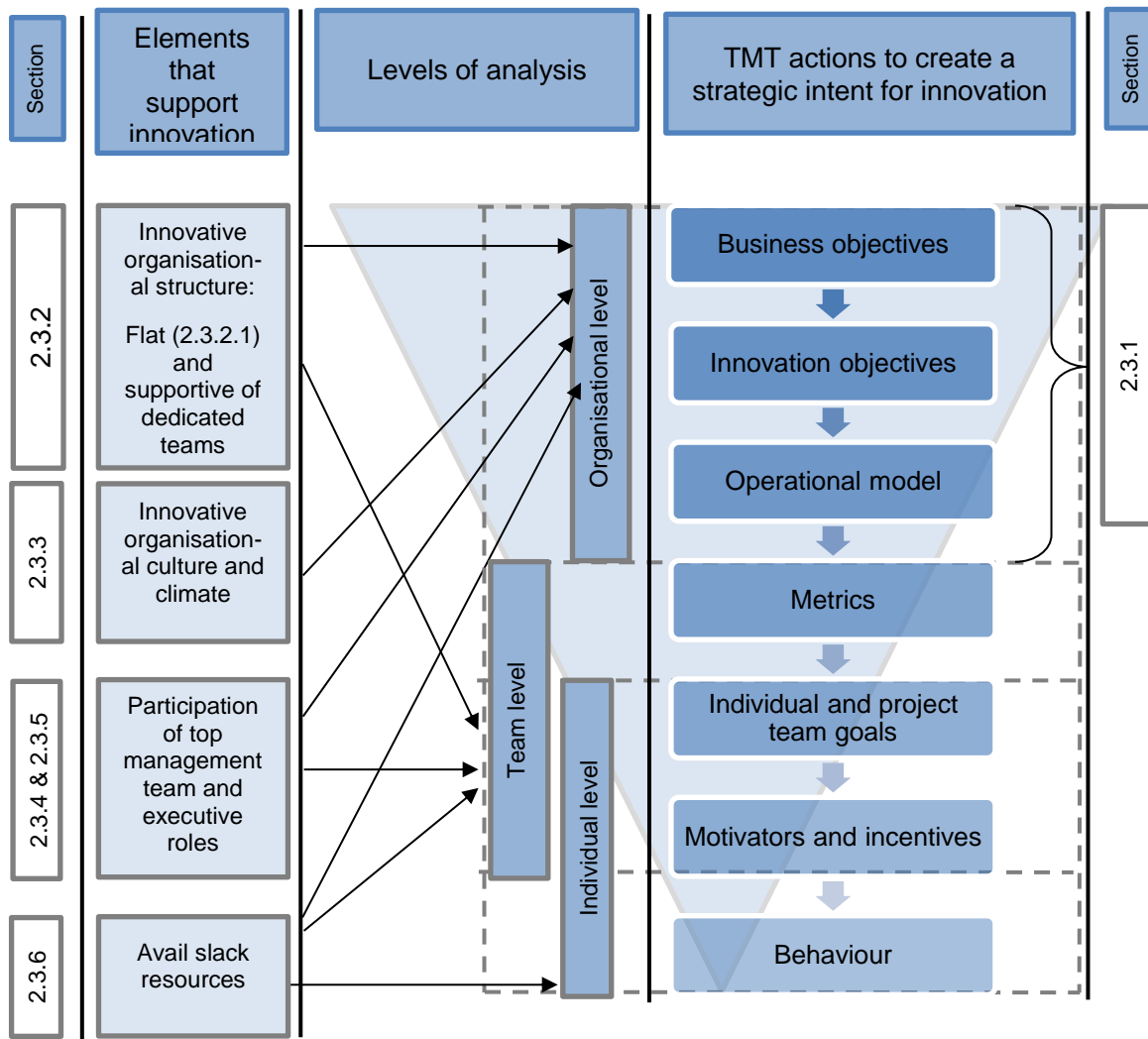
FIGURE 2.2: Process cycle for TMT to foster organisational innovativeness

(Source: Adapted from Anderson *et al.*, 2014:28; Choi & Chang, 2009:246-247; Claver-Cortés, Zaragoza-Sáez & Pertusa-Ortega, 2007:45; Davila *et al.*, 2013:xxxii; di Fiore, 2014; Govindarajan, 2011; Isaksen & Tidd, 2006:329-344; Johnson, 2010; Kim, Min & Cha, 1999:153; Leiponen & Helfat, 2010:224-235; Markham, Ward, Aiman-Smith & Kingon, 2010:402; Tidd & Bessant, 2013:146-154; Yadav, Prabhu & Chandy, 2007:1)

This section serves to discuss the elements for innovativeness that may exist at the organisation's macro level, including: organisational and innovation objectives realised through operational models; innovative organisational structures; innovative cultures and climates; the role of management, including the top management team, chief executive officer and the chief innovation officer; the roles that facilitate innovation internal and external to the innovation team; and, lastly, availing slack resources for innovation.

2.3.1 Achieving organisational and innovation objectives through institutionalising operational models for innovation

In the innovation management literature, strategy is recognised as a key element required at the organisational level to drive innovation in organisations (Anderson *et al.*, 2014). Davila *et al.* (2013) suggest that fostering organisational innovativeness begins with incorporating innovation in the organisational strategy and prioritising it as a strategic objective (Hough, Thompson, Strickland & Gamble, 2007) if innovation is intended as a corporate growth strategy (Pisano, 2015). Leiponen and Helfat (2010) propose that instituting innovation objectives is helpful in directing sometimes broad innovation activities. Pursuing a number of innovation objectives is likely to eventuate in more commercialisable value propositions that the organisation can produce and profit from than if there were no objectives (Leiponen & Helfat, 2010).

However, driving innovation solely by including the goal in the organisation's strategy and objectives is insufficient: to actualise innovativeness within an organisation, the strategy and objectives must be instituted by means of operational models to succeed (Davila *et al.*, 2013; Pisano, 2015). Institutionalising innovation processes internally makes them both sustainable as well as legitimate in the eyes of employees (Coblence, Pallez, Vivant & Weller, 2017); Herrera (2015) similarly advocates for institutionalising operational structures and processes. Furthermore, Anthony, Johnson and Sinfield (2008) argue that these internal institutions are necessary to set organisations apart from rivals. Infrastructure is seen as necessary to actualise the innovation organisation direction (Innovation Enterprise, 2013).

Such operational models for innovation processes encompass various factors, such as metrics, goals of individuals and teams, as well as motivators and incentives (Davila *et al.*, 2013). One model for executing innovation has been adopted in the current study, namely that of Govindarajan and Trimble (2010a; 2010b), which is reviewed and synthesised in this chapter. However, at this juncture, it is significant to note that this model is in keeping with the factors mentioned above. Moreover, while processes should be institutionalised, the overarching organisational structure should be a conducive environment for innovativeness and innovation activities to take place.

2.3.2 Innovative organisational structures

In addition to innovation strategy and objectives, the element of organisational structure is also commonly considered in innovation management studies (Anderson *et al.*, 2014). Structures of organisations determine the internal environment of the organisation as it pertains to the enduring relations between the employees and work teams (Harrison, 2005) and refer to formalised patterns connecting these constituents together through specialisation, distribution of power, departmentalisation and shape (Scott & Mitchell, 1976).

2.3.2.1 Flat organisational structures

For innovation to be stimulated within an organisation, some flexibility must be within the structure (Chakrabarti, 1974) and flatter structures have been shown to be more conducive to actualising innovativeness (Smith, 2010) as they offer this flexibility (Claver-Cortés *et al.*, 2007). However, as an organisation grows, it becomes increasingly difficult to maintain this flatness as managers have many more people reporting to them. If achieved, however, it can be a success factor or a basis for continued innovativeness and profitability (Kastelle, 2013).

2.3.2.2 Structures that facilitate dedicated teams

Moreover, among Govindarajan's (2011) key success factors (KSFs) for executing innovation, one is an organisational structure that supports dedicated innovation teams with capable champions at the helm. Despite being an innovation KSF, flattening an established corporate structure, which is likely to be complex and somewhat bureaucratic (Smith, 2010), is a challenge. Moreover, a causal relationship exists between organisational structure and culture: changing one will cause the other to change as well (Janićijević, 2013). However, cultural change may be desired and indeed necessary to pursue and achieve widespread organisational innovativeness (Büschgens, Bausch & Balkin, 2013).

To solve this trade-off, operational models that enable organisations to achieve organisational ambidexterity – the ability of an organisation to explore and exploit simultaneously (O'Reilly & Tushman, 2013) – without disrupting the current operations, should be considered for implementation (O'Sullivan & Dooley, 2009). These models include continuing with organisations' exploitative, daily operations while simultaneously pursuing exploration of innovative value propositions, which is implemented by fostering a structure that supports semi-autonomous dedicated innovation teams (Virta, 2017). Thus, objectives and organisational structures have been discussed; the subject of cultures and climates that lend to innovativeness are reviewed below.

2.3.3   Innovative cultures and climates

The questions of culture and climate have been found to be important in the innovation literature (Anderson *et al.*, 2014). Both constructs are used to conceptualise how people experience and characterise their work settings but these differ from each other (Schneider, Ehrhart & Macey, 2013).

2.3.3.1 Organisational culture and innovativeness

Firstly, corporate culture can be understood as a deeply embedded and widely accepted system of beliefs and values across an organisation (Ahmed, 1998; Morgan, 2006; PwC, 2017). Developing an innovative culture within an organisation requires leaders with the right mindset, expecting the unexpected as well as being open to change (Grant, 2016). As an organisational culture is institutionalised to some extent by the leaders, the upper echelons (Hambrick & Mason, 1984), the leaders who fail to value the importance of innovation are likely to lead ongoing operations and staff

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at large to devalue innovativeness as well (Grant, 2016; Hambrick & Mason, 1984; Yoo & Kim, 2015). While culture operates at a far deeper level than does climate in organisations, climate is more easily observable (Ahmed, 1998; Tidd & Bessant, 2013).

2.3.3.2 Organisational climate and innovativeness

Secondly, climate is understood as the shared impressions and meanings employees attribute to the codified rules and the practices carried out daily with the organisation (Schneider *et al.*, 2013). These perceptions are more objective and observable than those of the phenomenon of culture (Castro, 2008) and climate is more receptive to efforts of improvement and change than is culture (Stone, Harrison, Feldman, Linzer, Peng, Roblin, Scott-Cawiezell, Warren & Williams, 2005).

While many authors have used the terms of "culture" and "climate" interchangeably, Tidd and Bessant (2013:146) advance that this is erroneous as they differ. Firstly, climate differs vastly from culture in that it can be perceived at a surface level – in other words, it is more clearly visible or observable for researchers to study in comparison to culture, which is far more hidden from view as a result of being deeply embedded (Castro, 2008). Thus, if change or improvement in climate is necessitated, the factors necessary to achieve these efforts are also more easily understood (Tidd & Bessant, 2013). Secondly, whereas culture is a widespread and pervasive organisational force which ought to be studied at the organisation level, climate can be observed at different levels of analysis. Individuals can be surveyed and studied for shared impressions of groups (teams), divisions, departments and other analysis levels (Tidd & Bessant, 2013).

(a)   Factors of team climate that can influence innovation

Furthermore, six main factors of climate can influence innovation critically at the team level, including: openness and trust; involvement and challenge; space and support for ideas; debate and conflict; risk-taking propensity; and freedom (Isaksen & Tidd, 2006:329; Tidd & Bessant, 2013:147). The team level of analysis is important and relevant to the study as the research problem concerns managerial and/or leadership considerations for team integrations of small innovation acquisitions.

Thus, the first factor of team climate that can influence innovation is openness and trust, which refers to internal team relationships that have emotional safety; in these contexts, members feel that there exists an open platform for suggesting ideas without judgement. Secondly, involving team members in decision-making and challenging them to have a stake in the success of the organisation represent the involvement and change factor; this factor leads to high intrinsic motivation and commitment to the organisation and team (Isaksen & Tidd, 2006:329-344; Tidd & Bessant, 2013:146-154).

Thirdly, creating space and support for ideas, such as through availing organisational slack, gives employees the platform to experiment to find a feasible and profitable idea. Furthermore, conflict refers to tensions that exist between team members, which should be fostered at a constructive level. Debate is about exchanging various opinions and viewpoints in a healthy manner to arrive at

the best possible solutions in the project's endeavours. Risk-taking propensity comprises of tolerance for ambiguity and uncertainty. Lastly, freedom is evidenced in an organisation or team as the independence in behaviour people have (Isaksen & Tidd, 2006:329-344; Tidd & Bessant, 2013:146-154). Team development is further discussed in Chapter Four due to its salience and relevance to the current study, while the roles of various top management stakeholders are examined in the next section.

2.3.4   The role of top management

Various factors related to the role of management have been studied in the innovation literature (Anderson *et al.*, 2014). The role of organisational level management is significant to the literature review as a result of the institutional leadership which operates in top management positions (Washington, Boal & Davis, 2008) because these individuals play an important role in the post-acquisition integration process (Datta, 1991; Haspeslagh & Jemison, 1991; Li, 2014). Moreover, organisational management is considered important in the stakeholders of the innovation project team, especially the positions of chief executive officer and chief operations officer (Govindarajan & Trimble, 2010a:28-48).

Therefore, as it relates to the role of top management, Tidd and Bessant (2013) emphasise the importance of proactive, participatory management and its role in the context of innovative organisations. Govindarajan (2011) underscores the significance of managerial participation as a critical innovation success factor, especially in the cases of less incremental, more radical innovations. Thus, the proactive roles of the top management team (TMT), chief executive officer (CEO) and chief innovation officer (CINO) are considered in this section.

2.3.4.1 The role of top management team

In the event that an organisation is increasingly under highly competitive market conditions and changing macro-environmental pressures, innovation may become a strategic necessity for the organisation's survival and increased competitiveness; in this case, senior management should proactively lead the charge (Davila *et al.*, 2013; Govindarajan, 2011; Hambrick, 1987; Hambrick, Cho & Chen, 1996; Tidd & Bessant, 2013). The visibility of the TMT's involvement in innovation initiatives has been emphasised as important (Govindarajan, 2011). The visible support of management is conducive to innovation efforts (Choi & Chang, 2009). Moreover, Damanpour and Schneider (2006) found that demonstrating a favourable attitude concerning innovation by the TMT also leads to facilitated innovation. Top managers, particularly CEOs, have significant power over their organisations; in addition, they are also charged with the weighty obligation to utilise that power for the growth of the organisation they control (Hambrick & Mason, 1984); as such, the following section deals with the role of the CEO in innovation activities.

2.3.4.2 The role of the chief executive officer

CEOs have one singularly scarce resource: that of their time and attention (Yadav *et al.*, 2007). As one ascends the organisational hierarchy to the upper echelons of top management, the bottleneck effect increases; in other words, the more senior the manager, the more they must oversee, which means the less gets through to them (Yadav *et al.*, 2007). Thus, the CEO should do everything in their power to ensure news on innovation reaches them or the relevant member of the top management team (Yadav *et al.*, 2007). If organisational learning does not reach the CEO or TMT, it is highly unlikely that the information will be diffused through the organisation (Vera & Crossan, 2004). One suggestion to prevent this is the hiring of a chief innovation officer (CINO) (Koetzier & Alon, 2009); the role is discussed below, regarding the study.

2.3.4.3 The role of the chief innovation officer

A relatively recent addition to the ranks of top management is the position of the chief innovation officer (CINO) (Johnson, 2010). A white paper by Innovation Enterprise (2013) puts forth that its relative novelty as an executive position means that the role of the CINO is still largely unclear, which is understandable. However, what is clear is that the institution of this position assists the CEO's role in innovation by combatting the bottleneck effect for innovative organisational learning; in other words, the CINO is more likely to have the time and infrastructure necessary to bring innovative ideas and learnings to the fore and to diffuse them into the organisation (Innovation Enterprise, 2013).

Whereas Johnson (2010) and Innovation Enterprise (2013) believe the role to be an uncertain one, di Fiore (2014) and Meige (2016) have sought to identify tasks this individual is to carry out, which serve as relatively early descriptions of the role. Meige (2016) describes the CINO role as, firstly, spearheading the pursuit of opportunities or ideas for developing innovations. Laurent and Chollet (2013) agree and suggest that executive leaders should not be reluctant to search for innovation prospects beyond the organisation and industry boundaries in which the CINO operates. Secondly, Meige (2016) also advocates that CINOs should optimise organisation and employee learning from the innovation experiments undertaken. Thirdly, the CINO should envision the demise of the core organisation as a mental exercise to plan for an uncertain future in a rapidly transforming marketplace. Moreover, Meige (2016) argues that this executive should foster the generation of ideas and create the opportunity for rapid experimentation.

According to di Fiore (2014) the duties of the CINO role include: cultivating skills; ascertaining new market gaps; assisting idea generation; overseeing seed funding; encouraging and ensuring best practices; supporting new product development units' innovation initiatives; and fashioning safe spaces ('shelter') for promising projects. Of these roles, the latter three are relevant to the current study. Project managers will directly cultivate the skillsets of team members they oversee; will be

assigned to the innovation project or, alternatively, be a part of the acquired workforce (in which case the market gap has already been identified); will be directly involved in facilitating the generation of ideas; and will not be responsible for seed funding. All these responsibilities of the CINO fall beyond the requirements of the innovation team and its leader. The remaining CINO duties are therefore relevant to the study; these reasons are discussed below.

Thus, the latter three duties CINOs should undertake with reference to the team are, according to di Fiore (2014): encouraging and ensuring best practices; supporting new product development units' innovation initiatives; and fashioning safe spaces for promising projects. Firstly, best practices should be instituted; in this role, di Fiore (2014) states that the CINO is tasked with actively scouting the practices currently used in innovation initiatives. With regards to market research and business experimentation methods, innovation teams will need to be held accountable for results, indicating that resources are being deployed for the achievement of organisational learning (di Fiore, 2014; Thomke & Manzi, 2014).

Wedell-Wedellsborg (2014), however, argues that there is only one aspect that unifies the majority of the job descriptions in the relatively new realm of innovation leadership; this is how they measure their progress in the role. The first manner of measurement is the real-world impact of their efforts; this means of measurement is likely only applicable for incremental innovations which are soon marketed. The second is that they define metrics of their innovation leadership success by developing them over a year or so. Moreover, the most successful of innovators in resourceful organisations create short-term means of measuring innovation successes, such as creating a feedback pipeline from users in a matter of days (Wedell-Wedellsborg, 2014). Thus, best practices for evaluating the portfolio of innovation experiments should emerge from an iterative process.

Secondly, the CINO should support new product development (NPD) units and innovation initiatives. This role involves facilitating the methodologies employed by critical innovation teams in the organisation (di Fiore, 2014), such as the prevalent dedicated team vehicle (Barczak *et al*., 2009). The CINO also coaches other managers to act in this capacity (di Fiore, 2014). Thirdly, the CINO provides shelters for projects with promise and di Fiore (2014) argues that innovations that have the potential to be disruptive in nature may require special shielding from premature resource cuts or idea dismissal as these may turn out to be industry-changing products or services for the organisation. Kanjanabootra (2017) goes one step further and maintains that CINOs must proactively seek out these disruptive ideas. Given the discussion of the innovation-related roles of the TMT, CEO and CINO, other roles that facilitate innovation ventures, such as gatekeepers, sponsors and champions, are discussed in the following section.

2.3.5   Additional roles facilitating innovation

For successful facilitation of innovation to take place, scholars have argued that certain role players are necessary to the initiative both externally and internally, such as those that assist the project's introduction into the formal R&D processes (Markham *et al.*, 2010) and those that effective innovation leaders exhibit (Kim *et al.*, 1999). Furthermore, Klerkx and Aarts (2013) put forth that several diverse actors, or role players, are necessary to the organisation's staff as individuals but that, for innovation to be supported, they coordinate and collaborate for best results.

2.3.5.1 Roles that facilitate the innovation project

The empirical work of Markham *et al.* (2010:402) argues that three major roles exist that contribute significantly to the formal development of innovations in projects, namely innovation sponsors, gatekeepers and champions.

(a)   Sponsors

Firstly, sponsors of innovation avail and deliver resources to the project to assist it in eventuating at a commercialisable offering (Ettlie and Rosenthal, 2012). Kuratko *et al.* (2011:234) also term this role a "facilitator" who pushes for other organisational players to accept the venture through to its fruition by engaging them as well as by mentoring the leader of the project. Sponsors have been so successful, in fact, that some organisational model innovation scholars have called for basing a competitive imitator model solely on sponsors availing resources to peers internal to the organisation (Casadesus-Masanell & Zhu, 2013).

(b)   Gatekeepers

The gatekeeper role serves to stipulate various yardsticks the project must meet to be successful in moving to the formal development stage of the organisation (Markham *et al.*, 2010; Ter Wal, Criscuolo & Salter, 2017). It has also been argued that these actors play an important role at an organisational level, as their role affords them the opportunity to have a universal view of the knowledge base of the organisation, information they can use to improve it (Harorimana, 2009). Kim *et al.* (1999) put forth that this actor requires significant technical, organisational and market information to execute their role with a view to facilitating transformation in value creation efforts. Moreover, the information gatekeeper role of the R&D team leader, like the champion (discussed in section 2.3.5.1c), is played in the levels external to the team, such as individual members of the TMT (Kim *et al.*, 1999).

(c)   Champions

Champions are organisation employees charged with identifying opportunities for innovation and campaigning for their development (Sergeeva, 2016). Kuratko *et al.* (2011) characterise the champion as a driver and director of the venture who supervises implementation, augmentation of concept and supporting the project through any hurdles it may face through to its completion. The

greatest power and responsibility of this role is possibly the first pitch of the concept to management and whether it is then approved for R&D and commercialisation (Chakrabarti, 1974). Howell (2005) argues that these players emerge in manners that are informal, which is to say beyond the systematic authorisation of managers, or hierarchy.

Given the roles that facilitate the innovation project from externally and internally, the roles of the innovation project leader, or R&D leader, are examined below.

2.3.5.2 Roles that the leader of the R&D project must play

Kim *et al.* (1999:153) put forth that four roles positively influence the performance of R&D teams, including: gatekeeper; team builder; technical expert; and strategic planner. As the gatekeeper role has been addressed in section 2.3.5.1b, this section deals only with the latter three of the four roles. The study of Kim *et al.* (1999) also included the role of the innovation champion, but did not find that leaders championing the project with external parties to the team to be important to the internal functioning to the team level, the latter of which is important to the study because of the team level of integration.

(a)   Team-building

The concept of team-building can be defined as those activities undertaken which aim to enable a group to come to be a unified working entity capable of operating at the highest levels of performance (Constantine, 1993). Furthermore, de Meuse and Liebowitz (1981) define team-building as an intervention undertaken over the long run that aims to develop skills related to working together effectively as a team in a structured approach. Moreover, team-building promotes team cooperation, friction resolution and the facilitation of trust among group members (Wand & Howell, 2010).

Team-building is arguably necessary in the early stages of team formation but this significance decreases over the lifespan of the project (Kim *et al.*, 1999) as teams establish trust (Turaga, 2013), which takes time (Hut & Molleman, 1998). Kim *et al.* (1999) also argue that an R&D team leader's team-building role is less important than strategic planning (discussed in section 2.3.5.2(c) below) in uncertain projects – ergo team-building is the most important role in certain projects. Furthermore, the team-building role is an internal one, undertaken by the project leader (Kim *et al.*, 1999).

(b)   Technical expert

The leader's role often requires a level of technical expertise, which involves idea generation and recognition, complex problem-solving and stimulation of the innovation process, all of which are necessary for R&D team members to esteem these leaders (Kim *et al.*, 1999).

(c)   Strategic planner

Kim *et al.* (1999) argue that the strategic planning role of an R&D team leader is debatably most important in projects characterised by high levels of uncertainty. In a conventional sense, project

leaders set venture goals, develop action plans with deadlines, allocate resources, assign responsibilities to team members and evaluate the process. However, project leaders in innovation and R&D experience difficulty in establishing strategic goals and organising the mechanisms necessary to realise these goals, as transformative projects seek to conquer the unfamiliar and the new (Kim *et al.*, 1999). Thus, the leader's strategic planning role is critical to effective innovation efforts as the role which undertakes the specification of strategic focal areas and flexible planning for the purposes of managing unforeseen and unavoidable contingencies that arise during the innovation execution process (Barczak & Wilemon, 1989).

Additionally, one-way managers, such as the CINO and innovation leaders, can provide shelter for promising innovation initiatives by making slack resources available to employees for experimentation (Keegan & Turner, 2002), which is discussed in the following section.

2.3.6   Availing slack resources for innovation experimentation

Anderson *et al.* (2014) hold that the matter of availing slack resources to employees for the purpose of innovation experiments has been examined in the literature. Slack resources refers to various corporate resources that top management provides employees access to for experimentation purposes (Keegan & Turner, 2002; Tidd & Bessant, 2013). Experimental slack resources, such as time, can lead to new ideas with marketable potential from within the organisation (Malhotra, Majchrzak, Kesebi & Looram, 2017). Slack includes but is not limited to: freed up working time (Lichtenthaler, 2016; Rasmussen, Mosey & Wright, 2014) and available workspaces, such as laboratories (Schneider-Sikorsky, 2014).

Moreover, innovation scholars (such as Levinthal & March, 1981) have been interested in the effectiveness of the practice of availing human and financial resources to employees for experimentation; this has been the case since a seminal work of the resource-based view (RBV) proposed by Penrose (1959). In fact, organisational slack has been seen as both a positive and a negative in the literature (Nohria & Gulati, 1996). Regarding the latter, some researchers indicate that slack may be wasteful and unjustified (Bradley, Wiklund & Shepherd, 2011; Mosakowski, 2002). The former, however, has been more widely accepted by the managerial community, evidenced by the continued availing of slack resources in organisations today (Govindarajan & Srinivas, 2013); some discoveries have successfully eventuated from this practice, such as the Post-It (Chesbrough, 2003a).

It has, however, been argued that slack resources are less wasted and put to more valuable use if allocated to teams rather than simply made available to individual employees alone (Bunduchi, 2009). This argument has been underscored elsewhere in the literature, namely in Jalote, Palit, Kurien and Peethamber (2004), where these scholars suggest that reduced resource wastage is

achieved by allocating resources to teams dedicated to the project. Thus, it can be argued that availing slack resources to teams pursuing innovation execution can be successfully undertaken.

Nevertheless, wherever the promising idea for an innovative value proposition originates, once it is approved, it is often taken through to the formation of a team, such as a dedicated team, which acts as the primary vehicle for research and development (Barczak *et al.*, 2009). As such, the framework advanced by Govindarajan and Trimble (2010a; 2010b), as mentioned in Virta (2017), is utilised to explain the formation of the dedicated team in the following section. The dedicated team these authors put forth is relevant to the study as , the team level of analysis is considered in the literature reviewed on innovation and the innovation execution process, particularly regarding the dedicated team as put forward by Govindarajan and Trimble (2010a) (Virta, 2017). The team level of analysis is relevant to the study as the research problem concerns managerial and/or leadership considerations for team integrations of small innovation acquisitions.

2.4   TEAM LEVEL: THE DEDICATED TEAM AND ITS EXTERNALITIES

Innovation initiatives requiring experimentation are best executed by project teams (Magnusson & Berggren, 2001) or dedicated teams (Barczak *et al.*, 2009; Bianchi, Richtnér & Modig, 2014; Cooper & Sommer, 2016). Satell (2016) argues that established organisations should employ and facilitate dedicated teams because the organisation may struggle to innovate given that its focus is likely on improving operational efficiencies (Parmar, Mackenzie, Cohn & Gann, 2014; Porter, 1996; Velamuri, Bansemir, Neyer & Möslein, 2013). However, this team operates as a lean start-up and focuses on iterative product development through trial-and-error experimentation (Bianchi *et al.*, 2014; Satell, 2016). As a result, the formation and support of DTs can lend to an organisation's ability to be ambidextrous in both exploiting current operations and strengths as well as exploring lucrative opportunities (Virta, 2017).

In the operational model proposed by Govindarajan and Trimble (2010a:27-28; 2010b:79-80), the DT and the established organisation are connected by means of a partnership. The DT is made up of individuals that are exclusively focused on the non-routine tasks that an innovation initiative requires (Bagno, Salerno & Dias, 2017). The established organisation should assemble a shared staff, which includes people working in operations, to partner with the DT to provide it with access to resources which it will need to execute the innovation "plan" (Govindarajan & Trimble, 2010a:15-16).

2.4.1   Stage one: Divide the labour

At the inception of an innovation initiative, the breakdown of responsibility and labour should be divided and distributed between the branches of the partnership: the DT and the shared staff, both of which are overseen by the innovation leader (Govindarajan & Trimble, 2010a; 2010b), in this study the innovation acquisition champion. The situation of the shared staff, the innovation team leader

and the DT in the organisational structure is graphically illustrated in Figure 2.3 below; thereafter, these three components are discussed.
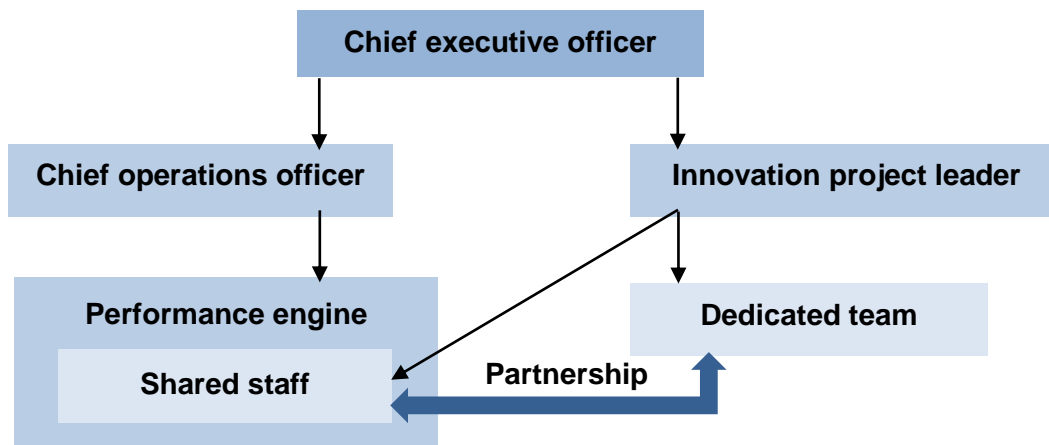
FIGURE 2.3: Organising the innovation project team in the organisational structure
(Source: Adapted from Govindarajan & Trimble, 2010a:28-48)

2.4.1.1 Dedicated team

The DT is comprised of a diverse group of employees who are committed to carrying out atypical job tasks related to innovation execution, which the rest of the organisation is not involved in, trained for or otherwise able to take on (Bagno *et al.*, 2017). The types of tasks the DT is responsible for may include research and development, design thinking processes and rapid prototyping, as examples (Govindarajan & Trimble, 2010a; 2010b; Hamel & Tennant, 2015; Leavy, 2012). Furthermore, the DT approaches experimentation without bias insofar as team members collaborate to eventuate at a feasible, marketable product (Torres & Galvis, 2017).

Govindarajan and Trimble (2010b) argue for hiring outsiders to the DT as it mitigates the risk of recreating a group of conventional wisdom within DTs. This can be caused by the far-reaching consequences of organisational memory, also known as organisational 'DNA' (Govindarajan & Trimble, 2010b:80; Yoo & Kim, 2015:74), which many full-time employees have embedded in their understanding of corporate culture (Schein, 2004).

Thus, if only internal transfers are considered for this team, these scholars argue that the DT will likely turn out similarly to the permanent ongoing operations of the organisation and not deviate from the corporate status quo sufficiently to be considered very innovative (Govindarajan & Trimble, 2010a; 2010b; Yoo & Kim, 2015).

2.4.1.2 Shared staff

The shared staff (SS) are comprised of employees from the performance engine (PE), which essentially encompasses all employees involved in ongoing operations. Shared staff members liaise with the DT and perform two main functions. Firstly, they undertake routine tasks in the execution of

innovation; these are simply tasks that are commonly found on their job description as a part of the ongoing operations of the organisation. Secondly, they are also empowered by management to gain access to valuable resources on behalf of the DT, which the leader cannot. This may include access to factory lines during non-peak production times or materials and other resources that the DT can use for their experiments (Govindarajan & Trimble, 2010a; 2010b; Thomke & Manzi, 2014).

2.4.1.3 Innovation project leader

Florén and Frishammar (2012) emphasise the importance of a strong project manager heading the DT as this individual can rally support and gain access to resources for the team's experiments in creating a commercialisable innovation. As can be seen in Figure 2.3, the innovation project leader is responsible for managing the DT directly as well as reporting to top management positions, such as the CEO and chief operations officer (COO) (Govindarajan & Trimble, 2010a; 2010b).

Furthermore, this manager oversees the shared staff, which is in a partnership with the DT (Govindarajan & Trimble, 2010a; 2010b). The rationale of this leader cooperating and networking with the CEO, COO, DT and SS for the purposes of facilitating the execution of innovation has been argued for by Beckett and Berendsen (2015:1) as well, who term this role that of an "interaction champion". Similarly, Edmondson (2003) advances that effectively undertaking this boundary-spanning role is associated with implementing technology. It has also been suggested that this role is most effectively performed when assumed by leaders, and not teams.

Additionally, the innovation team leader is responsible for integrating the various insiders and outsiders of the DT as well as running a series of disciplined experiments to arrive at a commercialisable value proposition that is innovative and can capture value for the organisation (Govindarajan & Trimble, 2010a; 2010b). The duty of integrating members and building the team has been argued as particularly important in the early stages of an R&D project (Kim *et al.*, 1999) to build relationships between team members (Pirola-Merlo, Härtel, Mann & Hirst, 2002). Disciplined experimentation in teams is more effectively conducted if strong project leadership is at the helm (Yukl, 2009). Given the discussion of the division of labour in the DT-shared staff partnership and its selection of the innovation project leader, the second stage, build the team, is discussed below.

2.4.2 Stage two: Assemble the dedicated team

In assembling a DT, Govindarajan and Trimble (2010a; 2010b) prescribe three critical steps: firstly, to identify the skills needed; secondly, to hire the best people the leader can find; and, thirdly, to match the initiative to the project team's organisational model (Govindarajan & Trimble, 2010b).

Prior to hiring individuals based on their capabilities, the skills required for the innovation initiative should be identified. This modus operandi will ensure that the DT is characterised by all necessary personal know-how (tacit knowledge), practical previous experience, technical competencies and creativity. Once the skills have been identified, the pool of insiders should be reviewed for potential

candidates as well as considering capable outsiders who possess skills that are perhaps not as prevalent in the organisation at the time (Govindarajan & Trimble, 2010a; 2010b).

Dussauge, Hart and Ramanantsoa (1992), Galbraith (1982) as well as Magnusson and Berggren (2001) have advocated for the superiority of using a dedicated team, which is separate from the day-to-day operating functions of the wider organisation, as these scholars believe that it is a superior vehicle to use in the pursuit of commercialisable, more radical innovations, given that they are led by a strong project manager.

2.4.3   Stage three: Manage the partnership

Developing a symbiotic, synergistic partnership is challenging due to the divergent perspectives, opinions, interests and priorities of the team, which require active managing and leading for the initiative to achieve success (Govindarajan & Trimble, 2010a; 2010b; Morgan, 2006). This is perhaps why many organisational difficulties originate from strained relationships (Ilgaz, 2014). In innovation teams, leaders dedicate more than 20 per cent of their time to resolving team conflict alone (Kratzer, Leenders & van Engelen, 2006:97).

Thus, an additional sub-model has been put forth, which deals with anticipating and mitigating the strains in the partnership of the DT and SS. These two groups do not work together naturally, which means that a collaborative approach with the performance engine is necessary. To foster such a synergetic relationship, Govindarajan & Trimble (2010a) suggests three challenges (see Figure 2.4 below) that should be anticipated before they can be managed.
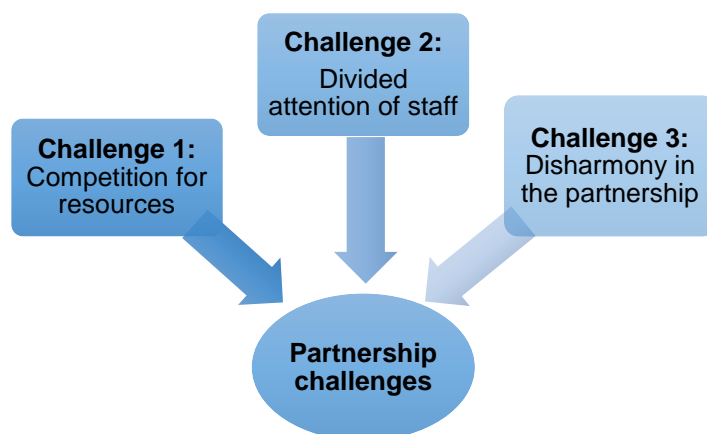
FIGURE 2.4: Common challenges faced in managing the partnership

(Source: Adapted from Govindarajan & Trimble, 2010a:78)

The DT competes for scarce resources from the performance engine, as they depend on the time, energies and attentions of shared staff, which can create disharmony in partnerships between the SS and DT (Govindarajan & Trimble, 2010a). Barsh, Capozzi and Davidson (2008) advise that once

a small project team has been created and assembled, opportunities must be founded for managing experimentation and succeeding in attainment of small wins early on. Similarly, Govindarajan and Trimble (2010a) advance that rigorous innovation experimentation must take place at the team level. Hülsheger *et al.* (2009) have reasoned that the management of these teams is vital for successful innovation to take place.

The following section discusses the part of the framework that these researchers advance, which they call innovation execution, and combines other prescriptions present in the literature. It is salient to note that the literature, by and large, refers to the innovation process rather than innovation execution as proposed by Govindarajan and Trimble (Virta, 2017); therefore, the wider literature pertaining to the innovation process is reviewed in the following section as well as innovation execution and the dedicated team's role therein.

2.5   THE INNOVATION PROCESS

Many innovation processes have been proposed by multiple scholars, culminating in several generations of innovation processes (Abidin, Mokhtar & Yusoff, 2013; Rothwell, 1994). Moreover, recent examples will be presented and discussed, including the generic processes of Tidd and Bessant (2013) and Smith (2010) as well as the DT-driven process of Govindarajan and Trimble (2010a). This section presents existing knowledge on the various innovation processes that have been advanced by scholars since the start of innovation as a discipline. As Govindarajan and Trimble's innovation execution process is considered in this study as a result of its focus on teams dedicated to developing innovations, perhaps made up of small acquisitions (Govindarajan & Trimble, 2010a:53). It is also the case that small innovation acquisitions that are integrated into teams may be charged with undertaking an innovation execution process to develop an innovation, making innovation processes and innovation execution processes relevant to the study.

2.5.1   Innovation process generations

The work by Rothwell (1994) that actualised the identification of evolving innovation processes from the 1950s has been called a seminal work by scholars such as Meissner and Kotsemir (2016) as well as Zajkowska (2015). As such, Rothwell's five generations are reviewed in this section, as well as the sixth generation advanced by Chesbrough (2003b:35) which is known as "open innovation" (a summary of which can be seen Table 2.1 below).

TABLE 2.1: The six generations of innovation management processes

Generation	Innovation process model	Period	Nature of the model
1	Technology push	1950s–Late 1960s	Linear process
2	Market (demand) pull	Late 1960s–Mid-1970s	Research and development on the desires of the customer
3	Coupling	Mid-1970s–end 1980s	Interaction between organisational functions
4	Integrated	End 1980s–early 1990s	Parallel processing with feedback loops
5	Networking	1990s	Systems integration and networks (SIN)
6	Open innovation	2000s	Collaborating and exploiting multiple paths for innovation

(Source: Adapted from Chesbrough, 2003b:35-41; Rothwell, 1994:8-12; Smith 2010:114-123)

2.5.1.1 The first generation: Technology push

For nearly two decades spanning the 1950s and 1960s, the dominant process model employed by innovating organisations was linear in nature, with sequential stages to follow, and the driving force behind this process was scientific discovery (Rothwell, 1992; 1994). New or improved technologies, research and technological possibilities lead to refined design and engineering, and if this is successful to mass production, marketing to the target customer and promoting the new product on the market, meaning that it is immaterial whether a demand exists in the market or not to the innovator organisation (Brem & Voigt, 2009). This sequential process model is presented in Figure 2.5 below.

Basic science → Design and engineering → Manufacturing → Marketing → Sales

FIGURE 2.5: First generation technology push process

(Source: Adapted from Rothwell, 1994:8)

Smith (2010) argues that the base assumption of this model is that additional investments in research and development increase the likelihood of discovering more technologies, which then leads to more innovation. While this model was successfully and widely implemented in the middle of the twentieth century, it gave way to the market pull model, the second generation.

2.5.1.2 The second generation: Market pull

In many cases, consumers are inadequately satisfied with the value offerings on the market at any given point in time, which they are aware of and want (or need) producers to create, manufacture and sell these products and services that consumers demand (Brem & Voigt, 2009), which is to say that they are marketed and sold at prices consumers are both willing and able to buy at (Meszaros

& Evans, 2010). Therefore, the impetus to the market pull innovation process, popular from the late 1960s to the mid-1970s, was in gaining market insights to determine the needs and wants of consumers; once the demand of the consumer was identified, innovators went to work developing the desired value proposition and once it was commercialisable, it was produced *en masse* and sold to the market (Rothwell, 1994; Smith, 2010). This process is presented in Figure 2.6 below.

| Market need | → | Development | → | Manufacturing | → | Sales |
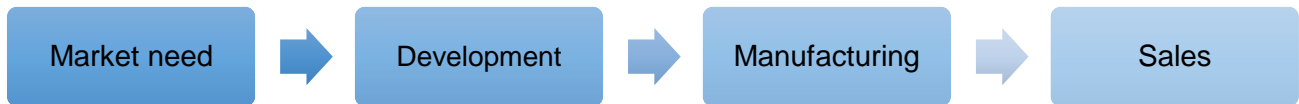
FIGURE 2.6: Second generation market push process

(Source: Adapted from Rothwell, 1994:9)

Given the discussion of the chiefly linear, sequential innovation process models of the first generation (technology push) and second generation (market pull), the more dynamic, third generation process is presented hereafter.

2.5.1.3 The third generation: Coupling

As many industries faced significant levels of complexity in their value creation processes, scholars asserted that the two previously discussed linear processes were arguably too oversimplified to encompass and fully serve the tasks of idea generation and innovation implementation in the mid-1970s to late 1980s (Rothwell, 1994; Smith, 2010). This is especially true for organisations operating in macro environments characterised by challenging socio-economic and market demands and rapidly advanced technologies and production processes (Hobday, Boddington & Grantham, 2011; Schwab, 2016; Smith, 2010). In response to these criticisms of the first and second generation models, the third was born: "coupling" (Godin & Lane, 2013:10-11; Smith, 2010:116).

Essentially, the coupling model is so named because combines the prior two generational models and show the direct impact socio-economic needs and technological advances should have on both the innovation process and the innovations the organisation puts into the marketplace to solve problems or exploit opportunities (Nacu & Avasilcai, 2015). It aims to 'couple' or build a relationship between the various activities and role players involved in innovation and its execution (Godin & Lane, 2013:6). The third generation coupling model can be seen below in Figure 2.7.
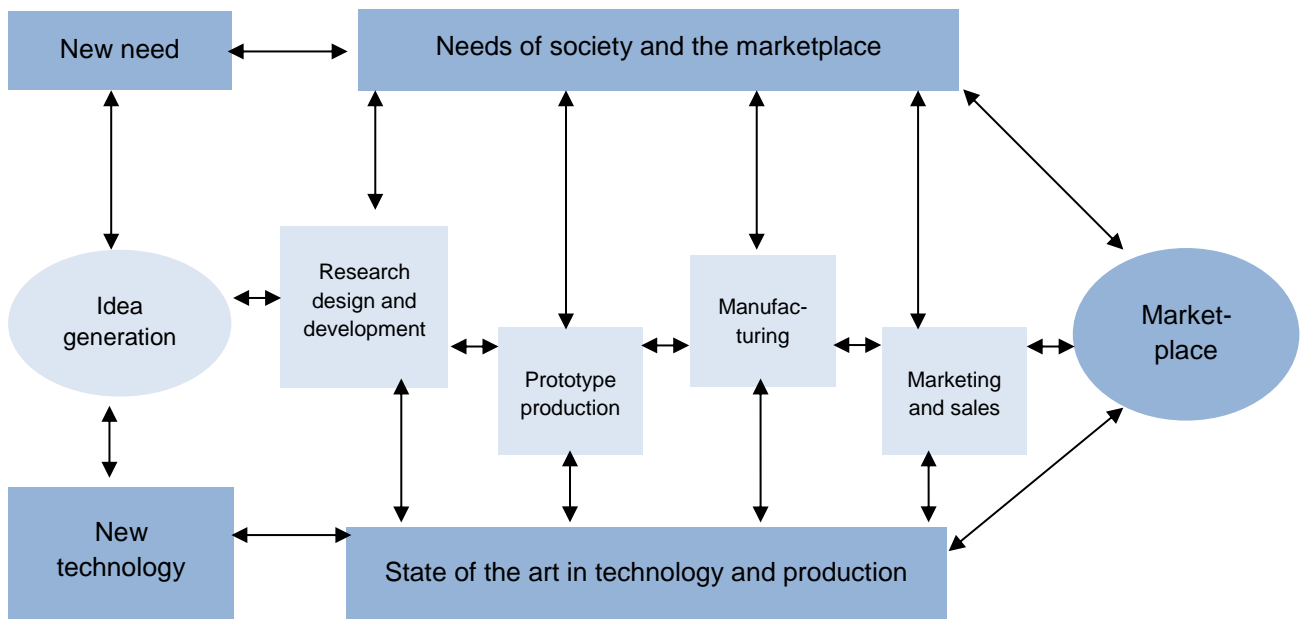
FIGURE 2.7: Third generation coupling process

(Source: Adapted from Rothwell, 1994:10)

As can be seen in the above model's various relationships (graphically illustrated using arrows), this process allows for several feedback loops between the linear, sequential stages of innovation implementation (refer to the green boxes) and responsive loops to the external environmental forces of the needs of the market and society as well as highly advanced technology and process innovation in production (refer to the blue boxes) (Rothwell, 1994; Smith, 2010).

This model allows for high levels of interaction and interdependence between the internal innovation execution stages, indicated by feedback loops, which represent lines of open and clear communication between role players within, while simultaneously maintaining an outward view as well (Smith, 2010). However, as can be seen in the above figure, this model has a significant constraint: there is very little attention paid to integrating functions, such as marketing, R&D and operational production (du Preez, Louw & Essmann, 2006). Another example of a third-generation linear innovation process is the "stage-gate model" (Cooper, 1990:44; du Preez *et al*., 2006:4), which is below in Figure 2.8.
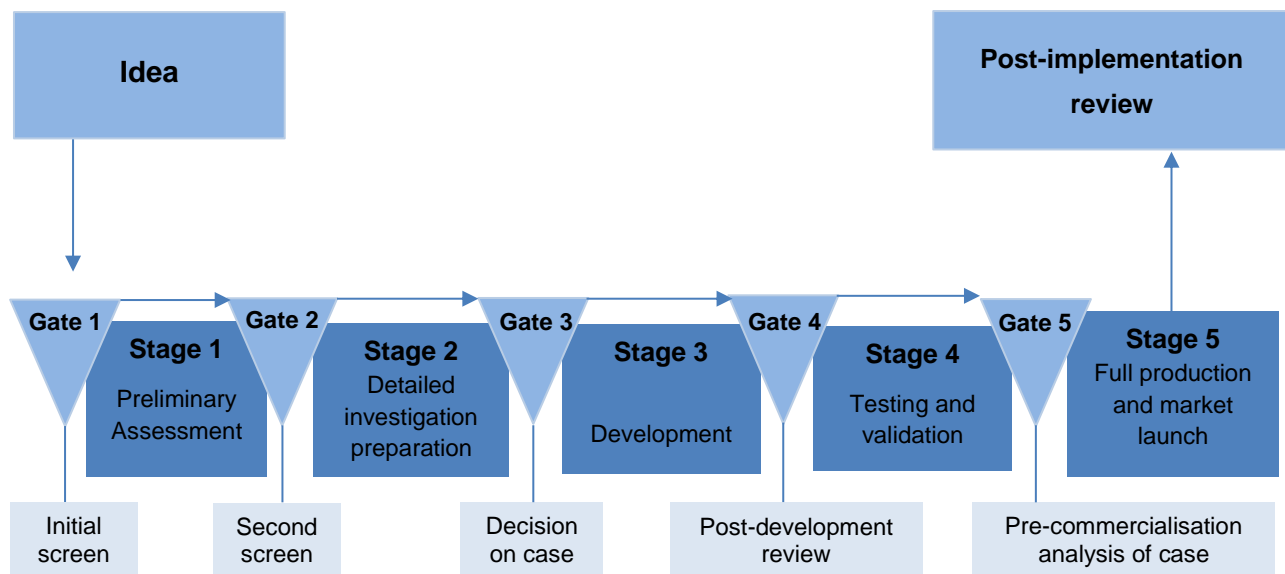
FIGURE 2.8: Stage-gate model

(Source: Adapted from Cooper, 1990:46)

In keeping with the third-generation tradition of innovation models, the stage-gate model proposed by Cooper (1990) was linear, sequential (du Preez *et al.*, 2006) and allows for the clarification of individual and team accountability (Cooper, 2006), which is important to determine formally for the innovation to successfully eventuate (Brem & Voigt, 2009).

2.5.1.4 The fourth generation: Integrated/parallel processing

The movement towards the fourth generation had the disadvantage of more complex conceptualising and managing of innovation execution as a result of responding to the levels of complexity existing in society, the marketplace and the customer base (Ortt & van der Duin, 2008). The more complex processes introduced in the late 1980s through the early 1990s were integrated or parallel processing models (Rothwell, 1994) that can be characterised as having an iterative orientation (Hobday, 2005). The model of the fourth generation fostered more cost effective and expeditious new product development processes, which is advantageous for achieving a rapid time to market; the model of this era also promoted integration and cross-functional projects (Neely & Hii, 1998). This model can be seen below in Figure 2.9.

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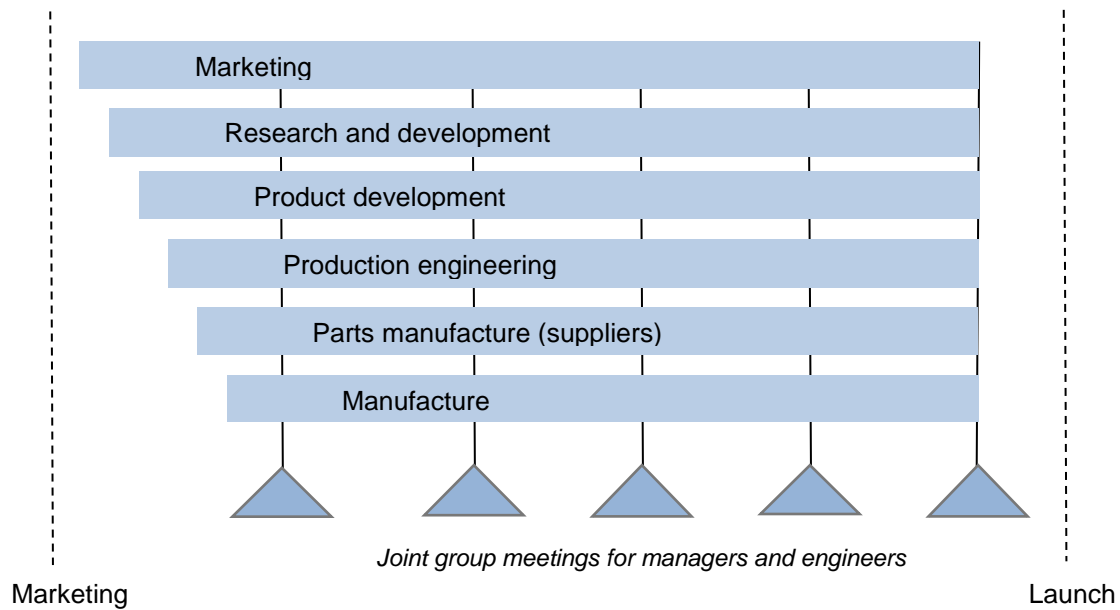
FIGURE 2.9: Fourth generation integrated/parallel processing model

(Source: Adapted from Neely & Hii, 1998:14; Smith, 2010:117)

Heightened competition in the 1980s led to the need for a more integrated perspective on managing innovation execution from the initial idea to commercialisation (Smith, 2010). Rothwell (1994) asserts that this integrated, overlapping approach of bringing the different innovation functions together in the early stages of the meetings of managers and engineers (refer to the triangles which represent these meetings in the above figure) was inspired by innovative Japanese organisations, which they accomplish in a parallel rather than in a serial manner, which is more linear. Correspondingly, Neely and Hii (1998) also relate the influence Japanese organisations had on this generation of innovation processes. Terziovski (2002:6) identifies the influential Japanese process-orientated principle of "kaizen" as a key success factor of this generational model, which refers to the practice of using problem-solving techniques for detecting and solving issues that arise in innovation execution processes.

2.5.1.5 The fifth generation: Network innovation

The 1990s saw an increased interest in gaining an understanding of the external stakeholders that either directly or indirectly influence the various organisational and innovation functions, which in turn affect knowledge creation (du Preez *et al.*, 2006); this can be seen in Figure 2.10 below. External inputs by various stakeholders can be seen in the figure, such as: societal needs; relations with suppliers; customers; rivals; distributors; scientific discoveries; new technologies; and tertiary education departments (du Preez & Louw, 2008). Thus, effective networking with these stakeholders can be beneficial for the accumulation of organisational and innovation knowledge (du Preez & Louw, 2008).

External inputs:
Needs in society
Rivals
Supplier
relationships
Distributors
Strategic
alliances
Customers

External inputs:
Competitors
Customers
Distributors
Suppliers

Marketing and sales

Finance

**Accumulation
of knowledge
over time**

External inputs:
Customers
Distributors
Suppliers
Rivals
Departments of
universities

**Engineering and
manufacturing**

**Research and
development**

External inputs:
Scientific
discoveries
and new
technologies
Customers
Suppliers
Departments
of tertiary
education
institutions

FIGURE 2.10: Fifth generation network innovation model

(Source: Adapted from du Preez & Louw, 2008:550)

As can be seen in the figure above, the model is far less linear and process-orientated than the previous four models as it is cyclical; it seeks to understand the wider external network in which knowledge creation takes place (du Preez & Louw, 2008).

Rothwell (1994) identified the fifth generation innovation process in the mid-1990s and wrote a seminal work on the subject (Meissner & Kotsemir, 2016; Zajkowska, 2015). From a strategic management point of view, the model this scholar advanced encompassed many elements. Firstly, a focus on efficiency in developing new products is a strategic objective. Secondly, centring on quality over price is important. Thirdly, responsible and adaptable corporate citizenship is significant. Furthermore, a customer orientation is used in the NPD process. In addition, integrating important suppliers and customers into the design process (Rothwell, 1994), which is today more widely known as co-design (Hanafy & ElMaraghy, 2014).

Fundamentally, Rothwell (1994) advocated for the fifth generation networking model for innovation as primarily geared towards making innovation leaner than in previous waves. Lean innovation refers to removing waste in the process of innovation execution, essentially implementation from idea through to experimentation, to create the most value from the most purposeful investment (Radeka, 2013). The fifth generation of innovation was the first that could be considered an open system, where various external stakeholders and their influences on the continuous internal knowledge accumulation process were included in the conceptualisation of the model (Smith, 2010:121). Thus, the preceding four were all closed to external influence (Smith, 2010). The sixth generation, open innovation, was first proposed by Chesbrough (2003b).

2.5.1.6 The sixth generation: Open innovation

Chesbrough (2003b) proposed the concept of open innovation as the new innovation process which extends externalisation further (Smith, 2010; Tidd & Bessant, 2013); the model of open innovation is presented in Figure 2.11 below. As can be seen in the figure, various innovative research projects are underway at any given time, both within the internal realm of the organisation boundary as well as externally to the organisation. Whether the project is within the organisation or external to it, each project is at a different stage of completion, which can be seen in the figure: some may be early in the research and development process whereas others may already be in the commercialisation phase (Chesbrough, 2003b; Smith, 2010; Tidd & Bessant, 2013).
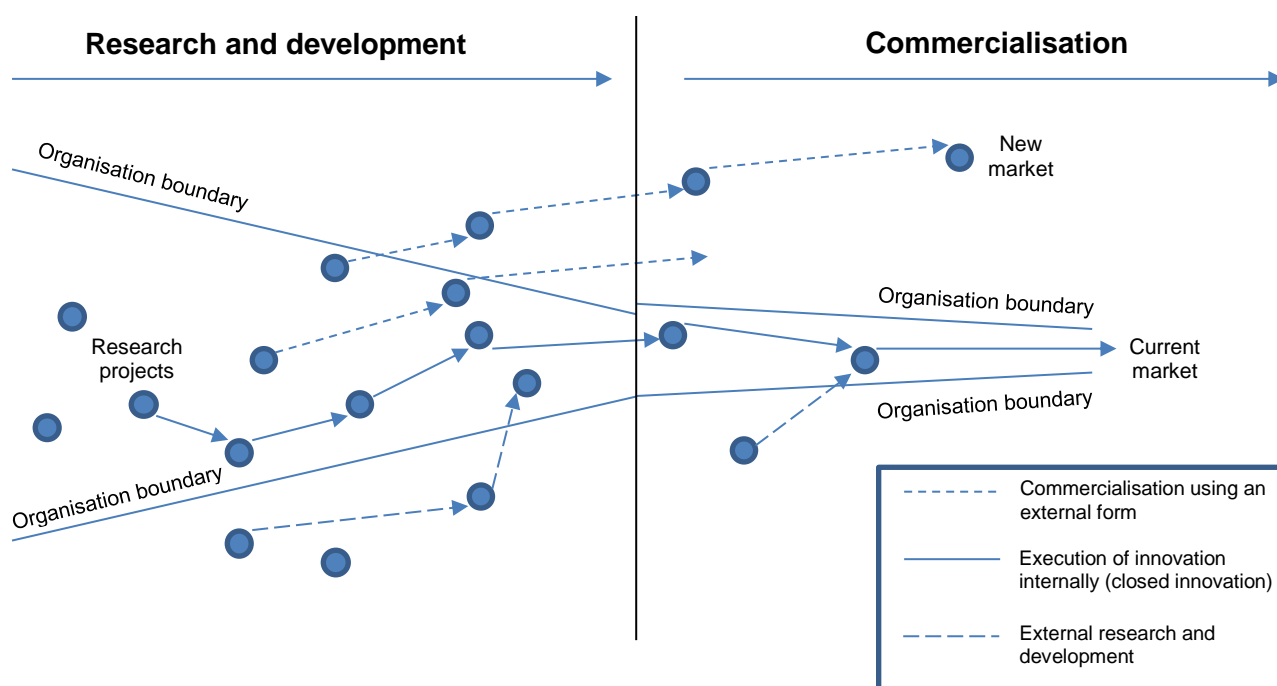
FIGURE 2.11: Sixth generation open innovation process

(Source: Adapted from Chesbrough, 2003b:37; Smith, 2010:121-123; Tidd & Bessant, 2013:271)

Organisations pursuing open innovation models offer them multiple options for either ending the venture (represented by the stationary blue dots in the figure) or approving the research project. If so, those projects which are relevant to the organisation's customer base or potential customer bases (considered the new market) are researched and developed within the organisation's boundaries to deliver the offering to the current market. In cases where the innovative value proposition is deemed inappropriate for the marketing of the organisation, it is commercialised beyond the rigid boundaries of the organisation's interior in new markets, which is accomplished by

means of strategic alliances and other external strategic options (Chesbrough, 2003b; Smith, 2010; Tidd & Bessant, 2013).

This section has discussed the six generations of innovation management processes that have spanned decades from the mid-twentieth to the early twenty-first century, which are summarised in Table 2.1. Given the discussion of these models, the following section introduces and discusses innovation processes that have been more recently advanced in the literature.

2.5.2   Recent innovation processes

Resulting from the legacies of the six generations of innovation management models put forth in the literature and applied in industry, relatively more recent processes are discussed below (du Preez & Louw, 2008; Govindarajan & Trimble, 2010a; 2010b; Nolan & Williams, 2010; Tidd & Bessant, 2013).

2.5.2.1 Generic four-phase innovation process

Firstly, a generic innovation process comprising four phases has been put forth by Tidd and Bessant (2013): search; select; implement; and capture (refer to Figure 2.12 below). Salerno, Gomes, da Silva, Bagno and Freitas (2015) have argued that these four phases encompass a one-size-fits-all approach that has been traditionally adopted by innovation management scholars, such as Cooper (1990) and Utterback (1971). However, the four-phase process has largely endured in Tidd and Bessant's (2013), the first edition of which – Tidd, Bessant & Pavitt (2005) – has been cited 7856 times, according to Google Scholar on 31 August 2017 (Google Scholar, 2017).

Do we have a clear innovation strategy?

Search	Select	Implement	Capture

Do we have an innovative organisation?
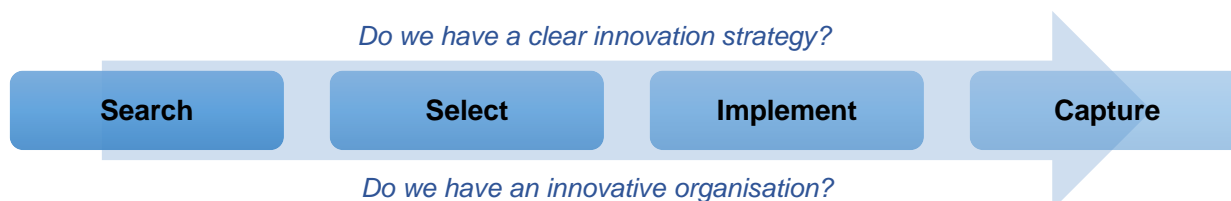
FIGURE 2.12: The four-phase generic innovation process

(Source: Adapted from Tidd & Bessant, 2013:21-47)

In this process, the first phase is known as "search" (Tidd & Bessant, 2013:22) and "idea generation" (Utterback, 1971:78). According to this model, for the innovation process to be started, an idea is necessary to begin and these can originate from various sources, including the research and development department, 'Eureka' moments (sudden flashes of discovery), signals from the marketplace, updated regulations and behaviour of rivals (Tidd & Bessant, 2009:19).

Secondly, "select" (Tidd & Bessant, 2013:22) and "problem solving" (Utterback, 1971:78) comprises the next phase. If a pool of ideas is constantly being generated, one is strategically chosen for innovation execution, if deemed viable and marketable (Tidd & Bessant, 2013). Conversely,

Utterback (1971) contends that this step deals with developing a novel technical solution that is ready to go to market.

The third phase is "implement" (Tidd & Bessant, 2013:22) and "implementation" (Utterback, 1971:78). Whereas Tidd and Bessant (2013) explain the phase of implementing as the strategic commitment of resources to creating a marketable value proposition, Utterback (1971) sees this implementation as market introduction, or early diffusion (Hsueh, 2011; Nejad, Sherrell & Babakus, 2014).

The final phase is "capture" (Tidd & Bessant, 2013:22) and "diffusion" (Utterback, 1971:78). Although Tidd and Bessant (2013) view capture as profiting from introducing the innovation to the market for the first time, Utterback (1971) describes this phase as increasing marketing promotion efforts with consumers to stimulate demand, purchases and majority diffusion (Hsueh, 2011; Nejad *et al.*, 2014).

With reference to Figure 2.12, Tidd and Bessant (2013) pose two significant questions on the peripheries of the figure. The first is: "Do we have a clear innovation strategy?" and the second is: "Do we have an innovative organisation?" (Tidd & Bessant, 2013:47) Innovation strategy and organisational innovativeness are significant factors for the creation of effective innovation processes and successful marketed innovations. The importance of top-level strategic planning and fostering innovation strategy and innovativeness throughout the organisation is important (Tidd & Bessant, 2013).

2.5.2.2 The Fugle process of innovation

The Fugle process of innovation comprises two phases, which are centred on the development and exploitation of a portfolio of prospective innovations (du Preez & Louw, 2008). As can be seen in Figure 2.13 below, ideation is the first stage of phase one and encompasses generating and filtering ideas to arrive at the stage of defining the concept. The third stage involves refining the possible ideas and concepts to arrive at only feasible possibilities for innovative value offerings to be transferred into the organisation's portfolio (du Preez & Louw, 2008).
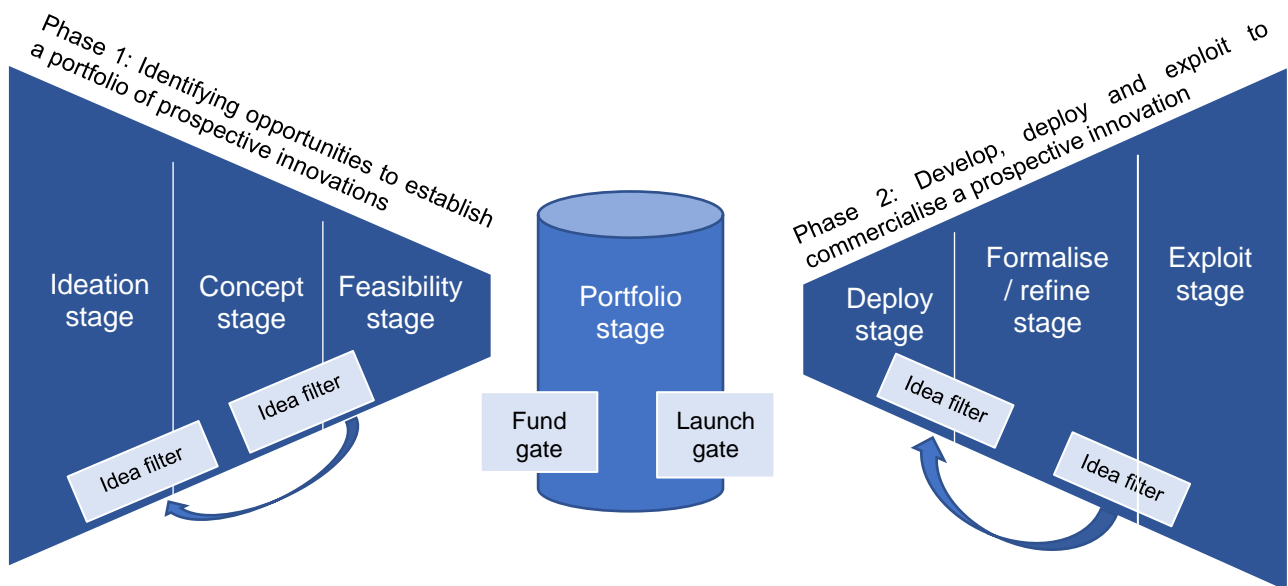
FIGURE 2.13: Fugle innovation process

(Source: Adapted from du Preez *et al.*, 2006:15)

The second phase is also made up of three stages, the first of which sees the organisation deploy (or launch) projects in which they design, execute and test the idea in the market. Secondly, the success of the launch is then monitored to ensure the proposition lives up to specifications and anticipated performance in the market. The formalised offering is expanded and exploited in the market to generate additional value as much as possible (du Preez & Louw, 2008).

2.5.2.3 Two process mindsets

Organisations striving to operate efficiently in fast changing environments and compete effectively engage in two modes of thinking, operational and innovative, which continually feed into each other (Nolan & Williams, 2010), as can be seen in Figure 2.14 below.
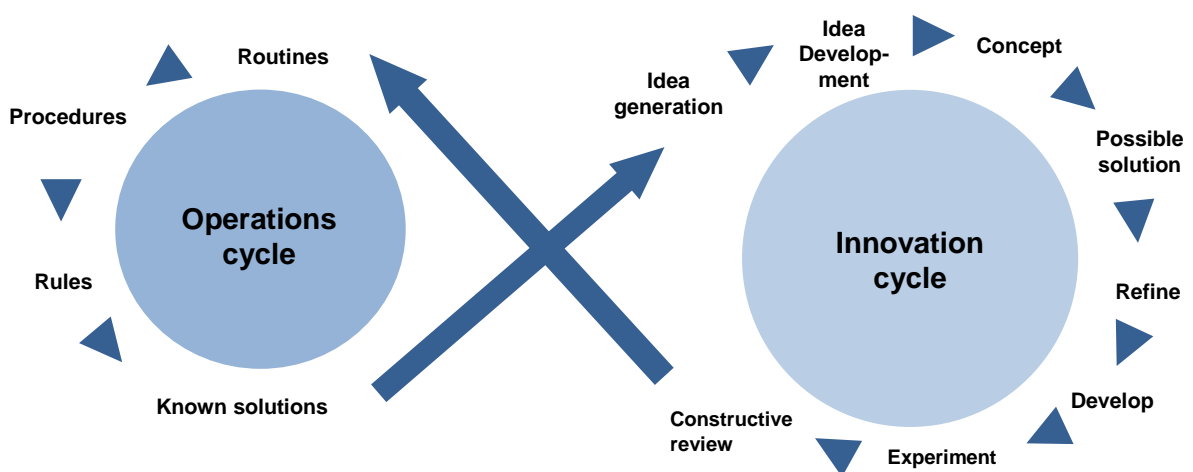
FIGURE 2.14: Two process mindsets

(Source: Adapted from Nolan & Williams, 2010:32-41)

In Nolan and Williams' (2010) operations cycle, the procedures, routines and rules drive the daily, expected operations, all of which are knowns; the thinking in this cycle is based on logic and facts as well as analysing present scenarios of mainly confirmed knowns. On the reverse side, the cycle of innovation requires being easy with various unknowns; for example, a new idea may arise, which will need to be developed and further conceptualised until it can be included as a possible innovation to be experimented on until it is commercialisable, at which stage the innovation is input into the operations cycle. The thinking in this cycle is speculative, exploratory and future-orientated and focussed on ideas that are yet untested (Nolan & Williams, 2010).

In summary, modern innovation processes in organisations are iterative, non-linear, cyclical and taxing on those involved, whether they are initiators or implementing innovators with a role to play in innovation execution (Anderson, de Dreu & Nijstad, 2004). However, the processes put forth in this section (du Preez & Louw, 2008; Govindarajan & Trimble, 2010a; 2010b; Nolan & Williams, 2010; Tidd & Bessant, 2013) while comprehensible, logical and applicable, lack any prescriptive, concrete recommendations for managers on how to organise people and develop a dedicated team within the innovation initiative and the leadership challenges that accompany this endeavour. As such, the operational model proposed by Govindarajan and Trimble (2010a; 2010b), which has a focus on the DT for innovation experimentation in the innovation execution process, is considered because of this inclusion and focus.

2.5.3   An innovation execution process undertaken by a dedicated team

Virta (2017) has advanced the Govindarajan and Trimble (2010a; 2010b) framework as a useful model for both explicating and achieving an ambidextrous approach to innovation, which undertakes both exploitation of daily operations as well as exploration of future opportunities. Thus, this framework guides the execution of innovation in established organisations, which are relatively less equipped to innovate effectively as a result of maintaining their focus on operating efficiencies (Porter, 1996) and be somewhat bureaucratic (Virta, 2017), by establishing a link between operations and a team dedicated to innovation execution (Govindarajan & Trimble, 2010a; 2010b; Virta, 2017). This framework facilitates the work of DTs, which allows established organisations to gain organisational ambidexterity (Chen, 2017; Sætre & Brun, 2013; Virta, 2017), which is the simultaneous exploration of potential profitable innovations (new knowledge) as well as a continuation of the exploitation of current knowledge, resources and processes (Raisch, Birkinshaw, Probst & Tushman, 2009). According to Euchner and Ganguly (2014), this model has identified critical success factors for developing capable and prolific new innovation ventures within organisations and encompassed these factors in their model. Figure 2.15 below depicts this largely mutually exclusive nature of innovation execution.
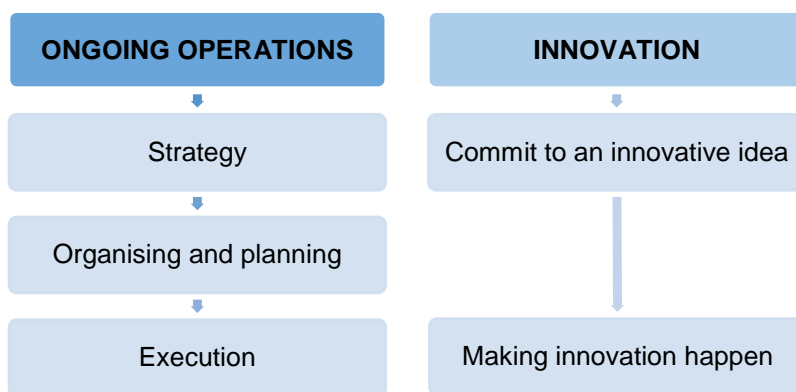
FIGURE 2.15: The separation of ongoing operations and innovation

(Source: Adapted from Govindarajan & Trimble, 2010a:16)

As can be seen in Figure 2.15, these scholars' framework for executing innovation is made up of two phases: firstly, "build the team" and, secondly, "run a disciplined experiment" (Govindarajan & Trimble, 2010a:vii-99), which can be seen in Figure 2.16 below. The three stages of the first phase are: firstly, dividing the labour; secondly, assembling the dedicated team; and, lastly, managing the partnership (Govindarajan & Trimble, 2010a:27-28; 2010b:79-82). The second phase, rigorous innovation experimentation, is discussed in the following section.
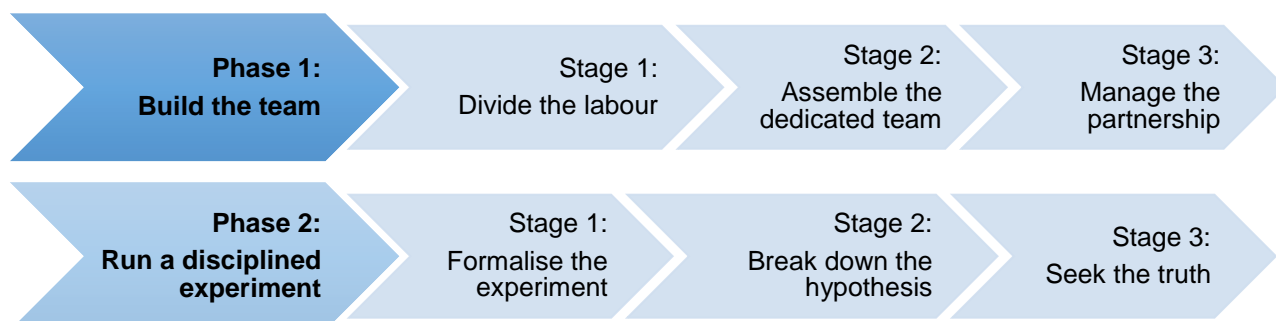
FIGURE 2.16: Phases and stages of innovation execution

(Source: Adapted from Govindarajan & Trimble, 2010a:vii-99; 2010b:79-82)

Given the discussion of literature regarding the elements of organisational contexts that support innovation and the innovation processes proposed by various authors, the team level of analysis is considered hereafter. The assemblage of the DT, the formalisation of the innovation experiment and the criteria for holding innovation leaders accountable, namely for organisational learning, are discussed and reviewed in the rest of the chapter.

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2.6 TEAM LEVEL: RIGOROUS INNOVATION EXECUTION AND EXPERIMENTATION

Thomke and Manzi (2014) argue that the problem of developing a proposed innovation as a complex task. Due to the absence of existing tested data and organisational learning in cases of inventive novelty, managers often reflexively revert to their personal intuition and experience and to their organisation's conventional wisdom. Thus, these researchers suggest rigorously applied scientific tests (Thomke & Manzi, 2014), which is in keeping with Govindarajan and Trimble's (2010a:14-19) prescription that successful outcomes of innovation initiatives eventuate from disciplined planning and experimentation – innovation execution. The learning process is essentially made up of three steps: firstly, formalise the experiment; secondly, break down the hypothesis; and, thirdly, seek the truth (Govindarajan & Trimble, 2010a). Regarding the research problem of the current study, innovation execution and experimentation are of interest as integrated teams may be dedicated to these tasks during the integration process.

2.6.1 Stage one: Formalise the experiment

Thomke and Manzi (2014) put forth five conditions for effective experimentation in organisations, which is addressed first in this section. These authors argue that if these conditions are met, the project can go forward requiring two processes. The four-phase process of formalising such an experiment, according to Govindarajan and Trimble (2010a), is presented. In addition, the ten principles that should steer organisations' experiments to achieve organisational learning optimally are also discussed (Govindarajan & Trimble, 2010a).

2.6.1.1 Conditions for effective business experimentation

Thomke and Manzi (2014:5) offer guidance for organisations embarking on experiments. For these experiments to be successful, even insofar as bringing about valuable organisational failures, five conditions should be met; these are presented in the form of questions the organisation must ask itself, from the top management team to the ranks of those carrying out the experiment (Thomke & Manzi, 2014).

(a)   Clear purpose

The first question is: "Does the experiment have a clear purpose?" (Thomke & Manzi, 2014:4). Experiments are often costly to the organisation conducting them in terms of financial and human (time) resources. Thus, they should only be conducted if only sensible manner of answering the questions necessary (Thomke & Manzi, 2014).

(b)   Stakeholder commitment

The second question is: "Have stakeholders made a commitment to abide by the results?" (Thomke & Manzi, 2014:5). Whatever the results turn out to be, stakeholders must act in accordance with them and not cherry-pick the findings that support their sense of reality or viewpoint. Therefore, if an

excitedly-anticipated project is not supported by the experiment's ensuing data it should be discarded, which requires stakeholder commitment to results (Thomke & Manzi, 2014).

(c)   Feasibility and achievability

The third question is: "Is the experiment doable?" (Thomke & Manzi, 2014:6). For this question to be answered in the affirmative, the experiment would need to have a testable prediction, a realistic sample size and feasibility in conducting the experiment (Thomke & Manzi, 2014).

(d)   Reliable results are ensured

The fourth question is: "How can we ensure reliable results?" (Thomke & Manzi, 2014:7). As experiments require often-significant trade-offs (including time, cost, reliability and other pragmatisms), three methods can increase reliability and diminish trade-offs. Firstly, the marketable value offering can be tested in a randomised field trial to see how potential customers and consumers will respond. Secondly, blind tests can also be used, which involves test subjects not knowing that they are part of an observation while responding to a product or service. Moreover, big data can also be analysed for trends; however, big data usually point to existing industry trends, which don't encompass very novel propositions (Thomke & Manzi, 2014). The method chosen will understandably be dependent on the value proposition. Davenport (2009) also emphasises that contemporary business experimentation, if conducted properly, produces valid and reliable results.

(e)   Derived sufficient value from experimentation

The fifth and final question is: "Have we gotten the most value out of the experiment?" (Thomke & Manzi, 2014:9). Due to the expense and trade-offs necessary for business experiments, organisations must get the most out of them by gaining and diffusing as much organisational learning as is possible (Thomke & Manzi, 2014). He suggests the creation of a 'learning library' for other employees to have access to, which will prevent repeating similar experiments and wasting valuable resources (Davenport, 2009:71).

By conducting business experiments that produce results which managers and employees trust, outdated, inflexible conventional wisdom becomes eroded to the benefit of organisational innovativeness (Thomke & Manzi, 2014). Thus, to gain credibility in the organisation, experimentation should be formalised; Govindarajan and Trimble (2010a) propose a process to this end, discussed in the following section.

2.6.1.2 Steps in formalising the experiment

Formalising the experiment requires critical strategic thinking regarding the most efficient and effective course to follow in the innovation initiative's experimenting. Figure 2.17 below displays the generic process, which innovation initiatives can assume, adjust and carry out given their experiments' specific needs (Govindarajan & Trimble, 2010a).
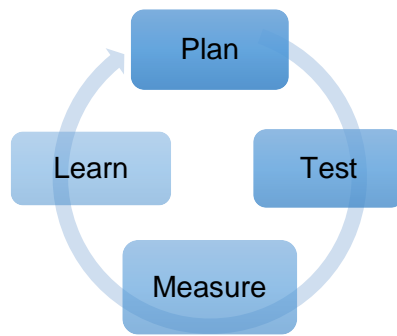
FIGURE 2.17: The process of formalising the experiment

(Source: Adapted from Govindarajan & Trimble, 2010a:106)

Firstly, at the start of planning the innovation initiative, early predictions are made in the initiative's process of devising a business or innovation experiment. To experiment effectively and learn from trialling, logic should be recorded at the start to ensure fruitful learning. Secondly, the testing stage of formalising the experiment deals with predicting outcomes as well as documenting auxiliary logic and assumptions. At this point, testing focuses on trials that allow for increasingly informed estimates to be made in experimenting. Thirdly, the measuring stage of the experiment's formalisation is comprised of comparing initial predictions with results and gathering main learnings from the assessments. Lastly, after the particular experiment is conducted, the "plan" should be revised so that the next trial should then aim to test the innovation on the basis of new learnings, which influenced variables of the experiment itself (Govindarajan & Trimble, 2010a:103-106). Davenport (2009) states that if the experiment concludes in success, statistical significance should be ensured by testing market readiness. If this condition is met, market rollout can then be planned and gradually executed, which will allow the market diffusion to act as a test by itself (Davenport, 2009). However, for the innovation initiative to reach the market rollout stage, the "innovation plan" must be robust in that it rigorously carries out experiments (Govindarajan & Trimble, 2010a:12); to develop such a "plan", Govindarajan and Trimble (2010a:107-116) propose ten principles.

2.6.1.3 Principles for developing a robust innovation plan

Innovation initiatives are subject to an entirely different set of rules to those of ongoing operations (Govindarajan & Trimble, 2010a:13). Therefore, they require their own exclusive plans to execute experiments (Govindarajan & Trimble, 2010a:107-108). Table 2.2 below presents the ten principles put forth by Govindarajan and Trimble (2010a:99-116) for robust innovation plans. This section serves to discuss these ten principles in turn as they ought to manifest in project teams, while considering other viewpoints in the literature.

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TABLE 2.2: Ten principles for robust innovation plans

Number	Principle
1	Invest in front-end planning heavily
2	Create a project-specific plan
3	Discuss findings and assumptions
4	Clearly document evolving hypotheses for each experiment
5	Identify ways of spending little and learning a great deal
6	Establish an independent forum for discussing results
7	Reassess the plan often
8	Conduct trend analysis
9	Formally allow for revisions to predictions
10	Subjectively evaluate innovation leaders

(Source: Adapted from Govindarajan & Trimble, 2010a:106-115)

(a)   Invest in planning heavily

As can be seen in the above table, top management's willingness to invest significant resources in front-end planning is the first principle for developing rigorous innovation plans (Govindarajan & Trimble, 2010a:108-109). It can be said to be because the early stages of the new product development (NPD) process are known as the "fuzzy front end" (Florén & Frishammar, 2012:20), where 'fuzzy' refers to high levels of uncertainty that distinguish earlier parts of the NPD, which makes managing difficult and who is accountable challenging to identify (Koen, Bertels & Kleinschmidt, 2014:35). At this stage of an innovative initiative, it is challenging to estimate future costs accurately (Backlund, 2013).

Therefore, the organisation is willing to invest a great deal in the beginning, with the expectation that capital outlays will decrease as learnings increase and disciplined experimentation comes to an end (Perotti & Pray, 2002). To ensure that choices made at the front-end are both feasible and will not necessitate expensive efforts at redesign (at later stages), managers proactively invest time as well as resources (Poskela & Martinsuo, 2009). Florén and Frishammar (2012) similarly emphasise the importance of top management involvement but these scholars underscore the significance of management lending its credibility to the project to assist in building commitment among employees.

Davenport (2009:70) puts forth that organisations hoping to execute innovations that are the result of business experiments invest with a view to develop a 'test and learn' organisational capability. Employee training, time to support initiatives and availability of equipment facilitate rapid experimentation and are examples of the types of investments top management makes to expedite organisational learning and new value propositions to take to market (Davenport, 2009).

(b)   Construct the plan from scratch

The innovation is developed through the use of an emergent "plan" and manner of measuring the experiment's progress; in other words, a fresh outlook is taken on planning (Govindarajan & Trimble, 2010a:108-116). Davenport (2009) suggests management begin each experiment with an entirely new hypothesis for facilitating learning, whether it succeeds or fails.

All the experiment's stakeholders, including the chief executive officer (CEO), have awareness of the ratio of knowns to unknowns at the various stages of the innovation project, which stands at a ratio of ten per cent knowns to 90 per cent unknowns at the outset (Govindarajan & Trimble, 2010a:110). Several critical unknowns exist at the start of uncertain projects, such as market, technological and cost estimates; innovators turn their attention to these first and address more detailed, relatively less urgent unknowns at later stages (Govindarajan & Trimble, 2004).

(c)   Catalogue all experiment failures and successes

A clear hypothesis of record should be kept by the innovation leader and initiative; the "hypothesis of record" is the account kept of the hypotheses and findings of each failed experiment (Govindarajan & Trimble, 2010a:111-112). This rigorous documentation of learnings and failures is undertaken to ensure that every person involved in the experiment has a point of reference for information regarding historical experiments, which serves to foster more disciplined experimentation (Govindarajan & Trimble, 2010a). Davenport (2009) focuses attention on this principle by underscoring the importance of making the information surrounding failures widely available in the organisation through a learning library where all the information has been catalogued.

(d)   Seek ways of spending little and learning a lot

New product development and innovation endeavours can become a significant expense for the organisation if cheaper avenues of experimenting are not explored. Moreover, these undertakings can be particularly costly if the experiments result in an innovation which is not marketable (Govindarajan & Trimble, 2010a). Similarly, Schrage (2014) regards inexpensive learning as a priority for innovation initiatives and Humphreys (2015) identifies the purpose of exploring innovative ideas as cheaply and expeditiously as is possible to realise their potential in the market.

(e)   Form a separate forum for discussing results

The objectives of the innovation initiative are much different than those of the performance engine. As such, these must be treated as if they are mutually exclusive while the innovation is being tested and developed. To accomplish this, the meetings with innovation executive leaders are held to discuss experiment outcomes, which must be entirely separate from but in addition to meetings held by the operations department (Govindarajan & Trimble, 2010a). Such a forum is best utilised for identifying, discussing and learning from the experiments' failures (Cannon & Edmondson, 2005).

(f)   Repeatedly re-examine the plan

The innovation experimentation plan follows an iterative process (Anderson *et al.*, 2004:113-114); thus, this "plan" must be continually reassessed as new information comes to light so that if an experiment failed due to a specific cause, it should be documented and the experiment should be amended and repeated (Govindarajan & Trimble, 2010a:108-109). It has been suggested that one structure which facilitates the building of innovation capabilities is that of implementing a plan that is evaluated, reassessed and modified when such action is made necessary (Johnson, Hays, Center & Daley, 2004). An experimental approach is undertaken by means of flexible improvisation to attain real-time know-how and experience; instituting this approach eventuates with testing extensively on iterative product designs that are subject to continual milestones headed by a project leader and carried out by a cross-functional team (Eisenhardt and Tabrizi, 1995).

(g)   Analyse trends

The primary trend of the innovation initiative should be analysed to see if the new value offering will be successful or not in the market (Govindarajan & Trimble, 2010a). Keeping abreast of external trends in the market or amongst competitors is seen as important by Florén and Frishammar (2012) who emphasise the importance of absorptive capacity, which regards the ability of an organisation to appreciate valuable new information that is available externally, input it into the organisation's knowledge base and employ it in execution exercises, particularly in innovation initiatives (Cohen & Levinthal, 1990). If undertaken effectively, achieving absorptive capacity translates into knowledge breadth, which means that diverse sources have been consulted and knowledge has been transferred to the organisation's base (Ireland & Webb, 2007:53).

(h)   Allow for official revisions to earlier predictions

The team should be able to formally revise and adjust the plan as data is uncovered from experimenting; therefore, the hypothesis of record should be updated as early as is possible once findings replace initial predictions (Govindarajan & Trimble, 2010a:114-115). Davenport (2009) also suggests that revisions are necessary when one version of an experiment results in failure, but an alteration of hypotheses can eventuate in a successful outcome in another experiment. Wedell-Wedellsborg (2014) argues that committing to a metric for success before fully understanding what the project's experiment will demand is imprudent as organisational learning and the project could eventuate in premature and unusable failure to the organisation.

(i)   Subjectively appraise innovation leaders

Early assumptions about innovation initiatives are often no more than wild guesses (Wedell-Wedellsborg, 2014), as is presented graphically in Figure 2.18 below (Govindarajan & Trimble, 2005). In addition, John Friend's work on uncertainty has afforded the literature insight into complex decision-making; specifically, it may be thought of as an evolution of incremental purposeful decisions which are made sequentially and take both historical and future options into account

(Burns, 2004). Discovering the commercialisable idea for an innovation is challenging and complex, innovation leaders should instead be evaluated on whether they add value to organisational learning and produce evidence regarding an innovation's potential in the marketplace (Govindarajan & Trimble, 2010a). Wedell-Wedellsborg (2014) agrees that demonstrating flexibility in decision-making in the early stages is important for innovation leaders in order to gain true insight into the learnings resulting from experiments. This insight is deployed in the incremental decisions taken which evolve over time to address the complex problem and arrive at a solution (Burns, 2004), which is graphically illustrated below in the figure (Govindarajan & Trimble, 2005).
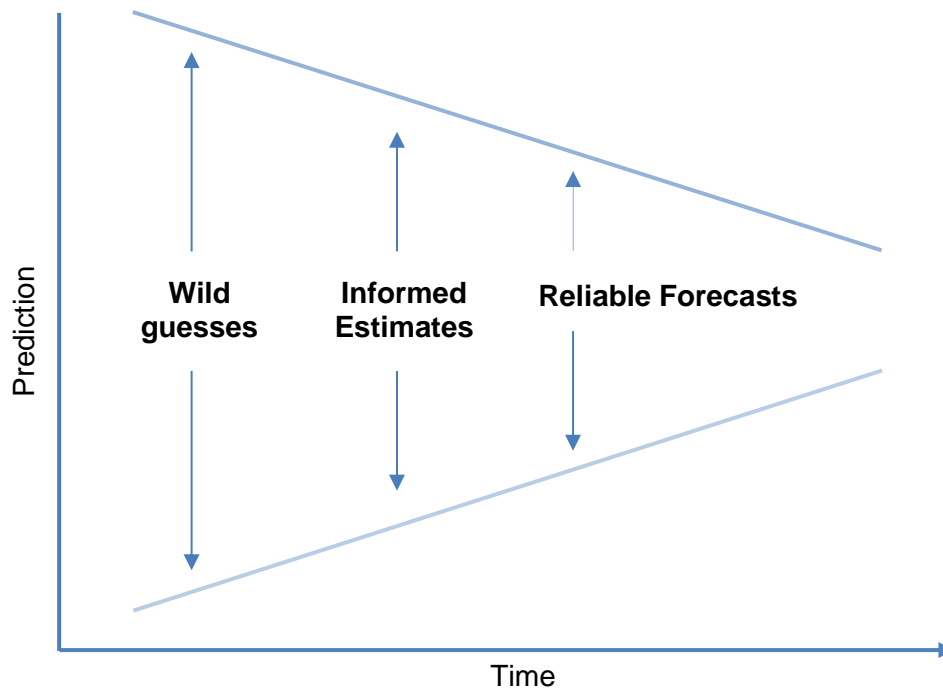
FIGURE 2.18: Predictions better with time

(Source: Adapted from Govindarajan & Trimble, 2005:66)

Moreover, senior management should train, coach and empower innovation leaders to foster and support the efforts of their immediate teams (Hamel & Tennant, 2015). A proficiency at exploiting innovation tools ought to be reinforced by the TMT. Frequently, opportunities for unconventional and highly creative thinking should be invented by leaders. Rash judgements when evaluating new options are to be avoided. Furthermore, a strong inclination for original ideas must be demonstrated. Distinguishing innovators and applauding their smart failures should be acted on by leaders. A personal mentorship role to members of innovation teams should be carried out by leaders. Resources should be secured and freed up by innovation leaders, such as time and money, for innovation experimentation. Moreover, hires and endorsements for more creativity should be made. The elimination of bureaucratic obstructions to innovation should be undertaken. Lastly,

understanding and applying the inexpensive experimentation route of rapid prototyping ought to be undertaken rapidly to ensure that innovators fail fast in order to eventually succeed (Hamel & Tennant, 2015). Given the discussion of principles for rigorous innovation plans (Govindarajan & Trimble, 2010a:101-121) necessary to formalize business and innovation experiments, the next section discusses the hypotheses of the innovation project at the outset.

2.6.2   Stage two: Break down the hypothesis

At the start of an innovation project, it is necessary to turn the initial assumptions the team has about the innovation experiment into actionable, testable hypotheses to guard against vague theories that make experiments challenging to execute rigorously (Govindarajan & Trimble, 2010a). In cases where highly uncertain projects are first ideated, the people involved invariably formulate assumptions about the idea despite the high uncertainty characterising the project's outset (O'Connor & Rice, 2001). These assumptions are made about hypotheses yet to be tested; the team postulates at the start of the experimentation process, documents and tests hypotheses and, finally, reflects on and learns from experiments, all the while documenting actions taken and outcomes realised (Bodislav, 2012; Govindarajan & Trimble, 2004).

2.6.3   Stage three: Seek the truth

Efficiency in innovation initiatives is necessary to eventuate at the "moment of truth" (Govindarajan & Trimble, 2010a:144-151) as soon as possible; this moment refers to the eventual point where the leader and the team realise whether the innovation is feasible and possible to commercialise. Rather than staving off this moment, it should be resolutely pursued and caused at the earliest possible opportunity, especially if it is made impossible to bring with the innovation to market because the venture would only continue haemorrhaging valuable organisation resources. Seeking this moment of truth and increasing the initiative's efficiency in reaching this point of realisation is supported by holding the venture and the innovation leader accountable for learning; to this end, the Govindarajan and Trimble (2010a) propose a set of criteria, which are discussed in the following section.

2.7   CRITERIA FOR HOLDING INNOVATION INITIATIVES ACCOUNTABLE FOR LEARNING

Magnusson and Berggen (2001) state that in cases of incremental innovation where less creative-thinking and experimentation are necessary, more formal processes, such as the stage-gate model (see Figure 2.8) (Cooper, 1990; 2000), are appropriate. However, in innovation initiatives where the product under development is more radical than incremental, formal processes are less appropriate. In these circumstances, more informal, exploratory and iterative processes are recommended (Magnusson & Berggen, 2001). However, as these organisational activities often require significant resources, it is necessary that the innovation initiative be held accountable for organisational learning. Govindarajan & Trimble, (2010a) put forth nine criteria for the evaluation of learning in innovation projects, which are used to keep leaders and teams accountable to learning rigorously from the experiments they undertake. As being charged with undertaking innovation projects may

be what the integrated team will be held accountable for during the course of the integration process, the criteria Govindarajan and Trimble (2010a) put forward for holding the team accountable is reviewed and presented in this section.

2.7.1   Take planning seriously

The initiative's team and leader should demonstrate to the organisation that they are rigorously experimenting by structuring their learning (Govindarajan & Trimble, 2010a). Analogously, Hamel and Tennant (2015) state the importance of enlisting capable and accountable leaders for innovation in the organisation as being high. These researchers emphasise that some organisational leaders must be formally held accountable for innovation through providing them with incentives (Hamel & Tennant, 2015). As has been previously mentioned, effective senior managers should dedicate time to the initiative's success, thereby demonstrating their commitment to the outcome (Florén & Frishammar, 2012; Poskela & Martinsuo, 2009). One way in which planning is taken seriously by the initiative and the innovation leader is by producing a well-defined hypothesis of record.

2.7.2   Create a clear hypothesis of record

Govindarajan and Trimble (2010a:111) advance that all initial experimental hypotheses should be recorded concisely and all causes and effects should be clearly mapped graphically to map or display visually the causes and effects of the innovation experiments. Regarding the former, hypothesis of record, Leavy (2011) elaborates on this chronicling of rigorously testing original assumptions team members may have about the potential outcomes of experiments. This makes it a clearer and more scientifically trustworthy process, which justifies the use of resources in an "unknowable" future, in the words of Vijay Govindarajan (Leavy, 2011:10).

Regarding the latter, the cause-and-effect maps, Govindarajan and Trimble (2004) argue for a movement from vertical thinking to influence mapping, which has also been put forth by Kaplan and Norton (2000; 2004) as well as Marr, Schiuma and Neely (2004). Whereas the cause-and-effect maps advanced by Govindarajan and Trimble (2004) are applicable in the microcosmic environment of the DT's execution and experimentation processes, the balanced scorecard of Kaplan and Norton (2000; 2004) is applicable for the organisation at large. Nevertheless, other scholars (Gama, da Silva & Ataíde, 2007) have argued for Innovation Scorecards, which seek to systemise the management of innovation by instituting this scorecard measuring relationships between causes and effects.

The purpose of the Govindarajan and Trimble (2004) cause-and-effect map undertaking is twofold. Firstly, ease of reference for the team members is enabled. Secondly, these illustrations of past work lend to demonstrating to top management that resources are being used for salient organisational learning resulting from experimentation (Govindarajan & Trimble, 2010a). Similarly, Hauser and Luca (2015) assert that business experimentation is a lengthy, robust process that serves to inform its various stakeholders about its variables; each trial that is carried out will lead the team to the next

hypothesis for the following experiment until either success or infeasibility is concluded (Hauser & Luca, 2015). In initiatives where effective learning takes place, comprehensive understanding of the hypotheses across the team is evident.

2.7.3   Everyone understands the hypotheses

The team should be working together cohesively and collaboratively on hypotheses that are understood across the team (Govindarajan & Trimble, 2010a). Hauser and Luca (2015) also put forward how important it is that all stakeholders, particularly members of the experiment team, are informed about the plan. Full team understanding and transparency are especially useful to avoid pitfalls that may have surfaced in past experiments (Hauser & Luca, 2015). De Souza (2010:77) similarly argues for full understanding of the research problem and hypothesis among the members of what this scholar refers to as the "research team" with a view to expend profound intellectual energies in the experimental testing phases. These phases of the experiment add new evidence to the team's learning and should be amended to encompass new learnings, which is discussed below.

2.7.4   Revise when new evidence arises

As new evidence comes to light through rigorous, disciplined experimentation, the hypothesis of record and the cause-and-effect map should be amended to reflect the new evidence (Govindarajan & Trimble, 2010a). Hauser and Luca (2015) also suggest that each new experiment should begin with a new hypothesis that has been informed from the previous experiment's learnings. This research strategy is corroborated elsewhere in the literature, namely by Reynolds (1999:388), who argues for "cyclical" experimentation as experiments either prove or disprove the hypothesis; in the case of the latter, a new hypothesis and experiment are designed and executed (Reynolds, 1999).

Weissbrod and Bocken (2017:2665) propose that the concept of "start-up thinking" is necessary in innovation activities seeking to go to market quickly. To operationalise this, these scholars argue that the action of "pivoting" proposed by Ries (2011:143-147) is useful to apply for rapid experimentation (Humphreys, 2015). Pivots are strategic changes made to concepts and value offerings the organisation is researching and developing (Bajwa, Wang, Duc & Abrahamsson, 2017; Ries, 2011), which take place once a significant learning has eventuated from a business experiment (Weissbrod & Bocken, 2017). Therefore, pivoting (Ries, 2011) can be likened to revising the innovation experiment when new evidence has arisen (Govindarajan & Trimble, 2010a); the following section discusses what should be prioritised: recognising and resolving the most critical unknowns.

2.7.5   Every team member recognises the most critical unknowns

The remaining unknowns that need to be revealed after initial experimentation are understood among the team's members. Conducting experiments to uncover these unknowns are done as cheaply and as systematically as possible for best organisational results (Govindarajan & Trimble,

2010a). Full transparency across the project will lead to everyone appreciating the key unknowns and understanding what experimentation is aiming to learn (Hauser & Luca, 2015). In fact, early investments of resources are aimed at developing resolutions to the prioritised unknowns of the initiative (Anthony, Eyring & Gibson, 2006). The resources expended on these experiments close with findings which need responding to by the team, which is discussed in the next section.

2.7.6   The team reacts quickly to new information

If new data comes to light through experimentation, the team should meet soon after to review the information and adjust the plan and experiments so that organisational learning and innovation can become a reality (Govindarajan & Trimble, 2010a:157). If, however, the business experiment is rooted in the social sciences – in that it is testing potential customers and consumers' responses to a novel offering – commitment to the experiment is necessary to eventuate at unbiased results (Hauser & Luca, 2015). New information that comes to light is acted on to further organisational learning and to reinforce the mindset of learning in the team (Song, Joo & Chermack, 2009).

2.7.7   The team has a learning mindset

The team should be open to learnings and agree to address any evidence they uncover, even if not initially predicted or in contrast to original assumptions (Govindarajan & Trimble, 2010a). In fact, much knowledge learning, transfer and exploitation is undertaken in a team setting across organisations (Matthews & Candy, 1999). It has been proposed that knowledge transfer leads to team learning by means of four actions, which include experimentation, effective communication, post-experiment reflection and documentation of the learning that has occurred (Mingfei & Jie, 2010). These multiple actions undergone by the team are interdependent (Gibson & Vermeulen, 2003) and effectively lead the team to a post-experiment situation where knowledge has been accumulated (Mingfei & Jie, 2010) and is ready to be deployed for commercialisation (Smith, 2010; Tidd & Bessant, 2013). These learnings may culminate in facts that contradict the early assumptions of the innovation team.

2.7.8   The team faces uncomfortable facts

Sometimes the findings from experimenting may be in direct contrast to initial predictions; in this case, the team and leader should be comfortable enough in their logic and critical thinking that they should adjust the hypothesis of record and cause-and-effect maps (Govindarajan & Trimble, 2010a). Moreover, Furr and Dyer (2014) suggest that bringing these facts to the attention of innovators is operationalised by experimenting on the initial assumptions in liaison with potential customers (Kristensson, Gustafsson & Archer, 2004; Matthing, Sandén & Edvardsson, 2004) or prospective early adopters (Viki, 2017). Although uncomfortable facts may make team members uneasy, their continual discovery indicates that the initiative's predictions are bettering.

2.7.9 Predictions are getting better

The first few innovation initiatives the organisation undertakes may prove useful in improving predictions in the future (Govindarajan & Trimble, 2010a). Figure 2.19 has illustrated this process of early predictions becoming more reliable over the course of time; investing heavily early on thus is an astute action for successful experimentation to take place (Govindarajan & Trimble, 2005) to resolve the most critical unknowns (Anthony *et al.*, 2006). Given the discussion of the criteria for holding innovation initiatives accountable for learning in this section, the following section serves to create a summary of the model.

2.8   GOVINDARAJAN AND TRIMBLE'S INNOVATION EXECUTION PROCESS SUMMARY

As the Govindarajan and Trimble (2010a) model has been shown to be a useful vehicle for achieving organisational ambidexterity in established organisations that are focused on ongoing operations and face barriers to organic innovation, it has been examined and reviewed in this chapter (Virta, 2017). In addition, this model is both relevant and salient to the current study as it encompasses the innovation execution that is undertaken by a DT, which does not exist elsewhere in the research. For this reason, it is summarised in Figure 2.19 below, including the principles for developing robust innovation plans (Govindarajan & Trimble, 2010a:101-121) (refer to section 2.6.1.3), steps for formalising the experiment (refer to section 2.6.1.2) and criteria for holding the initiative accountable for learning (refer to section 2.7), which have all been reviewed in this chapter.

2.6.1.3 **Principles for developing a robust innovation plan**	2.6.1.2 **Steps in formalising the innovation experiment**	2.7 **Criteria for holding the innovation initiative accountable for learning**
(a) Invest heavily in front-end planning	**Plan**	2.7.1 Take planning seriously
(b) Create the plan and scorecard from scratch		2.7.2 Create a clear hypothesis of record
(c) Discuss data and assumptions	**Test**	2.7.3 Everyone understands the hypotheses
(d) Document a clear hypothesis of record		2.7.4 Revise when new evidence arises
(e) Find ways to spend a little and learn a lot		2.7.5 Every team member recognises the most critical unknowns
(f) Create a separate forum for discussing results	**Measure**	2.7.6 The team reacts quickly to new information
(g) Frequently reassess the plan		2.7.7 The team has a learning mindset
(h) Analyse trends		2.7.8 The team faces uncomfortable facts
(i) Allow formal revisions to predictions	**Learn**	2.7.9 Predictions are getting better
(j) Evaluate innovation leaders subjectively		

FIGURE 2.19: Innovation execution process for experimentation

(Source: Adapted from Govindarajan & Trimble, 2010a:106-115)

Furthermore, Govindarajan and Trimble (2010a) suggest that hiring outsiders is necessary for DTs to create truly innovative value propositions, even if outsiders are sourced from small acquisitions. As such, the figure above presents the experimentation process such teams undertake to arrive at a commercialisable offering for the market. However, it is conceivable that the process the innovation leader faces in forming and developing such a team that executes innovation experiments while simultaneously integrating a small acquisition is likely a complex undertaking due to the myriad factors the leader must consider. As such, this underexplored knowledge gap is explored in the current study.

2.9   CONCLUSION

Innovation has been shown to be far more than simply coming up with the idea; the process proceeding the idea is challenging yet crucial to manage effectively, with the end result of bringing the novel value offering to market. However, the literature regarding innovation execution has been expanding of late. For the purposes of this part of the study, particularly the innovation execution process, the model by Govindarajan and Trimble (2010a) has been adopted as it encompasses the

dedicated team as well as advances a process for innovation execution. Thus, it has been introduced and discussed in the chapter. These researchers also advance that DTs tasked with innovation experimentation and execution should include outside hires, considering even small acquisitions. However, the framework and the literature falls short of advising innovation acquisition champions what challenges are likely to arise in this scenario and how to shoulder these challenges, if they indeed exist. Therefore, the following chapter firstly deals with the broad mergers and acquisitions literature and, more narrowly, the process perspective of post-acquisition integration, specifically challenges and critical success factors associated with the integration process.

CHAPTER THREE

ACQUISITIONS, THE POST-ACQUISITION INTEGRATION PROCESS AND ITS CHALLENGES

3.1   INTRODUCTION

Mergers and acquisitions comprise a diverse, multidisciplinary and complex field of activity which has been widely practised since the late nineteenth century (Larsson & Finkelstein, 1999; Viviers *et al.*, 2014). M&A are primarily corporate finance transactions that can be both successful and beneficial given that they are strategically planned and managed (Mulherin, 2012). The main aim for undertaking any M&A-related activity is to generate added shareholder value for the acquirer (Vazirani, 2012). The idea is to create synergetic value from the newly combined organisation so that the value is greater than the sum of parts (Nandy & Baag, 2009). There are various reasons for pursuing any M&A activity, generally including pursuing a corporate growth strategy, defensive purposes and profit opportunities (Bruner, 2004; Coyle, 2000; Galpin & Herndon, 2007). Today, many organisations are undertaking M&A for such strategic reasons, one of which is to incorporate innovations of other organisations in the portfolio of value offerings of the acquirer (Hagedoorn & Duysters, 2002; Hitt *et al.*, 1990). Vasilaki and O'Regan (2008) advance that M&A are debatably the most popular strategy used by organisations pursue to establish a competitive advantage over their competitors.

This chapter presents the literature reviewed regarding mergers and, particularly, acquisitions, and how the latter can be used for the purchase of commercialisable innovative value propositions. Throughout the review, additional relevant concepts are defined, the existing literature is discussed regarding the study's background and the main findings of the secondary research are synthesised (Mouton, 2001).

3.2   STRATEGIC METHODS FOR BUILDING INNOVATION CAPABILITIES

When considering a strategy to pursue, such as an innovation strategy, three strategic methods make innovation execution possible, including: organic development (innovating internally), strategic alliances (collaborating with an external partner) as well as mergers and acquisitions (innovating by purchasing an external concern) (Bresman, Birkinshaw & Nobel, 1999; Hagedoorn & Duysters, 2002; Koza & Lewin, 2000). Figure 3.1 below illustrates these three strategic options for pursuing an innovation growth strategy graphically.
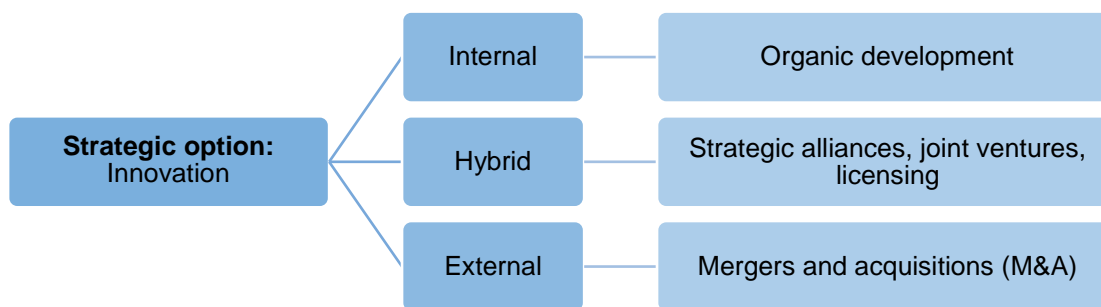
FIGURE 3.1: Methods for pursuing the strategic option of innovation

(Source: Adapted from Bresman *et al.*, 1999:440-443; Hagedoorn & Duysters, 2002:167-168; Koza & Lewin, 2000:146-147)

According to Capron and Mitchell (2009) as well as Knott and Posen (2009), in times of rapid change in the technological arena, resource-rich organisations adopt development strategies that have an external component, such as M&A, in order to achieve corporate renewal without having to undertake in-house development, which is often uncertain and time-consuming (Capron & Mitchell, 2009; Knott & Posen, 2009), in order to manage change effectively and efficiently as well as to be prepared to do so pre-emptively (Tidd & Bessant, 2013:83-85).

3.2.1   Mergers and acquisitions

As illustrated in Figure 3.1, one of the methods for pursuing the strategic option of innovation, the external outlook, is carried out by means of mergers and acquisitions (Koza & Lewin, 2000), both of which have been defined in section 1.2.2. While this is a strategic option for organisations, some researchers warn against relying too heavily on a strategy of M&A for the purposes of achieving innovation, particularly given the task of merging mid-sized to large organisations, which consistently presents a plethora of integration challenges (Jones, McCormick & Dewing, 2012:25) and continues to produce disappointing outcomes despite over three decades research on the subject since 1985 (Graebner *et al.*, 2017).

As a result of the demands M&A pose to acquirers, the choice of target organisation must strongly consider both the size and value of the transaction to ensure that the acquirer gains enough from the deal to make it a valuable and tenable acquisition (Bruner, 2002). In the following section, motives for M&A activity is the focus.

3.3   MOTIVES FOR MERGERS AND ACQUISITIONS

M&A are undertaken for various reasons (Das & Kapil, 2012; Mukherjee, Kiymaz & Baker, 2004; Vasilaki & O'Regan, 2008). Hitt, Ireland and Hoskisson (2007) put forth that there are four main objectives that are common among the majority of M&A. Firstly, these authors suggest that these are undertaken to gain additional market power by the acquisition of an extra customer base. Secondly, to maximise efficiency by means of economies of scale or scope or a combination of

these. Thirdly, it may be necessary to the organisation to reshape its competitive scope. Lastly, organisations also may endeavour to secure innovative capabilities to reduce the risk of developing new value offerings in-house, which could be expensive and time-consuming (Hitt *et al.*, 2007).

Among the myriad reasons for undertaking M&A, it has been put forth by Malik *et al.* (2014) that there is one overarching objective for organisations undertaking M&A activity, which is to join forces with another organisation(s) because the collaboration may be more beneficial than operating alone in the market. Moreover, the M&A combination must add to shareholder wealth, whether it be in the short or the long term (Malik *et al.*, 2014). A similar assertion has been made by Das and Kapil (2012) who have stated that the principal motive of M&A is the realisation of synergy to increase the value of the consolidated post-M&A organisation. Besides the two aforementioned studies, many other studies also cite the motive of synergy realisation as a key reason underlying scores of M&A; see for example Birkinshaw *et al.* (2000), Lubatkin (1983), Vaara (2002) and, more recently, Gupta (2013).

According to Vermeulen and Bakerma (2001), acquisitions are also assumed for the purpose of revitalising the organisation through bringing in new knowledge. This is undertaken to gain a competitive advantage in the market; sustaining it increasingly relies on innovative recombinations of knowledge (Bresman *et al.*, 1999). Grimpe (2007) asserts that many M&A today are engaged in for purposes relating to innovation, which are discussed in the next section.

3.4 MOTIVES FOR INNOVATION M&A

Ahuja and Novelli (2014) also assert that M&A are undertaken by acquirers for various possible reasons relating to innovation. Firstly, the value proposition(s) or patented knowledge of the target organisation could add to the product line of the acquirer, as is also upheld by Grimpe (2007). Secondly, if a comparable product or service is being developed by both organisations, the acquirer can reduce the time to market by pooling resources and harnessing human capital efforts. Thirdly, decreasing the unit cost of research and development is another possible motive for innovation M&A as a result of gaining economies of scale in research. Moreover, increasing the output rate of innovations could be another possible causal link (Ahuja & Novelli, 2014).

Furthermore, acquirers may undergo an M&A in order to gain access to new technology to better existing operations and productivity. In addition, an innovation merger or acquisition could play a role in improving an existing organisational capability centred on innovation. Finally, if no such capability exists in the acquirer before the transaction, the M&A may make an effort to establish such an organisational capability in the existing organisation (Ahuja & Novelli, 2014).

3.4.1 Motives for small acquisitions in innovation project teams

Govindarajan and Trimble (2010a) have emphasised the significance of including outsiders in innovation project teams as their fresh perspectives afford the venture the capacity to challenge

strongly held assumptions by incumbent employees, which would otherwise likely have gone unopposed. They suggest that one manner of gaining valuable outsiders is to consider acquisitions as an effective way of gaining ideal candidates for executing the innovation process, which is a motive for acquiring small organisations to integrate into the DT (Govindarajan & Trimble, 2010a).

3.5   ADVANTAGES OF AN INNOVATION-DRIVEN ACQUISITION STRATEGY

Aggressive acquisition strategies are undertaken for several reasons. Based on the corporate entrepreneurship and innovation literature in this section, three are presented: fostering intrapreneurship within a corporate; acquisitions as recruitment; and acquiring knowledge.

3.5.1   Fostering intrapreneurship within a corporate

Corporate venturing is the entrepreneurial behaviour that exists within established medium- to large-sized organisation (Hayton, 2005). It is also commonly known by the terms 'intrapreneurship' and 'corporate entrepreneurship' (Hornsby, Kuratko & Zahra, 2002:253; Kuratko, Montagno & Hornsby, 1990:49). The extent to which an organisation can be deemed entrepreneurial in nature relies on three fundamental dimensions: risk-taking, proactiveness and innovativeness (Craig, Pohjola, Kraus & Jensen, 2014; Rauch, Wiklund, Lumpkin & Frese, 2009). There are seven main ways in which entrepreneurship manifests in established organisations, including: traditional R&D; ad hoc venture team; new venture divisions or groups; champions and the mainstream; acquisitions; outsourcing; and hybrid forms (Hoy, 2007:7; Kuratko *et al.*, 2011:46-49). It is salient to note that the authors also suggest that each of the approaches can be employed in the same organisation in differing ways (Hoy, 2007; Kuratko *et al.*, 2011). As aforementioned, one such way is through pursuing an acquisitions strategy.

3.5.2   Acquisitions as recruiting human resources for knowledge base expansion

The execution of innovation per Govindarajan and Trimble (2010a) consists of two phases and can be achieved in these types of organisations. Both phases have three stages. The first phase, "Build the Team", is followed by its second stage, "Assemble the dedicated team", which deals with bringing together a collaborative team that will be solely focused on experimenting and developing the innovation. A basic principle which should be followed in assembling the DT is recruiting the best and most appropriate individuals available. To find suitable candidates, the pool of applicants is reviewed and talent is scouted out from all possible sources. Some of the suggestions for hiring include: in-house transfers; external recruiting; and, lastly, small acquisitions (Govindarajan & Trimble, 2010a). The latter is the focus of this thesis.

Ahuja and Katila (2001) have concluded that innovations produced by any organisation are essentially the product of the knowledge implicit in the organisation. As such knowledge is regarded as tacitly imbibed in the individual natural persons who make up the organisation, these people represent the knowledge base which initially founded the innovative idea and carried it through to

the developmental stage at which it stands at any given time. Intellectual property rights which the organisation has registered for and possesses as intangible assets are also part and parcel of the knowledge base. Ergo, knowledge elements can be considered as natural persons, intellectual property and other related items (Ahuja & Katila, 2001; Ahuja & Novelli, 2014). Thus, the merging of organisations can be considered the uniting of two previously exclusive knowledge bases, as can be seen in Figure 3.2 below.
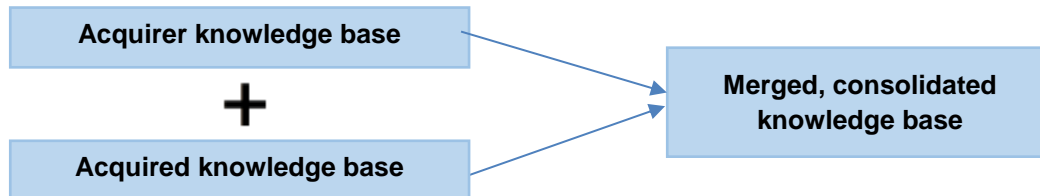
FIGURE 3.2: Post-integrated resultant knowledge base

(Source: Adapted from Ahuja & Novelli, 2014:581)

3.5.3   Acquisitions as gaining capabilities

Christensen (1997) submits that acquisitions are often undertaken for the purpose of adding to the portfolio of capabilities. The motivations that managers have for acquiring capabilities are for financial and competitive reasons (Rui & Yip, 2008). Oftentimes, they are cheaper to purchase through an acquisition than to generate organically within the organisation (Mittra, 2007). As for the competitiveness motive, it is more likely that they can be deployed faster, adding to the competitiveness of the consolidated entity sooner (Christensen, 1997; Mittra, 2007).

Puranam *et al.* (2009) suggest that technology acquisitions, by their definition, are undertaken for the capabilities which are technological. The system of routines that exist between people in the acquired organisation, the resources they use as well as the explicit and tacit knowledge make up a system which underlies the unique capability to develop technology (Puranam *et al.*, 2009). Grimpe (2007) contends that innovation acquisitions can lead to an increase in the consolidated organisation's NPD capabilities if successfully executed and integrated. However, M&A regularly unsettle the acquirer's innovation processes, slowing output rates of new products and intellectual property rights' registrations (Grimpe, 2007) because of the significant consumption of managerial time these require Cloodt, Hagedoorn and van Kranenburg (2006) qualify this experience in industry. If there are few innovative resources acquired through the M&A, the acquirer's established routines, innovation processes and performance are relatively less disrupted than when there are many, which require more managerial time (Cloodt *et al.*, 2006).

Despite the numerous advantages of engaging in acquisition activities, M&A also have a host of drawbacks, which often act as causes for M&A failure; as such, this is discussed in the following section.

3.6   MERGER AND ACQUISITION FAILURE

Researchers agree that many M&A fail and suggest that perhaps even as many as the majority do not succeed in achieving the objectives stipulated at the outset (Hitt, Harrison & Ireland, 2001; Loderer & Martin, 1992; Lubatkin & Lane, 1996; Porter, 1987; Sirower, 1997). More recently, Christensen, Alton, Rising and Waldeck (2011:48-49) advance that even as many as 70 per cent to 90 per cent result in failure. Lewis and McKone (2016) put forth that more than half of these corporate transactions erode shareholder value. Many causes of M&A failure exist and the literature has dealt with preventing a great number of these, particularly for medium- to large-scale M&A.

3.6.1   General causes of merger and acquisitions' failure

A summary of the various causes of M&A failure is offered by Bellinger and Hillman (2000). Firstly, organisations undertaking a merger or acquisition sometimes superimpose M&A strategies without understanding the idiosyncratic demands of the one they are dealing with (Haunschild, 1993). Secondly, lack of integration efforts are also responsible for M&A failure as cited by many authors, including Haspeslagh and Jemison (1991), Nahavandi and Malekzadeh (1988) as well as Weber (1996). Thirdly, managerial hubris (overconfidence) is also held responsible for M&A failure, which refers to action taken by brash top-level managers in their own ability to succeed in effectively combining organisations' systems, people and processes for the creation of shareholder value; alternatively, managerial hubris may eventuate in an M&A failure as managers overestimate the strategic fit of the previously sovereign entities (Haunschild, 1993; O'Neill, Pouder & Buchholtz, 1998).

Moreover, Haspeslagh and Jemison (1991) put forth several other causes of M&A failure, including: poor preliminary valuation and appraisal of target organisations; a lack of commitment to the overall success of the integration; deficiency in leadership and strategic guidance subsequent to the M&A negotiation; and a reduction in the availability of slack resources to the integration effort. Despite this variety of reasons for M&A failures, Haspeslagh and Jemison (1991) suggest that a common problem with M&A appears to reside with the strategy and implementation of the integration. However, a number of scholars hold that the most problematic stage of the M&A process is that of the integration (Koi-Akrofi, 2016). As a result, organisations who intend to pursue a merger or acquisition should plan the steps to integration with care (Bruner, 2004; Coyle, 2000; Galpin & Herndon, 2007; Nandy & Baag, 2009; Tarasovich, Lyons & Gerlach, 2008).

3.6.2 Preventing the failure of small technology-based acquisitions

Despite the popularity of acquiring innovative start-ups and SMEs, acquiring organisations continually find that post-acquisition integration can erode the very innovative capabilities which initially justified the acquisition (Birkinshaw *et al.*, 2000; Graebner, 2004; Puranam *et al.*, 2009; Puranam, Singh & Zollo, 2003; Ranft & Lord, 2002). Similarly to general M&A failures, scholars have also cited the integration process as a failure factor in smaller acquisitions. Those who examine the implementation of the acquisition explain that the choice between integration approaches – complete absorption to autonomy preservation – is a significant decision that managers have to make at the outset. This decision goes towards shaping subsequent integration actions further (Haspeslagh & Jemison, 1991; Pablo, 1994; Puranam *et al.*, 2009; Zollo & Singh, 2004). While full integration remains a disruptive process, it does have the advantage of generating a potent coordination effect in the bidder-target pair, which lends to greater operational synergy realisation (Puranam *et al.*, 2009; Thompson, 1967). This section has served to discuss the matter of M&A failure as well as those of small technology-based acquisitions; the following section considers the M&A literature's process perspective or research stream, which is relevant to this study.

3.8 PROCESS PERSPECTIVE OF M&A

Larsson and Finkelstein (1999) synthesise the theoretical lenses through which M&A are commonly studied in the literature; the primary fields include: economics; finance; strategic management; organisation theory; and human resource management (Datta, 1991; Zollo & Meier, 2008). In addition, Birkinshaw *et al.* (2000) as well as Haspeslagh and Jemison (1991) recognise the theoretical lens provided by another research stream, that of the process perspective. As the process perspective of post-acquisition integration has been deemed appropriate for this study, it is discussed in this section. A recent review of the PAIP literature undertaken by Graebner *et al.* (2017) has identified the work of Haspeslagh and Jemison (1991) as seminal; this study also referenced the works of Birkinshaw *et al.* (2000), Jemison and Sitkin (1986a), Larsson and Finkelstein (1999) as well as Nahavandi and Malekzadeh (1988) as still relevant today, and are included in this section.

The theoretical lens of organisation theory has also engaged study on M&A. In this field, the primary focus has been on the process of integration that takes place after the corporate transaction has been concluded. The emphasis has been twofold. Firstly, research has dealt with the clash of corporate cultures. Furthermore, the means by which conflict is resolved in a newly combined organisation has also been scrutinised (Larsson & Finkelstein, 1999). These authors have also acknowledged organisational integration as the chief factor explicating the amount of synergy realised post-acquisition (Larsson & Finkelstein, 1999; Yu, Engleman & van de Ven, 2005).

The process perspective research stream advances that value is created after the acquisition takes place and the integration process is undertaken. The stream is underpinned by organisation behavioural theory (Birkinshaw *et al.*, 2000). Birkinshaw *et al.* (2000:397) put forth that the stream's

central proposition is that the extent to which the anticipated benefits of an acquisition are realised is determined by managerial actions and integration processes. In the process perspective, the issues of strategic fit and organisational fit are recognised as offering great potential for synergies. However, this stream argues that synergy realisation is entirely dependent on managerial ability to undertake the post-acquisition integration process effectively (Haspeslagh & Jemison, 1991; Hunt, 1990; Jemison & Sitkin, 1986a; 1986b; Shrivastava, 1986).

Birkinshaw *et al.* (2000:397) use the term "organisational behaviour" for this research stream and indicate that it is reinforced by acculturation theory (Nahavandi & Malekzadeh, 1988). One of the tenets of the research stream is that the similarity between the cultures of the two merged organisations will facilitate employee satisfaction and effective integration. Weber (1996:1181) defines this similarity as "corporate cultural fit"; Cartwright and Cooper (1993) use the term "cultural compatibility". In this stream, it is argued that success over the long term can be realised only by the following means: managing the process; effectively communicating with all employees, existing and acquired; as well as understanding of the expectations and the apprehensions on both the bidder and target's sides (Bastien, 1987; Birkinshaw *et al.*, 2000; Blake & Mouton, 1985; Cartwright & Cooper, 1993).

Several studies have developed the acculturation theory, which aims to examine those behavioural changes produced from the obligatory interaction of the two corporate cultures that the integration managers impose on the employees (Nahavandi & Malekzadeh, 1988; Weber, 1996). Birkinshaw *et al.* (2000) state that acquisition behavioural implications are studied at both the individual and organisation levels.

3.9 MANAGING SYNERGY REALISATION AND EMPLOYEE RESISTANCE IN INTEGRATION APPROACHES

Larsson and Finkelstein's 1999 study created a process-oriented model for integrating merging organisations, which was empirically tested across a sample of 61 sizable M&A. Among their findings, they found that the organisations which were most successful had realised the greatest quantity and quality of synergies; in addition, these scholars put forth that synergy realisation between combining organisations can be attributed to successfully dealing with three important M&A issues (Larsson & Finkelstein, 1999). These success factors include: high strategic combination potential; a high level of organisational integration; and low levels of employee resistance (see Figure 3.3 below) (Larsson, Brousseau, Driver & Sweet, 2004; Larsson & Finkelstein, 1999). As the current study deals with the post-acquisition integration, the integration process success factors of high organisational integration and low employee resistance are considered in this section.
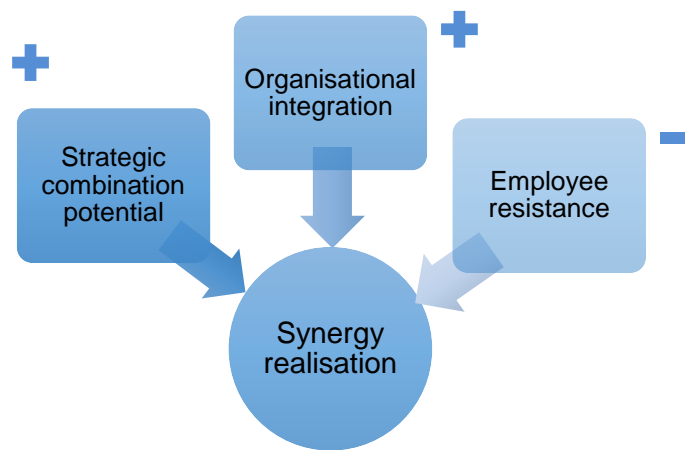
FIGURE 3.3: An integrative M&A model for synergy realisation

(Source: Adapted from Larsson & Finkelstein, 1999:13)

3.9.1 Organisational integration approaches for synergy realisation

Zollo and Singh (2004) advance that synergy may be realised only when organisations devise and implement post-acquisition integration processes with care and with a focus on obtaining the potential gains predicted at the outset. According to Larsson *et al.* (2004), the choice between organisational integration approaches for synergy realisation will influence the amount of synergy realised between the consolidating organisations. Larsson (1990; 1993) fused the various typologies for improved comprehension, including: soft/avoiding; hard/controlling; and co-competence; all are introduced in this section (Larsson, 1990; 1993; Larsson *et al.*, 2004).

3.9.1.1 Soft/avoiding approach to realising synergy

The soft, or otherwise known as avoiding, approach aims to conserve and perpetuate the prevailing values of the previously separate organisations. This technique has the drawback of putting the integration of the organisations largely on hold. However, emphasis is placed on developing the relationship between the united organisations gradually as they learn more about one another as well as found a sense of trust. This allows the approach to achieve a minimal amount of employee resistance. Despite this advantage, lessened resistance eventuates at the expense of postponing integration (Larsson *et al.*, 2004).

3.9.1.2 Hard/controlling approach to realising synergy

The intention of the hard, or controlling, approach is to quell potential cultural clashes and opposition by employees as soon as is possible. While this strategy presents the advantage of swift integration, it superimposes the acquirer's way of operating on the purchased organisation. In spite of the value of this rapidity, the unilateral compulsion to change the incoming organisation expeditiously may lead to employee resistance. In turn, the amount of synergy realised could be compromised (Larsson *et al.*, 2004).

3.9.1.3 Co-competence approach to realising synergy

The final approach is the co-competence approach. It is recognised as superior when considering the drawbacks of the former approaches. Its aim is to exploit the valuable competencies of both organisations by focussing attention on combining the capabilities from both sides. The strategy presents a challenge, however, which is how to identify which competencies are indeed superior in an objective way (Larsson *et al.*, 2004).

Nevertheless, if it is possible to carry this out successfully by constructively learning about the respective organisations, it will give rise to superior management of the human element of M&A. Conducting the co-competence approach is made easier through the uniting of similarly sized organisations, to lessening potential employee resistance to the adoption of the smaller organisation's ways (Larsson *et al.*, 2004). These three approaches can be instituted during the course of the integration process following the M&A transaction.

3.9.2 Managing employee resistance during integration

According to Larsson *et al.* (2004), the most difficult component to manage successfully in M&A is the human element, which refers to employees, especially those of the acquired organisation. Commonly, employees of the acquired organisation typically react negatively to their organisation being purchased for several reasons. Three main causes of employee resistance are shown in the Figure 3.4 below; these include cultural clashes, interpreted threats and negative career implications, perceived or real (Larsson *et al.*, 2004). This resistance by new employees lugs down efforts aimed at integration and synergy realisation for the newly amalgamated organisation. As can be seen in the figure below, three possible solutions exist which can be deployed to prevent or treat employee resistance issues, including acculturation, communication and career management through reward systems, which are discussed in this section.
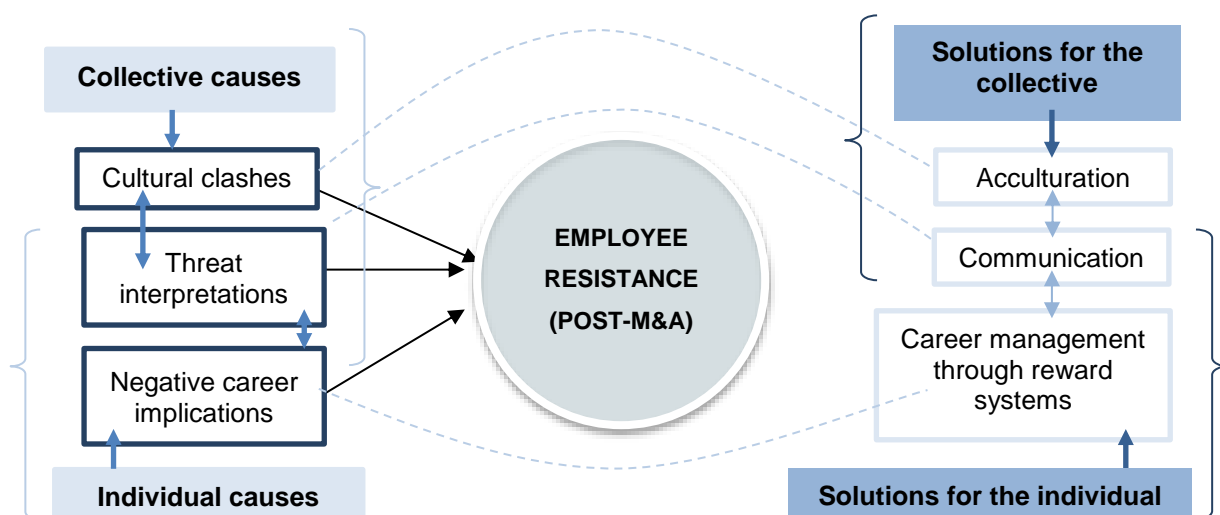
FIGURE 3.4: Causes of and possible solutions for employee resistance

(Source: Adapted from Larsson *et al.*, 2004:10)

3.9.2.1 Acculturation

Opposition within the collective is derived from joined corporate cultures which are not necessarily always compatible with each other (Larsson *et al.*, 2004). Organisations' cultures are particularly difficult to manage as they are essentially social realities that have been formed over time through trial and error and are embedded in the minds of members of a particular society (Morgan, 2006). The leadership's depth of understanding of any incoming culture is prone to be fragmented and cursory in comparison to the true nature of the social reality itself, as it is perceived and shared between new employees (Larsson *et al.*, 2004; Morgan, 2006).

Larsson *et al.* (2004) suggest that M&A require management to initiate and advance a fundamentally new, mutual corporate culture (Larsson *et al.*, 2004). In fact, authors suggest that acculturation is a key success factor for post-merger integration (PMI) (Larsson & Lubatkin, 2001; Nahavandi & Malekzadeh, 1988). However, other researchers propose that this is far easier said than it is done (Larsson, 1990; 1993; Larsson & Lubatkin, 2001; Weber & Camerer, 2003). This is as a result of the deeply entrenched and complex nature of cultures, which is not easy to develop from scratch, especially over the short term (Morgan, 2006). Nevertheless, acculturation should be pursued to align the joined employee workforce as much as is possible, given idiosyncrasies. Acculturation is the development of a jointly shared, constructive culture that works towards overcoming cultural clashes that take place in the collective workforce (Larsson *et al.*, 2004).

3.9.2.2 Communication

Problems may result in employee resistance from communications that are not consciously and carefully managed and carried out. Employee perceptions and trust can be shaken by issues of acquirer-acquisition communication, such as: lack of diffusing information properly; misunderstandings; perceived threats; and adverse, damaging rumours (Larsson *et al.*, 2004). At the interpersonal level, conflict may fester that results from these disputes. As illustrated in Figure 3.4 this form of employee resistance lies between the poles of collective and individual causes (Larsson *et al.*, 2004).

Larsson *et al.* (2004) warns that problems resulting from inadequate communications should be managed accordingly, at the team level. Team-building efforts should be undertaken between employees from the acquirer and the target as a part of early integration efforts. This should continue for quite some time to ensure a cohesive workforce that works toward a solid foundation of trust and mutual respect. In addition, early diffusion of pertinent information should be undertaken so as not to leave people out who will need to participate in activities that top management deems necessary to achieving the amalgamated organisation's strategy (Larsson *et al.*, 2004).

3.9.2.3 Career management through reward systems

At the individual level, employee reactions can be interpreted and understood through the implications of the acquisition on their personal career paths. Resistance can thus stem from the perceptions employees have that M&A will curb the progress of their advancement through the organisation's chain of command (Larsson *et al.*, 2004). Namely, the consolidation may have a real or perceived negative effect on their personal social capital or the shared networks and interpersonal relationships between individual employees and teams that create value for the organisation (Boxall & Purcell, 2008). New employees may feel that their prior social capital is now less valuable than before the integration took place because of the influx of acquired employees (Larsson *et al.*, 2004). Other fears employees have regarding negative career implications include: diminished job security; downgraded benefits; hindered opportunities for upward advancement; more substantial workloads; and disrupted career planning (Larsson *et al.*, 2004).

Larsson *et al.* (2004) advance that combatting the effects of this form of employee resistance should include reward systems being instituted and managed by organisation leadership to stabilise concerns of individuals on a case-by-case basis, if possible. This is a particularly difficult strategy to carry out because of the significant manpower and time expenditure it requires to administer suitably (Larsson *et al.*, 2004; Schweiger, Ivancevich & Power, 1987).

The success factors of communication and career management through incentive and reward systems can also be framed as solutions to the problems that manifest at the collective, interpersonal and individual levels (see Figure 3.4) should be managed simultaneously throughout the process of integration following the acquisition. However, whether these employee resistance causes and solutions are applicable to the scenario of a small innovation acquisition which integrates into a team is included in the study's primary research. Resolving the issues of employee resistance requires management to first select an organisational integration approach, which is discussed in the following section.

3.10   INTEGRATION APPROACHES

Haspeslagh and Jemison (1991) also created a typology of approaches to integration based on two dimensions, the needs for strategic interdependence and organisational autonomy. This typology has stood the test of time, surviving from its introduction in 1991 to recent years in studies such as Graebner *et al.* (2017) and Steigenberger (2016). In fact, Angwin and Meadows (2015:236) have identified this typology as the "most prominent and enduring" as they have used it as a basis for their extended typology. In this section, both typologies are discussed as the dimensions of strategic interdependence and organisational autonomy form a significant part of the approach champions of acquisition have to decide on in their efforts to integrate acquisitions into teams.

3.10.1 The need for strategic interdependence and organisational autonomy

Haspeslagh and Jemison (1991) advanced that the approach taken to a post-acquisition integration is determined by two dimensions, strategic interdependence and organisational autonomy; these essentially unify the strategic requirements that the combining organisations have and the need for organisational fit post-acquisition. However, the empirical work undertaken by Angwin and Meadows (2015) has added an additional dimension to the classification of integration approaches, that of managerial relevance. These three dimensions are reviewed below.

3.10.1.1   Strategic interdependence/knowledge transfer

When two organisations are integrated, a potential for synergy exists, which has been shown to be a primary motive for M&A (Das & Kapil, 2012; Gupta, 2012; Malik *et al.*, 2014). However, for the potential synergy to be realised, the previously sovereign organisations must be sufficiently combined; this represents the concept of strategic interdependence (Haspeslagh & Jemison, 1991). Angwin and Meadows (2015:248) have updated the term used by Haspeslagh and Jemison (1991:139) of "strategic interdependence" to be "knowledge transfer", which refers to the dissemination of knowledge and its provision as stimuli to solving various problems (OECD, 1996:21). Nevertheless, Haspeslagh and Jemison (1991:142-274) advance that interdependence needs to take place for the transfer of capabilities to occur, which in turn is the main antecedent for value to be created from an M&A.

3.10.1.2   Organisational autonomy

Haspeslagh and Jemison (1991:142) assert that the integration of acquisitions presents a paradox: pursuing capability transfer can lead to the attrition or destruction of the capabilities the acquisition was initially selected for, leading to the acquirer inadvertently producing its own misfortune (Uzelac, Bauer, Matzler & Waschak, 2016). The extent to which an acquired organisation is integrated influences whether its culture is retained, in which case the organisation remains autonomous, or dissolved, in which case it relinquishes all autonomy and assimilates to the acquirer (Angwin & Meadows, 2015:236). Puranam, Singh and Zollo (2006) go further, asserting that autonomous targets preserve their keenness and aptitude to innovate, which ensures that they continue to create value post-acquisition.

3.10.2 Traditional and extended approaches to integration

These two paradoxical needs that acquisitions must fulfil in the post-acquisition phase of the M&A process – those of strategic interdependence and organisational autonomy – make up the dimensions for selecting an appropriate approach to post-acquisition integration (Haspeslagh & Jemison, 1991:142). Of the approaches this two-dimensional typology affords, three are recognised as main approaches to integration: absorption, preservation and symbiotic as well as the simply-retention approach of 'holding' (Angwin & Meadows, 2015:236; Haspeslagh & Jemison, 1991:145-147). Thus, these are recognised main integration approaches in the literature, each of which are

introduced and discussed in this section. As can be seen below in Figure 3.5, these are graphically illustrated below and discussed subsequently. First, the traditional approaches put forth by Haspeslagh and Jemison (1991) and similar typologies in the literature are discussed; following that, the extended integration types of Angwin and Meadows (2015) are reviewed.

Need for organisational autonomy of the acquired firm
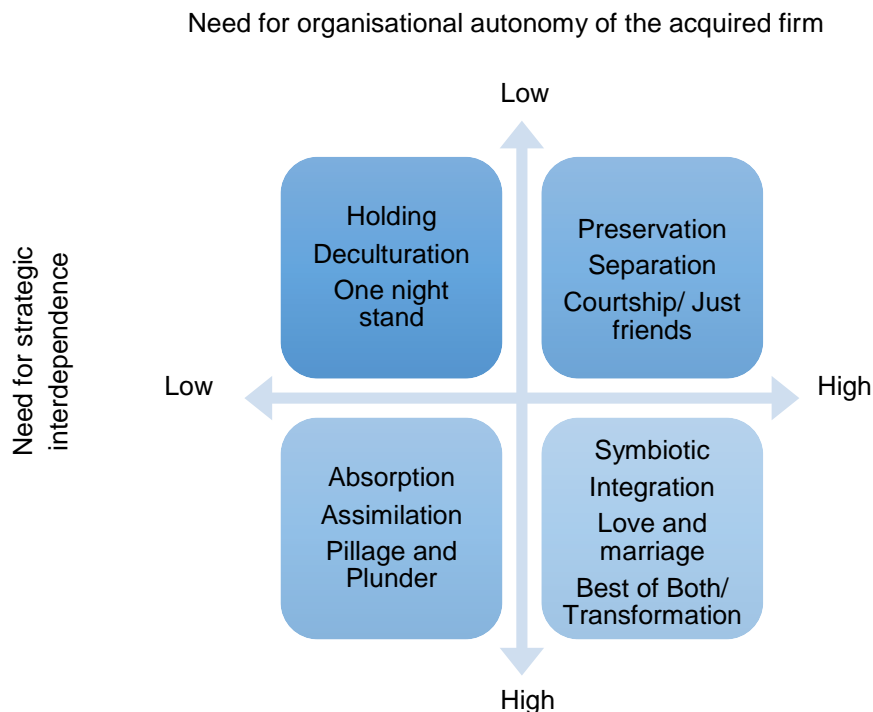
FIGURE 3.5: A typology of acquisition integration approaches

(Source: Adapted from Angwin & Meadows, 2015:239; Haspeslagh & Jemison, 1991:145; Nahavandi & Malekzadeh, 1988:82-83; Siehl & Smith, 1990:170-172)

3.10.2.1   Traditional approaches

The main integration approaches that have survived tradition and conventional wisdom are those of Haspeslagh and Jemison's widely cited 1991 study (Graebner *et al.*, 2017; Steigenberger, 2016), which are absorption, preservation and symbiosis (Haspeslagh & Jemison, 1991:145-149). However, other scholars have put forth similar typologies in the literature, including: the Marks and Mirvis (2001) study which examines the degree of change the bidder and target undergo; the culturally-based angle of Nahavandi and Malekzadeh (1988); and the human resource management lens introduced by Siehl and Smith (1990) (Angwin & Meadows, 2015:239-240; Ellis & Lamont, 2004:83), which are discussed below.

(a)   Absorption approach to integration

As can be seen the figure above, the absorption approach (bottom-left quadrant) constitutes a strong need for strategic interdependence and a low need for the acquired to retain autonomy (Haspeslagh & Jemison, 1991). Therefore, it is recognised in the literature that the main objective of absorptions

is to consolidate combining organisations' activities fully (Ellis & Lamont, 2004). Whereas Nahavandi and Malekzadeh (1988:82) refer to this as assimilation, Siehl and Smith (1990:170) call it 'pillage and plunder'. Homburg and Bucerius (2005) argue that integrations in high growth industries suffer from an approach of full absorption as the focus on internal task reorganisation restrains momentum needed to grow fast; this is primarily because the processes, systems and routines are relatively primitively developed at the outset (Bauer, Dao, Matzler & Tarba, 2017; Homburg & Bucerius, 2005).

(b)   Preservation approach to integration

In the preservation approach, the opposite is true: there is little need for strategic interdependence and a high need for autonomy, as can be seen in the top-right quadrant of Figure 3.5 (Haspeslagh & Jemison, 1991). Nahavandi and Malekzadeh (1988:82) refer to this approach using the term 'separation' while Siehl and Smith (1990:172) call this approach 'courtship' or 'just friends'.

Ellis and Lamont (2004:84) explain this as a target organisation that maintains its operations independently from the acquirer so that its strategic capabilities can be preserved (Haspeslagh & Jemison, 1991). Schweizer (2005) argues that the target's preservation through its high autonomy is necessary if the objectives of the acquisition are long-term and originate from strategic capabilities and competencies tacit to the organisation.

(c)   Symbiotic approach to integration

Moreover, Figure 3.5 illustrates the nature of the symbiotic post-acquisition integration approach, which thrives under both high strategic interdependence (knowledge transfer) and significant organisational autonomy (see the bottom-right quadrant) (Haspeslagh & Jemison, 1991). Although Haspeslagh and Jemison (1991) use the term symbiosis, other similar terms have also been used, including: 'integration' (Nahavandi & Malekzadeh, 1988:82), 'love and marriage' (Siehl & Smith, 1990:172) and 'best of both' or 'transformation' (Marks & Mirvis, 2001:85-86).

Ellis and Lamont (2004:98) argue that this approach affords the previously sovereign organisations the 'best of both' solution. While Teerikangas and Irrmann (2016) argue that symbiotic integration is characterised by acquirers seeking mutual learning between their employees and those of targets, they claim that in practice, organisations actually wish to absorb acquired organisations into their cultures. Haspeslagh and Jemison (1991) and Schweizer (2005) advocate for preserving the target's operations and autonomy for a time initially before symbiotic exchanges can take place naturally, or in unforced manners which lend to effectiveness but not necessarily efficiency; Meier and Schier (2016) promote the need for an initial approach to symbiosis with a policy of preservation for conserving innovation capabilities.

(d)   Holding approach to integration

The holding approach is shown in the top-left quadrant of Figure 3.5. In the post-acquisition phase, some acquirers have no intention of combining the organisations (Ellis & Lamont, 2004), which keeps

the target at a distance. However, this approach is not considered a significant approach in the literature as no integration takes place (Angwin & Meadows, 2015; Ellis & Lamont, 2004).

3.10.2.2   Two additional approaches in an extension of the typology

Angwin and Meadows' (2015:247-249) empirical undertaking to review and critique the 1991 typology of Haspeslagh and Jemison eventuated in an extension of the typology with the additional of two more approaches: the intensive care and re-orientation approaches, both of which are discussed below and presented in Figure 3.6 below.
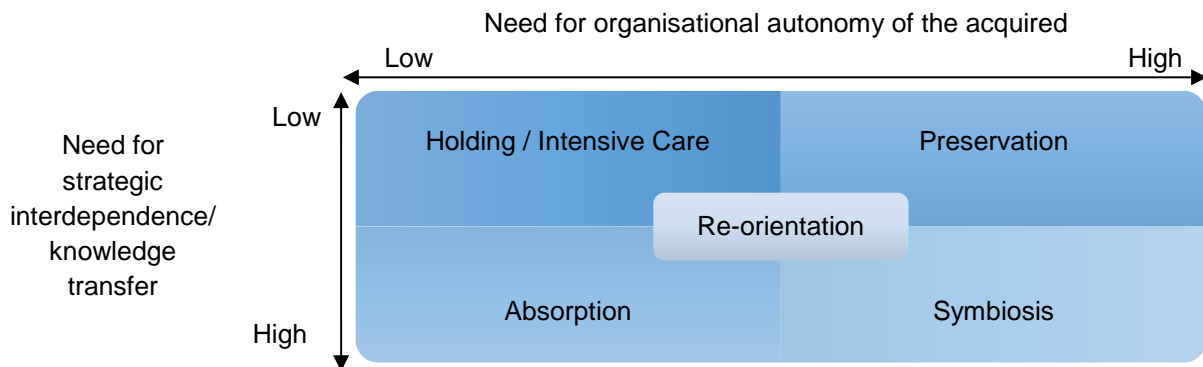
FIGURE 3.6: A typology of approaches to acquisition integration

(Source: Adapted from Angwin & Meadows 2015:248; Haspeslagh & Jemison, 1991:145)

(a)   Intensive care approach to integration

The approach known as intensive care is identical to the holding approach put forth by Haspeslagh and Jemison (1991) in terms of the two dimensions: strategic independence (low) and organisational autonomy (low), which is illustrated by its addition to the top-left quadrant of Figure 3.6. However, acquiring managers are often actively involved in the strategic direction and financial management of the acquired target to bring about a rejuvenation in its operations (Angwin & Meadows, 2015:247). Steigenberger (2016) further argues for this approach as a solution for salvaging the strong, healthy parts of distressed targets.

(b)   Re-orientation approach to integration

The re-orientation integration approach was also found to be used in practice in the empirical work of Angwin and Meadows (2015:248) and is illustrated in Figure 3.6 above at the origin of the plane. This approach involves the preservation of selected areas of the acquired, which are considered significant to the strategic needs of the acquirer, while simultaneously integrating the remaining activities (Angwin & Meadows, 2015:248). In fact, this approach allows for the division of acquired operations into exploitation and exploration, in other words, to integrate exploitative areas of the target into the bidder while maintaining the exploratory innovation areas as they were pre-acquisition (Angwin & Meadows, 2015:249; Dao, Strobl, Bauer & Tarba, 2017:196).

Aghasi, Colombo and Rossi-Lamastra (2017) put forth one manner in which the re-orientation strategy can be successfully implemented: the acquirer gives the target its autonomy while replacing its CEO with either an internally or externally recruited manager or executive. These authors argue that the valuable strategic capabilities for which the acquisition was assumed remain intact due to this "separation and replacement" strategy while the top manager's replacement allows for tighter control by the acquirer's management (Aghasi *et al.*, 2017:2-3). Given the discussion of innovation approaches, the following section serves to provide a detailed discussion of the M&A process.

3.11   THE M&A PROCESS

Through their thorough review of the M&A process literature, Gomes, Angwin, Weber and Tarba (2013) argue and conclude that a rich representation of the complex M&A process is yet to be developed and proposed as the existing understanding of it is inadequate due to compartmentalised understanding of the process (Schweizer, 2005). The remainder of the literature reviewed in this chapter serves to discuss the complexities of the process's phases, challenges and success factors, among other things, in an effort to provide a more holistic understanding of the M&A process for the creation of a theoretical foundation of the PAIP used in the primary research of the study. Firstly, the three-phase M&A process is discussed; secondly, the third phase of this process, which is the post-acquisition integration process is reviewed and synthesised; thirdly, the challenges associated with the PAIP considered; and, finally, the PAIP's critical success factors are contemplated.

Thus, the literature presents several step-by-step M&A processes. Some researchers advocate for a two-phase approach, in which the process is divided into pre-merger and post-merger (implementation) stages (Bach, 2014; Boland, 1970; Huang & Zhu, 2016; Schweiger & Weber, 1989). Conversely, Bach (2014) states that M&A researchers are now moving towards a three-phase approach. Simply put, this approach is divided into pre-merger, merger and post-merger stages; the various labels given to these stages are presented in Table 3.1 below.

TABLE 3.1: Three-phase M&A processes

AUTHOR	YEAR	THREE-PHASE PROCESS			PAGE
		Phase 1	Phase 2	Phase 3	
Von Krogh	2016	Pre-acquisition	Acquisition	Post-acquisition	307-308
Schertzinger	2009	Planning	Transaction	Integration	10-11
Wuebben	2007	Strategic analysis and conception	Acquisition structuring and management	Post-closing integration	39-51
Appelbaum, Gandell, Yortis, Proper and Jobin	2000a	Pre-merger	During the merger	Post-merger	649
Salus	1989	Pre-merger	Merger	Post-merger	47

(Source: Adapted from Appelbaum *et al.*, 2000a:649; Salus, 1989:47; Schertzinger, 2009:10-11; von Krogh, 2016:307-308; Wuebben, 2007:39-51)

For the purposes of this study, the labels of the three-phase process put forth by von Krogh (2016) as the topic of acquisitions is most relevant. Von Krogh (2016:307-308) promotes three phases: pre-acquisition; acquisition; and post-acquisition. However, each phase in Table 3.1 is comparable to the corresponding phase proposed by a different author. Thus, each of the three phases are discussed below. The M&A process is relevant to the study as the integration process is an important component of the third phase of the M&A process, namely the post-acquisition phase.

3.11.1 Phase one: Pre-acquisition

In the first stage, the focus is on taking measures internally that will enable the bidder to capacitate the acquisition of other organisations. This must be undertaken from a top strategic level that specifies a growth agenda by means of acquisition, possibly amongst other tactics. Management should identify gaps in the organisation's current strategy and operations. These gaps could then be filled with procured elements that are either added or replaced. Once a top-level acquisition strategy is in place and all strategic gaps have been identified, targets can then be considered. The final step in phase one is preparing the target profile, inspecting the organisation and then deciding on whether to purchase (Bach, 2014; Wuebben, 2007).

Christensen *et al.* (2011) suggest scrutinising targets in terms of the four elements that make up their organisational models. These are namely: customer value proposition; profit formula; resources; and processes. Firstly, the customer value proposition is an important consideration. If a value offering can offer consumers a more efficient, convenient or affordable means of accomplishing a task than is currently on the market, it may make a valuable addition to the buying organisation's product mix (Christensen *et al.*, 2011). Secondly, the profit formula should be reviewed. If the target's revenue model and cost structure are viable to sustain operations and, preferably, to produce a high yield, it should be contemplated as a possible purchase. Thirdly, the processes of the acquisition should also be taken into consideration, which may include research and development practices, manufacturing, sales and budgeting. However, if the profitability of the acquired is reliant on its autonomous functioning, the acquisition should operate as a separate organisational unit once bought particularly if the target's systems and processes are inextricably linked to the people of the organisation as it exists pre-acquisition (Christensen *et al.*, 2011). Lastly, the target's resources should also be contemplated. These will likely include technology, products, employees, intangible assets, equipment, cash, facilities and customers. If the organisation is bought solely for its resources, these will simply be extracted and input to the bidder where they are needed as a transfer (Christensen *et al.*, 2011).

Moreover, an acquisition growth strategy should be accompanied by its own specific objectives (Bach, 2014; Wuebben, 2007). Kuratko *et al.* (2011) suggest a number of important guiding principles for orchestrating an acquisitions strategy successfully as well as present the challenges it

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poses. A number of considerations should be at the fore in selecting the right acquisitions; these include (Kuratko *et al.*, 2011):

- ensuring strategic fit between the acquirer and the target organisation;
- undertaking acquisitions with relevant core competencies to the acquirer; or
- acquiring technologies, skills, knowledge and customers that are complementary to the organisation's long-term strategic direction.
- Kuratko *et al.* (2011) also counsel organisations considering an aggressive acquisition strategy to instil, in each new procurement, the culture and values of the purchaser.

Thus, the pre-acquisition stage encompasses the organisation's strategic outlook and objectives for acquiring other organisations, which it will conduct due diligence on and ensure has the correct fit with the existing organisation. Succeeding the pre-acquisition is the acquisition stage, in which the transaction is made and all legally binding agreements are made (Wuebben, 2007).

3.11.2 Phase two: Acquisition

The second stage is centred on undertaking the transaction itself (Wuebben, 2007). Three points are commonly dealt with in completing the purchase, the first of which is pre-signing. This covers drafting and drawing up a confidentiality agreement, sending a letter of intent, carrying out due diligence and entering initial negotiations. After pre-signing, pricing is dealt with. This involves valuing the target and evaluating how it will be financed if purchased. Finally, the acquisition will then be signed off on and closed. An acquisition agreement will be drafted. Antitrust and securities laws and regulations will be reviewed. If all previous steps have been conducted with the proper care, a final offer will be made. In the case that the offer is accepted, the particulars must be negotiated; these will encompass various details which may have been overlooked until that juncture (Bach, 2014; Wuebben, 2007). Although the financial management literature pertaining to M&A has dealt with this phase of the M&A process in significant detail (Birkinshaw *et al.*, 2000; Larsson & Finkelstein, 1999), it lies beyond the scope of the current study.

3.11.3 Phase three: Post-acquisition

Once the target has been officially acquired, the bidder must implement integration measures which are suited to the specific circumstances at play (Bach, 2014; Wuebben, 2007). The primary aim of this phase is to make use of the capabilities that exist in the previously separate organisations more effectively (Datta, 1991). Obstacles to achieving this aim should be removed to eventuate at an effective integration (Haspeslagh & Jemison, 1987).

A host of researchers have emphasised the importance of the post-acquisition integration process in determining acquisition performance (Birkinshaw *et al.*, 2000; Graebner, 2004; Haspeslagh & Jemison, 1991; Jemison & Sitkin, 1986b; Nahavandi & Malekzadeh, 1988; Vaara, 2003; Vancea, 2011; Yu *et al.*, 2005). More recently, Graebner *et al.* (2017) have highlighted the appeals in the

literature for a more substantial focus on the events in post-acquisition integration implementation, citing the work of Haleblian, Devers, McNamara, Carpenter and Davison (2009) as well as Steigenberger (2016). Significantly, Špaček (2016) argues that the most recent M&A wave has seen higher levels of concentration on the PAIP rather than a sole focus on the pre-acquisition and acquisition phases. Given the discussion of the acquisition stage, the post-acquisition phase is discussed in the next section in some detail as it is under exploration in the current study.

3.12   THE INTEGRATION PROCESS

Wuebben (2007) advances that there are three essential steps and activities to assume after closing the acquisition deal. These are: integration conception; implementing integration measures; and controlling integration (Wuebben, 2007). As the study is concerned with exploring managerial and/or leadership considerations that exist for the process of integrating small innovation acquisitions (with more than one individual) at the team level, the integration process is a relevant concept to review the literature on and present in this thesis.

3.12.1 Integration conception

At the outset of combining two organisations, their integration potential should be analysed and planned (Wuebben, 2007). A decision must be made regarding the level of integration. Most often, scientific inquiry on the small organisation integration has focused on this decision, which is known as the integration-autonomy dilemma. Thus, the main question posed in the literature has centred on whether the acquired organisation should be entirely subsumed into the bidder (known as full integration) or if an independent subsidiary ought to be created that is autonomously run by the original members of the target (known as autonomy) or somewhere in between these poles (Aghasi *et al.*, 2017; Pablo, 1994; Puranam *et al.*, 2009).

Bauer and Matzler (2014) warn that the chosen level of integration must be carefully considered as it has a causal effect on realising the objectives of the acquisition determined at the outset. For example, if full integration is pursued, it is likely that acquired employees will experience demotivation and lower productivity as well as that the acquirer will have a high level of employee turnover, thus losing human capital assets it sought to include in the larger organisation (Kapoor & Lim, 2007; Larsson & Finkelstein, 1999; Paruchuri, Nerkar & Hambrick, 2006; Puranam & Srikanth, 2007; Ranft & Lord, 2002).

Govindarajan and Trimble (2010a) recommend integrating the small innovation acquisition fully into the DT of the innovation initiative; however, their proposition falls short of advising innovation acquisition champions on the potential problems or challenges they may face in integrating such a small innovation acquisition. Thus, the following section addresses the implementation of integration post-M&A that exists in the broader M&A literature.

3.12.2 Implementing integration measures

Secondly, Wuebben (2007) suggests that assorted integration measures should be taken, including: organisational; strategic; administrative; operative; and cultural. This range suggests that a 'workstream' approach such as the one proposed by Galpin and Herndon (2007:77) for medium- to large-scale integrations. Moreover, Patzelt, Schweizer and zu Knyphausen-Aufsesse (2007) recognise that the literature spanning the field of M&A is substantially focused on the integration of large organisations (Chen & Reuer, 2004). The researchers suggest the existing field of inquiry lacks a focus on the study of acquiring small, entrepreneurial organisations (Patzelt *et al.*, 2007).

3.12.2.1   Integration sub-processes

A study conducted by Birkinshaw *et al.* (2000:395) on the process of post-acquisition integration argues that it takes place on two planes, which these scholars term "sub-processes": task and human integration, as can be seen in Figure 3.7 below. Effective integration across the study's three observed acquisitions occurred through a process made up of only two phases (Birkinshaw *et al.*, 2000).
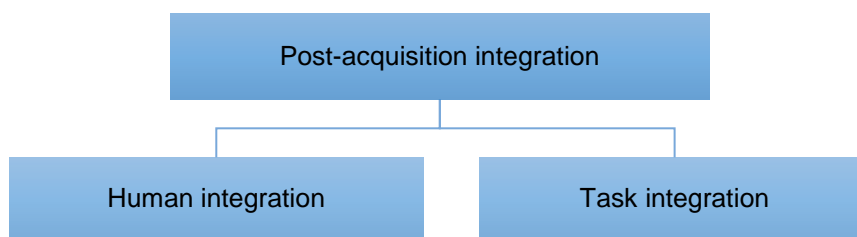
FIGURE 3.7: Post-acquisition integration sub-processes
(Source: Adapted from Birkinshaw *et al.*, 2000:395)

Firstly, integrating the two organisations' tasks led to a satisfactory non-human combination. While the task integration was carried out, the units' interactions were curbed and the human integration, aimed at the gradual converging of cultures and eventuating in respect, happened without difficulty (Birkinshaw *et al.*, 2000). The second observed phase in the study that proved effective in the post-acquisition integration process was characterised as recommencing with the integration of organisation tasks, which sought to build on the foundation of successful human integration that had resulted from phase one; the effectively executed second phase eventuated in substantial interdependencies between the previously separate units (Birkinshaw *et al.*, 2000).

3.12.2.2   The merger integration workstream model

As a result of the apparent dearth of scholarly literature on the integration process for small acquisitions into a DT, the integration process and strategy of medium- to large-sized M&A is considered here, as this is the most instructive model the author has been able to find. It was devised by Galpin and Herndon (2007). Therefore, according to Galpin and Herndon (2007), the full integration of organisations, particularly in the case of two similar sizes merging, encompasses at

least nine interdependent, concurrent workstreams; these can be seen in Figure 3.8 below. These comprise the differing focal areas which M&A integration managers should address for the most successful and effective M&A outcome. Each of these and all of them, collectively, are important for a sound sizable integration to take place; as such, M&A management should influence and lead all nine efforts, consciously and actively (Galpin & Herndon, 2007).
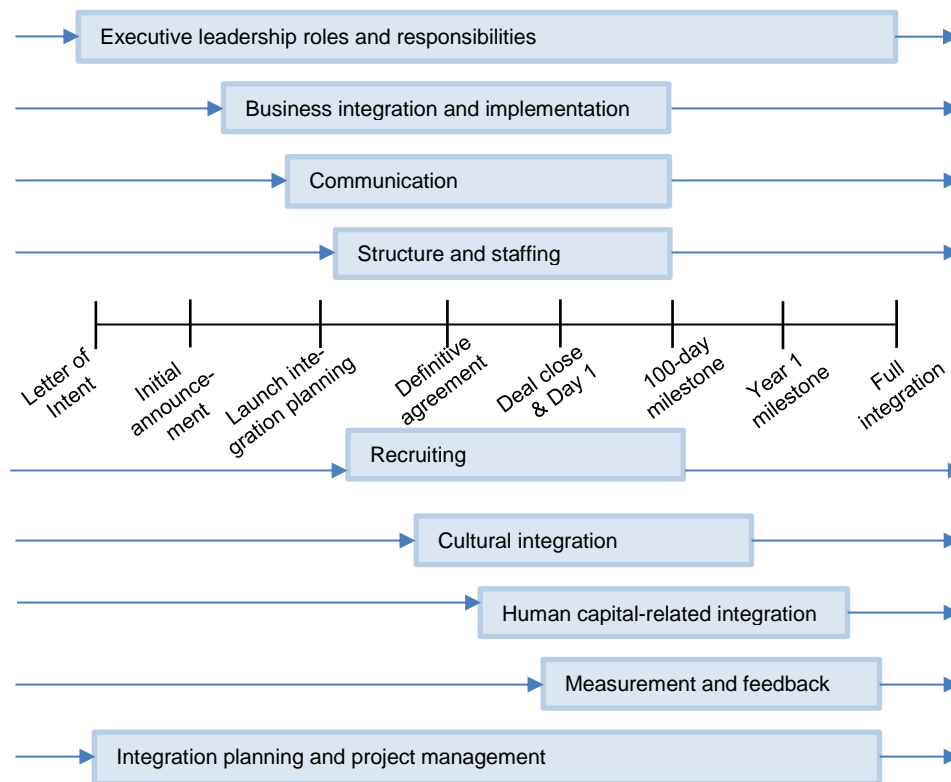
FIGURE 3.8: The merger integration workstream model

(Source: Adapted from Galpin & Herndon, 2007:77)

(a)   Executive leadership roles and responsibilities

Firstly, delineating who of the executives is accountable for each of the succeeding M&A functions must be prioritised for successful integration in each workstream (Galpin & Herndon, 2007). The executive's direct and effective involvement in the organisation is necessary for continued good performance (Cannella & Hambrick, 1993; Certo, Lester, Dalton & Dalton, 2006). Moreover, Vasilaki and O'Regan (2008) put forth that one of the most prominent issues in the literature regarding acquisition success is the effect of the executive leadership; indeed, one of the earliest studies on acquisition success, by Kitching (1967), single managers out as a vital source of this success.

Vasilaki and O'Regan (2008) adduce that the top management team (TMT) should effectively employ and manage resources and group processes to enhance post-acquisition performance of the combined organisation. The TMT should also display group task leadership and personal integration to the task. If the TMT assumes these executive leadership roles and responsibilities, the

integration process will benefit. Firstly, decision-making will be more effective; secondly, a clear vision will be exemplified; thirdly, the TMT will be qualified to influence and commit to the goal (Vasilaki & O'Regan, 2008).

In an earlier publication, Buono and Bowditch (1989) delineate the priorities the TMT should have. Firstly, it should emphasise the acquisition objectives; secondly, determine the organisational and strategic fit; lastly, it should devise how to gain the commitment of all employees for a successful acquisition (Buono & Bowditch, 1989). Hitt *et al*. (1990) and Hitt, Hoskisson, Ireland and Harrison (1991) argue that the demands of the M&A process engage most of the TMT's energy and time, to the detriment of core functions. In this case, core tasks of R&D and innovation, for example, may suffer if not prioritised (Hitt *et al*., 1990; Hitt *et al*., 1991). The longitudinal study by Yu *et al*. (2005) found support for this argument. By this logic, if the acquisitions scouted out and pursued are those that will bring R&D and innovative capabilities and value propositions to the buying organisation, then management would justifiably be spending time and resources on M&A activity. However, Yu *et al*. (2005) found that TMTs are prone to lose focus on the integration effort and then ineffectively manage it.

(b)   Organisational integration and implementation

Secondly, implementation should be stressed as each steps' deliverables should be actionable and executed carefully; this step encompasses the planning that goes into an integration and the execution of those strategic plans (Galpin & Herndon, 2007). The planning should ensure that integration hindrances do not exist; these may exist in various forms, such as: reward and evaluation systems; management styles; organisational cultures or structures (Datta, 1991; Lubatkin, 1987; Marks, 1997).

(c)   Communication

Thirdly, successful M&A boast the ability to communicate thoroughly with a view to align all stakeholders' visions for successful outcomes on strategies and objectives (Galpin & Herndon, 2007). This workstream aligns with the HRM (human resource management) lens, which emphasises effective communication (Larsson & Finkelstein, 1999; Yu *et al*., 2005). The risk of not addressing communication during this process renders the acquisition vulnerable to 'we-they' interaction dynamics, breakdowns in communication between players and reduced commitment (Buono & Bowditch, 1989; Napier, 1989; Shin & DeNisi, 2004; Yu *et al*., 2005).

(d)   Structure and staffing

Fourthly, structure and staffing is necessary for all steps proceeding from launching integration planning as execution needs to take place within a previously determined human resources pool that is organised with a goal in mind (Galpin & Herndon, 2007). Špaček (2016) argues that very little

attention is devoted to issues of reorganising, especially with regards to human resources, which is often the most significant shortcoming of the M&A process that leads to failure.

(e)   Re-recruiting

Moreover, re-recruiting (whether internally or externally) key talent within the integration is essential for the best hopes of success; influential employees should be included in the management of the merger to achieve good interpersonal relationships between merging groups (Galpin & Herndon, 2007).

(f)   Cultural integration

Furthermore, clashes in culture often occur and pose a substantial risk to successful integration (Galpin & Herndon, 2007). According to Larsson and Finkelstein (1999), issues relating to conflicting cultures is often studied through the organisation theory lens. It has been demonstrated how challenging it is to combine the cultures of two established corporates because they have built up their shared realities over time and these are deeply embedded in the minds of employees (Morgan, 2006; Weber & Camerer, 2003). In order to circumvent this 'hazard', careful attention should be paid to retaining some of the aspects of the organisational culture of both parties to ensure buy-in from all personnel (Larsson *et al.*, 2004; Nahavandi & Malekzadeh, 1988). It is suggested that a cultural analysis of each should be undertaken by management consultants in large-scale mergers to evade this threat as much as possible (Galpin & Herndon, 2007).

(g)   Human capital-related integration

Besides, human capital-related integration is significant to undertake as new roles should be codified and understood across the new organisation to keep relational misunderstandings to a minimum (Galpin & Herndon, 2007).

The eighth and ninth workstreams advanced by Galpin and Herndon (2007) are those of measurement and feedback as well as integration planning and project management, respectively. These steps align with Wuebben's (2007) integration-controlling step of the acquisition process. Therefore, both are discussed in the following section.

3.12.3 Integration control

The third and final stage which Wuebben (2007) recommends is that certain integration controls are fulfilled, such as a post-acquisition audit. Similarly, Galpin and Herndon (2007) propose that two integration controls are instituted by means of workstreams. The first is measurement of the specific integration and giving feedback; the second is continuous learning about integration processes for future successes (Galpin & Herndon, 2007).

3.12.3.1   Measurement and feedback

Measurement of M&A performance and feedback of integration effectiveness is critical to furthering the organisational learning regarding successful integrated M&A for the success of future M&A

integrations that acquiring organisation will undertake (Galpin & Herndon, 2007). Bauer and Matzler (2014) have argued that M&A performance and success is a function of and can be measured by its antecedents, which these scholars argue are strategic and cultural fit as well as the speed and degree of post-acquisition integration. While these have been identified as key success factors, Gomes *et al*. (2013) have similarly proposed several KSFs of the PAIP, which are discussed in more detail in section 3.14.

Nevertheless, M&A performance can be measured in multiple ways, depending on the aim of the measure (Meglio & Risberg, 2011), which is summarised in Table 3.2 below. As can be seen in this table, two main performance domains exist: financial and non-financial. Financial performance can be measured on the bases of market measures, including the dimensions of risk and market value, as well as accounting measures, which include the dimensions of profitability (Ma, Liu, Ning, Liu & Liu, 2014), growth, cash flow (Thanos & Papadakis, 2012), liquidity (Sinha, 2010) and leverage (Bouraoui & Li, 2014). Non-financial performance can be measured on the bases of operational measures, including marketing (or market share) (Venkatraman & Ramanujam, 1987), innovation (Ahuja & Katila, 2001; Zollo & Meier, 2008) and productivity (Andriuskevicius & Ciegis, 2017), as well as overall performance, including success and survival (Meglio & Risberg, 2011).

TABLE 3.2: Measures of merger and acquisition performance

Performance domain	Domain	Measure type	Dimension
	Financial performance	Market performance	Risk
			Market value
		Accounting performance	Profitability
			Growth
			Liquidity, cash flow and leverage
	Non-financial performance	Operational performance	Marketing/market share
			Innovation
			Productivity
		Overall performance	Success
			Survival

(Source: Adapted from Meglio & Risberg, 2011:422)

3.12.3.2   Integration planning and project management

Galpin and Herndon (2007) state that integration planning and project management is the final step. This encompasses learning from the combined organisation and continued commitment to the long-term success of integrations in the future; it is largely dependent on sustained emphasis of the preceding steps because of reliance on the collective success for the overall effectiveness of the consolidation (Galpin & Herndon, 2007). Given the discussion of the M&A process as put forth by

Wuebben (2007) and the post-acquisition integration process of workstreams (Galpin & Herndon, 2007) and sub-processes (Birkinshaw *et al.*, 2000), the following section discusses seminal theme-based acquisition integration process advanced by Haspeslagh and Jemison (1991).

3.12.4 Acquisition integration process per Haspeslagh and Jemison (1991)

Figure 3.9 below presents the theme-based post-acquisition integration process as put forth by Haspeslagh and Jemison (1991). The bidder and target interact for the purposes of operationalising integration to realise the objectives of the acquisition. Simultaneously, these interactions in the integration process serve to create and sustain an atmosphere that supports capability transfer. These present the overarching conditions that should be met for strategic capabilities to be transferred to improve competitive advantage. Thus, in summary: if interactions are positive, if process problems are addressed and mitigated as well as if a capability transfer-friendly environment is shaped, the bidder's competitive advantage can be augmented by the successful transfer of capabilities (Haspeslagh & Jemison, 1991).
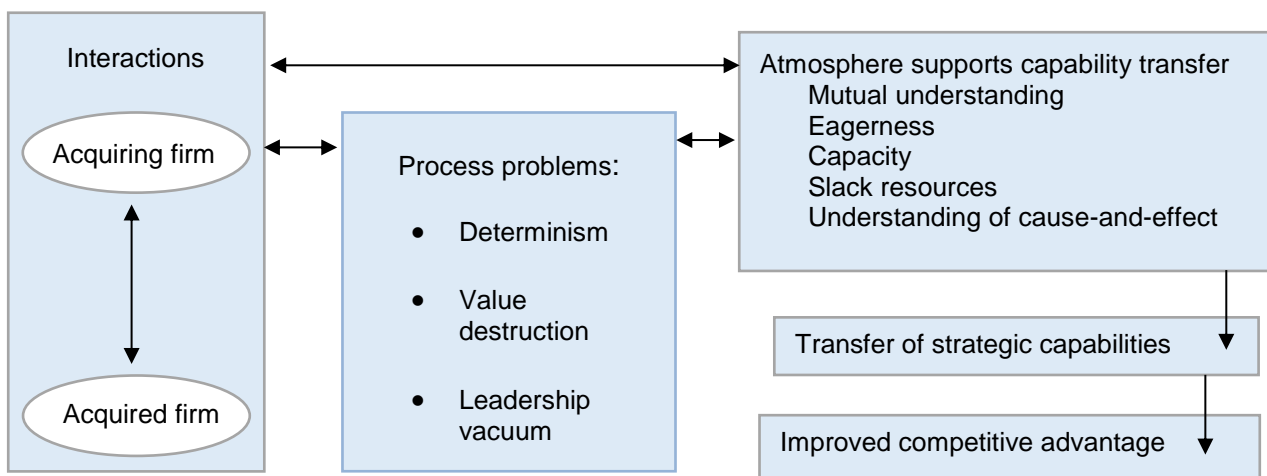
FIGURE 3.9: Haspeslagh and Jemison's acquisition integration process

(Source: Adapted from Haspeslagh & Jemison, 1991:123)

The process problems put forth by Haspeslagh and Jemison (1991), as can be seen in the above figure's highlighted green box, are essentially managerial and/or leadership issues associated with the PAIP. As such, these considerations are included in the primary research methodology of the current study. Therefore, given the post-acquisition integration process as presented in this section, the following serves to discuss the challenges that arise during it, with reference to those discussed previously as well as those illustrated in the figure above in the green box.

3.13 INTEGRATION PROCESS CHALLENGES

Haspeslagh and Jemison (1991) identify a major challenge in the management of acquisitions, which is the management of the post-acquisition integration process to realise the value creation estimated at the outset of the transaction. These authors also indicate that the post-acquisition integration

process, in turn, habitually gives rise to three challenges (see Figure 3.8) which managers must address for effective integration and thus successful value creation (Haspeslagh & Jemison, 1991). As the study is concerned with exploring managerial and/or leadership considerations for team integrations of small innovation acquisitions, challenges associated with the integration process provide possible items for discussion in the semi-structured interview guide of this study.

3.13.1 Determinism

The problem of determinism refers to the tendency managers have of steadfastly clinging to the initial reason for the acquisition rather than facing sometimes altered realities, which result from changed internal and external conditions (Haspeslagh & Jemison, 1991). Such changes can include: new information coming to light; unexpected events in industry, competitors and technology; internal organisation changes; as well as resistance between the opposing sides: the bidder and the target's employees. This deterministic and inflexible view identified by Haspeslagh and Jemison (1991) is entrenched in a fictitious sense of security and inured to recurring confusion and frustration, which are discussed below.

3.13.1.1   A false impression of security

For the corporate transaction to take place originally, it requires a persuasive selling point that justifies both the expense and risk of the acquisition (Haspeslagh & Jemison, 1991). The false security shared by all stakeholders is rooted in the persuasiveness of the reason for acquiring. It also clouds the judgement of managers regarding external changes (Haspeslagh & Jemison, 1991).

3.13.1.2   Unanticipated events

Shocks that originate externally can damage the acquisition. Thus, managing the acquisition's integration effectively relies on appreciating and comprehending the intricacies of industry and organisation context. Haspeslagh and Jemison (1991) also express that the most challenging unexpected incidents are those arising from conflict and antagonistic behaviour between the employees of the acquiring and the acquired organisations (Haspeslagh & Jemison, 1991).

3.13.1.3   Confusion and frustration

It is suggested by Haspeslagh and Jemison (1991) that integration is generally operationalised by the lower level managers, while the more senior managers hold them accountable to achieve the results anticipated at the acquisition's outset. Assumptions about the probable outcomes of an acquisition are formed at the start of the M&A process, which can potentially be too ambitious to achieve, which in turn necessitates modifications to the original thinking about how to execute successful integration as external changes occur and either make these goals more difficult to achieve or altogether unattainable. If these early assumptions are clung to by integration managers despite changing external forces without responding appropriately, the view can be considered deterministic in nature. This problem is further exacerbated when integration managers' feelings of

confusion and frustration trigger managers to intensify their commitment to original goals rather than applying themselves to the causes that signal change and how to respond adequately to these forces. The causes of this inflexibility to change may create a deterministic view held by managers characterised by hubris, insecurity and stubbornness (Haspeslagh & Jemison, 1991).

3.13.2 Value destruction

Arguably, all large-scale acquisitions change the status quo of both organisations – particularly that of the acquired. One manifestation of such change in the status quo of the buyer-acquirer and the acquired is that, in the acquisition integration, destruction of value can occur, which is the negatively impact that the acquisition may have on the people it affects, both managers and employees (Haspeslagh & Jemison, 1991). The affected people may feel uncertain, insecure, fearful and, at the extreme, feel the subconscious need for survival instinct. It is further argued that if people feel this way, they may actively or passively resist the integration, which can erode the shareholder value intended for the acquirer. Ways in which employees resist the organisation combination efforts during the process of post-acquisition integration include: working against or not in favour of the success of the acquisition; leaving the consolidated organisation; recoiling from new modes of behaviour; acting with a lack of initiative; reduced commitment; averseness to change; and even sabotaging operations (Haspeslagh & Jemison, 1991:130-131).

All these actions and non-actions by employees damage the acquisition and the new organisation, by extension; therefore, there is a need for managers to demonstrate empathy (Haspeslagh & Jemison, 1991). Acting empathetically means gaining an understanding of the culture, the emotions and the politics of the acquired organisation, which is exhibited and comprehended only by spending time with the existing and new employees (Marks, 1997; Nguyen & Kleiner, 2003). However, this poses a trade-off in managing and leading the PAIP, which occurs as a choice between efficiently achieving the strategic objectives that form the justification for the M&A and ensuring the optimal well-being of all personnel involved in the effort. As such, integration managers must work towards balancing the tasks of empathy and efficient integration without letting one entirely supplant the other (Haspeslagh & Jemison, 1991).

3.13.3 Vacuum of leadership

Integrations can suffer from a lack of appropriate leadership. Haspeslagh and Jemison (1991) found that lacking institutional leadership will need to be supplemented with interpersonal leadership. Institutional leadership refers to top management's direct involvement with the integration. All employees must be made aware of the acquisition's vision and purpose as well as their individual roles in accomplishing these. The TMT should shape an identity for the amalgamated entity, which the workforce can equate themselves with on a personal level. If these responsibilities are eschewed by senior executives, acquired employees are likely to revert to past behaviours that are incongruent with the new organisation and its aims (Haspeslagh & Jemison, 1991).

In the absence of sufficient institutional leadership, a great deal of interpersonal leadership from middle management is requisite for filling the void (Haspeslagh & Jemison, 1991). It is a time-consuming endeavour. The demands of integrating two previously independent organisations that lack a shared purpose compels those middle managers charged with directing the integration to veer their focus. This comprises a shift from the arguably more important value-creating aspects to the protracted matters of interpersonal leadership. Furthermore, the dearth of a common purpose has been found to bring about inferior performance. Therefore, in summary, integration leadership becomes misdirected from their intended purpose (Haspeslagh & Jemison, 1991). This section has shown how the challenges of determinism, destruction of value and leadership vacuities affect the post-acquisition integration process; the following section reviews critical success factors of the PAIP.

3.14   SUCCESS FACTORS OF THE INTEGRATION PROCESS

The review undertaken by Gomes *et al.* (2013) emphasise the importance of establishing critical success factors (CSFs) across the wider theoretical lenses that intersect with the M&A process literature. These scholars draw attention to the significance of the post-acquisition integration process and explaining performance by citing Haspeslagh and Jemison's (1991) assertion that creating value from acquisitions occurs from successful integrations. Moreover, effective integration practices that lead to long-term success post-M&A are driven by integration processes that consider both human and financial factors as well as combine CSFs (Bertoncelj & Kovač, 2008).

Regarding the latter, Gomes *et al.* (2013) identified seven critical success factors for the post-acquisition integration process, including: integration strategy and approach; post-acquisition leadership; speed of integration implementation; post-acquisition-leadership team and disregard of daily activities; communication during implementation; managing corporate and cultural differences (Gomes *et al.*, 2013:18); and human resource management (Gomes *et al.*, 2013). Each of these are reviewed in this section. Furthermore, as the study is concerned with exploring managerial and/or leadership considerations for team integrations of small innovation acquisitions, CSFs associated with the integration process provide possible items for discussion in the semi-structured interview guide of this study.

3.14.1 Integration strategy and approach

Effective post-acquisition integration processes are necessary for the creation of value from the M&A transaction (Haspeslagh & Jemison, 1991; Schweiger & Goulet, 2005). The extent of integration (full integration to autonomy) may negatively influence the performance of the acquisition or indeed cause it to fail in two ways: too little integration (Schweiger & Weber, 1989) and too much integration (Weber & Schweiger, 1992). The approach towards integration is a complex decision and undertaking, which justifies the various typologies found in the literature, summarised in Figure 3.5

and Figure 3.6 (Angwin & Meadows, 2015:239; Haspeslagh & Jemison, 1991:145; Marks & Mirvis, 2001; Nahavandi & Malekzadeh, 1988:82-83; Siehl & Smith, 1990:170-172).

Significantly, Birkinshaw *et al.* (2000) observed that the integration strategy and approach selected and implemented for a given post-acquisition phase was most successful when the sub-processes of task and human integration are consciously managed and led by management, which has been discussed and illustrated in Figure 3.7. Similarly, integrating human and financial factors in integration processes and practices are both necessary to accomplish long-term effectiveness post-acquisition (Bertoncelj & Kovač, 2008). Both the secondary and primary findings of Birkinshaw *et al.* (2000) indicate that multiple theoretical lenses need to be considered for the complex phenomenon of post-acquisition integration to be understood and analysed appropriately. This is in keeping with other assertions in the M&A literature, see for example: Cartwright and Schoenberg (2006), who argued for more holistic conceptions of post-M&A performance, as well as Larsson and Finkelstein (1999), who have promoted the need to gain multidisciplinary understandings of realising synergy. This section has discussed the CSF of strategy and approach to integration, the first identified by Gomes *et al.* (2013); the following section deals with the CSF of leadership post-acquisition.

3.14.2 Post-acquisition leadership

According to Gomes *et al.* (2013), leadership has been a prominent and enduring theme in the M&A literature and is identified as a critical success factor for the post-acquisition integration process. As early as the late 1960s, Kitching's (1967) work on diagnosing merger failure identified the success factor of a relationship between leaders of the consolidating organisations. Other scholars argue for the importance of demonstrating managerial decisiveness in setting strategic direction for effective integration and leading the change which existing and new employees experience (Angwin & Meadows, 2009; Gomes *et al.*, 2013; Nemanich & Keller, 2007; Vasilaki, 2011a; 2011b). Schweizer and Patzelt (2012) stress the important role of PAIP leadership in expediting the integration process and gaining the commitment of acquired and existing employees to remain as a part of the consolidated organisation both during and after the integration process. The cross-border M&A integration literature has also stressed the importance of leadership as a CSF (Erez-Rein, Erez & Maital, 2004).

Moreover, most successful integrations are characterised by a clear relationship at the boundary that exists between the acquiring and acquired organisations, which is effectively localised in an appointed executive of the acquiring management's choosing (Angwin, Stern & Bradley, 2004; Kavanagh & Ashkanasy, 2006; Kitching, 1967). Similar to the assertion by Govindarajan and Trimble (2010a) of the importance of hiring outsiders to the initiative with fresh perspectives, Angwin and Meadows (2009) argue for the appointment of an outsider to the acquired unit to lead it if significant change is needed in the unit. This is not an unusual assertion for the field of M&A as changes in top management have been often cited (Aghasi *et al.*, 2017; Krug & Hegarty, 2001; Walsh, 1988).

Vasilaki (2011a; 2011b) has advanced that instead of a comprehensive set of leadership qualities that are central to successful PAIPs across the board, different approaches to leadership may be necessary for different integrations strategies, approaches and styles. This reasoning is particularly salient to the current study as the primary objective involves an integration approach at the team level which has not yet been researched. This section has discussed the CSF of post-acquisition leadership, the first identified by Gomes *et al.* (2013); the following section deals with the CSF of implementing integration efficiently.

3.14.3 Speed of integration implementation

The speed of executing PAIPs is important in fast-changing industries, such as those driven by technological innovation (Vester, 2002). Ernst and Young (2014:4) have emphasised the recent importance and focus that 80 per cent of practitioners have on integration speed. However, this report states: "After all, the sooner you integrate, the sooner you can get back to focusing on your core organisation and increasing earnings" (Ernst & Young, 2014:16), which is not a goal associated with the procurement of small technology-based organisations made for effective innovation execution, including R&D and commercialisation, of an acquisition's value proposition (Ahuja & Novelli, 2014; Govindarajan & Trimble, 2010a).

While innovation-driven M&A necessitate expeditious, consistent PAIPs because of the need of a response to market demands (Vester, 2002), the human component made up of directly involved managers and employees does not integrate as fast as is required by deadlines of getting to market (Gomes *et al.*, 2013; Vester, 2002). Thus, a trade-off between speed and effective human integration is clear, which was also identified by Haspeslagh and Jemison (1991) in their discussion of the process problem of integration managers' deterministic worldview. To solve for this choice, Light (2001) argues that one cost outweighs the other: losing momentum on new product development of a feasible and potentially profitable product poses a greater risk to the acquirer than the costs associated with rapid decision-making, which may negatively affect the sensibilities of employees.

In contrast, Ranft and Lord (2002) have found that slower integration speeds lead to establishing trust between employees. Notwithstanding, Gomes *et al.* (2013) argue that the gains on either side of this trade-off mean that there is no superior speed at which to integrate: it is entirely dependent on the variables unique to the acquisition and the PAIP so the integration speed should be determined, planned for and executed on a case-by-case basis. This section has examined integration speed, the first identified by Gomes *et al.* (2013); the following section deals with the CSF concept of the integration team.

3.14.4 Post-acquisition-leadership team and disregard of daily activities

The complexity of the PAIP often forces managers to spend much of their time solving issues that arise from the changeover period rather than the daily operational activities, for which the acquisition

was initially undertaken (Ghemawat & Ghadar, 2000; Gomes *et al.*, 2013). This drawback motivates organisations to develop capabilities and value propositions in-house rather than pursue external strategic options, namely in the M&A milieu (Ghemawat & Ghadar, 2000), which suggests that greater understanding is necessary to enable managers and organisations to execute the PAIP effectively in order to reap the potential rewards of the combination.

As a result of the challenge of simultaneously managing the integration and organisational activities, scholars have suggested the creation and deployment of post-acquisition-leadership teams that focus their energy, time and effort on the coordination alone, which leaves the daily organisational activities as the highest priority of organisational managers (Epstein, 2004; Gomes *et al.*, 2013; Jemison & Sitkin, 1986b; Savovic, 2012).

Teran (2012) has discussed the advantages of forming and deploying a centralised integration team, which is tasked with outlining methods, processes and tools to be implemented across the PAIPs of the various acquisitions, as is operationalised in Cisco Systems. Similarly, Deloitte (2015:7) revealed that 82 per cent of study respondents considered the formation and functioning of teams dedicated to integration processes a critical success factor. Largely, these teams have more than ten members and are cross-functionally populated, including members from the organisation's different divisions and departments (Deloitte, 2015). This section has discussed the CSF of integration teams, the first identified by Gomes *et al.* (2013); the following section deals with the communication CSF.

3.14.5 Communication throughout integration implementation

An additional critical success factor widely put forth in the M&A process literature (Schweiger & DeNisi, 1991; Weber & Tarba, 2010) is that of communication in the post-acquisition phase, which Weber, Rachman-Moore and Tarba (2012) argue as essential to post-acquisition performance. Schweiger, Csiszar and Napier (1993) take the importance of communication further, emphasising that it is integral to stabilising the workforce directly involved in acquisitions from early in the PAIP, which lends to decreasing uncertainty and diffidence. Epstein (2004:177) emphasise the importance of "significant, constant and consistent" communication throughout the process, starting as early as is possible. Schweiger *et al.* (1993) warn that employee uncertainty in the transitional time of change can bring about various disadvantageous outcomes, such as declines in productivity, organisation loyalty and job satisfaction as well as increases in stress, absenteeism and employee turnover.

Communications with subordinates especially should be delivered by an appropriate method, timed aptly and allow for interactiveness (Gomes *et al.*, 2013; Weber & Tarba, 2010). However, Weber *et al.* (2012) warn against managers over-communicating, which decreases their own flexibility by keeping them to their promises. Despite this, Epstein (2004:177) identifies over-communication as a success factor. This section has discussed the importance of the communication CSF, the first

identified by Gomes *et al.* (2013); the following section deals with the CSF of managing cultural differences existing between corporate and nations.

3.14.6 Managing corporate and national cultural differences

Several researchers have analysed cases of acquisition performance in which the strategic fit between combining organisations seemed satisfactory but the acquisition performed poorly and found that the concept of cultural fit explains this dichotomy (Chatterjee, Lubatkin, Schweiger & Weber, 1992; Weber, 1996; Weber *et al.*, 2012). Thus, the issue of culture in M&A and managing it have been identified in the literature in the corporate or organisational sense (Melewar & Harrold, 2000) as well as a national sense (Chakrabarti, Gupta-Mukherjee & Jayaraman, 2009), which has been discussed in sections 3.9.2.1 and 3.12.2.2(f).

The differences between cultures have been identified by Gomes, Angwin, Peter and Mellahi (2012) at differing levels of analysis, which include the macro-environmental levels of nation, region, industry and organisation as well as the more micro level of the professional (Gomes *et al.*, 2013). A critical factor determining post-acquisition performance in cross-border M&A is that of national culture (Graebner, 2004; Puranam *et al.*, 2006; Puranam *et al.*, 2009; Puranam & Srikanth, 2007; Weber *et al.*, 2012); however, cross-border M&A activity falls beyond the scope of the current study.

Thus, the assertion made by Gomes *et al.* (2013) of managing the differences that exist between corporate cultures of the combining organisations must be actively undertaken to mitigate adverse effects on M&A performance is relevant to the study. Relatively recently, scholars have called for gaining an understanding of fit between the chosen integration approach (that considers differences in corporate culture) and the potential for synergy (Weber *et al.*, 2012) as their findings have indicated that these M&A perform better than those that have selected a more ill-considered approach to integration (Gomes *et al.*, 2013). This section has discussed the CSF of managing cultural differences, the first identified by Gomes *et al.* (2013); the following section deals with the CSF of managing human resources.

3.14.7 Human resource management

The final critical success factor that Gomes *et al.* (2013) draw attention to is that of managing human resources. Many studies have been undertaken in the milieu of HRM in M&A, including: Nahavandi and Malekzadeh's (1988) identification of human resource problems; conceptual studies by Weber and Drori (2011) as well as Weber and Schweiger (1992); and Weber's (1996) empirical study on human factors and cultural fit's relationship with M&A performance. Moreover, Gomes *et al.* (2013) argue that the reason why PAIP challenges associated with human resources are important is because these can restrain the potential synergy that may be realised from the combination.

Larsson *et al.* (2004) identify an important barrier that prevent synergies as employee resistance, which these scholars believe have three causes, including: cultural causes; interpreting the M&A

integration as a personal and collective threat; and construing the M&A as likely to impact the individual's career negatively. As cultural integration management as a CSF has been discussed in section 3.14.6, managing the final two causes is necessary. These scholars suggest that instituting communication and reward systems are necessary to solve employee resistance from an HRM perspective (Larsson *et al.*, 2004).

Gomes *et al.* (2013) further assert that improving upon HR practices may motivate and commit both managers and employees for achieving the integration purposes of strategic capability and knowledge transfer. HRM practices that are also recognised as effective integration capabilities include: conflict training for employees; addressing uncertainty, insecurity and stress through communication; and adjustment of other practices, such as rewards and incentives, labour relations and recruitment (Gomes *et al.*, 2013; Weber & Tarba, 2010).

The seven critical success factors identified by Gomes *et al.* (2013) – integration strategy and approach; post-acquisition leadership; speed of integration implementation; post-acquisition-leadership team and disregard of daily activities; communication during implementation; managing corporate and cultural differences; and human resource management – have been reviewed in this section. The following section serves to consolidate the reviewed literature pertaining to the PAIP.

3.15   CONSOLIDATING THE INTEGRATION PROCESS LITERATURE REVIEWED

The M&A literature has been deemed fragmented in several respects (Capasso & Meglio, 2005), including: disconnected M&A research streams (Larsson & Finkelstein, 1999); success factors of an M&A deal (Miczka & Größler, 2004); as well as the PAIP (Graebner *et al.*, 2017). As such, the literature reviewed in this chapter has firstly focused on the field of mergers and acquisitions in a broad sense, serving to examine: motives for M&A in general and for innovation M&A; advantages of acquisition strategies; and causes of M&A failure; as well as the research stream of M&A process regarding synergy realisation, acquisition performance and approaches to integration.

Secondly, it served to discuss the complexities of the phases of the post-acquisition integration process, its challenges and success factors to eventuate at a more holistic understanding of the M&A process for the creation of a theoretical foundation of the PAIP used in the primary research of the study. Regarding the chapter's review of the PAIP, Table 3.3 below summarises and synthesises the relevant phases, sub-processes, workstreams, challenges and critical success factors presented and considered in sections 3.11, 3.12, 3.13 and 3.14 as a means of synthesising the fragmented literature to create a theoretical framework for the PAIP. It is salient to note at this point that the table is irrelevant to a holding integration approach (see section 3.10.2.1d) but will only inform cases where integration takes place post-acquisition.

TABLE 3.3: A synthesis of post-acquisition integration process literature

Three-phase M&A process (von Krogh, 2016):	Integration sub-processes (Birkin-shaw *et al.*, 2000):	Three-phase post-acquisition integration process (Wuebben, 2007):	Workstream post-acquisition integration process (Galpin & Herndon, 2007):	Post-acquisition integration process challenges as per Haspeslagh and Jemison (1991):	Post-acquisition integration process critical success factors (Gomes *et al.*, 2013):
Pre-acquisition (Section 3.11.1)	N/A	N/A	N/A	N/A	N/A
Acquisition (Section 3.11.2)	N/A	N/A	N/A	N/A	N/A
Post-acquisition (Section 3.11.3)	Task and human integration (Section 3.12.2.1)	Integration conception (Section 3.12.1) Implementing integration measures (Section 3.12.2)	Executive leadership roles and responsibi-lities (Section 3.12.2.2a) Organisational integration and implementation (Section 3.12.2.2b)	Deterministic worldview managers have at the outset may lead to: ● False impression of security ● Unanticipated events ● Confusion and frustration (Section 3.13.1) Value destruction (Section 3.13.2) Leadership vacuum (Section 3.13.3)	Integration strategy and approach (Section 3.14.1) Post-acquisition leadership (Section 3.14.2) Speed of implementation (Section 3.14.3) Post-acquisition integration team and disregard of daily activities (Section 3.14.4)

TABLE 3.3: A synthesis of post-acquisition integration process literature (continued)

Three-phase M&A process (von Krogh, 2016):	Integration sub-processes (Birkin-shaw *et al.*, 2000):	Three-phase post-acquisition integration process (Wuebben, 2007):	Workstream post-acquisition integration process (Galpin & Herndon, 2007):	Post-acquisition integration process challenges as per Haspeslagh and Jemison (1991):	Post-acquisition integration process critical success factors (Gomes *et al.*, 2013):
Post-acquisition (Section 3.11.3)	Task and human integration (Section 3.12.2.1)	Implementing integration measures (Section 3.12.2)	Communication (Section 3.12.2.2c) Structure and staffing (Section 3.12.2.2d) Re-recruiting (Section 3.12.2.2e) Cultural integration (Section 3.12.2.2f) Human capital-related integration (Section 3.12.2.2g)	N/A	Communication during implementation (Section 3.14.5) Managing corporate and cultural differences (Section 3.14.6) Human resource management (Section 3.14.7)
		Post-integration controls (Section 3.12.3)	Measurement and feedback (Section 3.12.3.1) Integration planning and project management (Section 3.12.3.2)	N/A	N/A

(Source: Birkinshaw *et al.*, 2000:395-396; Galpin & Herndon, 2007:77; Gomes *et al.*, 2013:14-28; Haspeslagh & Jemison, 1991:122-135; von Krogh, 2016:307-308; Wuebben, 2007:39-51)

3.16 CONCLUSION

This chapter has served to introduce and discuss the literature reviewed regarding the broad M&A literature as well as challenges and success factors of M&A integrations. The process perspective lens has been discussed, which is important as the primary research can be framed by addressing managerial and/or leadership considerations that arise during the various stages of the integration process. Thus, the process of integration has been discussed through synthesising the relevant, existing research. During the discussion of this process, the various challenges that arise in the integration process have been identified and considered, such as communication, structuring, acculturation, human capital integration and career management issues. In addition, the process challenges advanced by Haspeslagh and Jemison (1991) have also been discussed. These issues are important to the study as they offer some broad managerial and/or leadership considerations for the post-acquisition integration process. Given the review of the literature on M&A and the PAIP, the following chapter deals with the concepts of management, leadership and team development insofar as they are relevant to innovation, the integration process as well as teams. Team development is relevant to the current study as it sets out to explore managerial and/or leadership considerations for integrating small innovation acquisitions into teams because small innovation acquisitions are integrated into teams, which are developed at a similar time. Moreover, the literature relating to management and leadership as these concepts relate to strategy, innovation, projects, change, the PAIP, transformation and teams are also reviewed in the following chapter.

CHAPTER FOUR

THE TEAM DEVELOPMENT PROCESS AND RELEVANT THEORIES OF
MANAGEMENT AND LEADERSHIP TO THE STUDY

4.1   INTRODUCTION

In recent decades, considerable and growing attention has been given to the subject matters of the team construct (Bonebright, 2010), management (Yadav & Sagar, 2013) and leadership (Dionne, Gupta, Sotak, Shirreffs, Serban, Hao, Kim & Yammarino, 2014). With regards to management, Tidd and Bessant (2013) have advanced that the appropriate and effective management of the innovation process throughout the organisation's hierarchy is paramount to successful performance; Haspeslagh and Jemison (1991) have also underscored the significance of effectively managing and leading the post-acquisition integration process for successful organisational combinations. Moreover, leadership has also been identified as a critical challenge for organisations to unpack and succeed at for augmented organisation competitiveness in a constantly changing world context (Dugan & O'Shea, 2014). Moreover, innovative and learning organisations are often characterised by structures in which people are organised into teams; in such teams, conflict, constructive dissent and debate are viewed as positive learning and collaboration opportunities (Serrat, 2009). Therefore, since the current study aims to explore unique managerial and/or leadership considerations for the process of integrating small innovation acquisitions at the team level, the literature as it concerns the concepts of teams, management and leadership is reviewed.

Thus, this chapter's initial focus is on the team, specifically the process perspective of its development. Further, the inclusion of both concepts of management and leadership is necessitated because of the current study's multidimensional nature, encompassing: innovativeness and the innovation process; acquisitions and the post-acquisition integration process; as well as the team development process and performance. Furthermore, firstly, the concepts of management and leadership are defined, discussed and compared and, thereafter, the theories of management and leadership that are deemed most relevant to this study are summarised and argued for. Secondly, the succeeding sections in the chapter discuss both concepts insofar as they are relevant to strategy, innovation, projects, change, the PAIP, transformation and teams. Finally, the chapter culminates in a summary of the broad prescriptions identified at the theoretical intersections uncovered through the review of literature.

4.2   THE TEAM DEVELOPMENT PROCESS

Teams are often formed as finite entities made up of a practicable number of people who work together towards a common purpose (Ferrán-Urdaneta, 1999; Isaksen & Tidd, 2006; Tidd & Bessant, 2013). The body of knowledge on teams and teamwork is a large and growing one; as such, the review of the literature has been deliberately limited to review concepts and arguments relevant to

the study. The development of the team is relevant to the current study, which aims to explore managerial and/or leadership considerations for team integrations of small innovation acquisitions; in these scenarios, as small innovation acquisitions are integrated into teams, teams are developed at a similar time. Firstly, the process perspective of developing teams is dealt with; secondly, success factors for complex and innovation-driven teams are discussed; and, thirdly, the team charter and its value is addressed.

4.2.1 The process of developing groups and teams

According to Rickards and Moger (2000), Tuckman (1965) initially proposed a developmental model for groups at a time when they were increasingly emerging in organisational structures and little to no research had been done on the process of developing them. As such, he first introduced a four-stage process, which initially included only the stages known as forming, storming, norming and performing, which is the classic model in the field (Kozlowski & Bell, 2013). In 1977, Tuckman worked with Jensen to revisit the original model and added an additional stage to the process at the very end, that of adjourning; the revised model can be seen below in the Figure 4.1.

FIGURE 4.1: Team development stages

(Source: Adapted from Bonebright, 2010:114; Tuckman & Jensen, 1977:419-427)

The simplicity and universality of this process has been recognised in the literature for over four decades (Bonebright, 2010) and continues to be relevant still (Humphrey & Aime, 2014; Kozlowski & Bell, 2013). Despite the apparent linearity of the above model, Tuckman did not evince that all team developments would progress sequentially through the phases (Humphrey & Aime, 2014). As such, this section defines and describes the phases while providing a critique of the process and a brief reflection on the intersection of theory.

4.2.1.1 Stage one: Forming

The stage at which members of a team are brought together at its inception is known as "forming" (Tuckman, 1965:396). At the start, group members focus their energies on orientating themselves around both the task behaviours and interpersonal relationships that will be required of them throughout the remainder of the team's existence (Tuckman & Jensen, 1977:421).

4.2.1.2 Stage two: Storming

Once the team has been formed, a period of resolving conflicts and differences commonly ensues, which is referred to as "storming" (Tuckman, 1965:396). Team unity often succumbs to conflicts stemming from polarisation on issues, which is especially the case when individual team members

are required to change and adapt for the sake of accomplishing goals specific to the team purpose (Bonebright, 2010).

4.2.1.3 Stage three: Norming

Once the team progresses through the second stage, a commitment to mutual norms and values is fostered, a stage known as "norming", which facilitates an understanding and expectation of team leadership (Tuckman, 1965:396). Employee resistance is reduced when leaders stimulate cohesiveness and unity in the interpersonal relations of the group as well as allow team members to express thoughts and opinions on team tasks (Tuckman, 1965). Moreover, members start to accept the idiosyncrasies of their peers to coordinate efforts more effectively and harmoniously (Bonebright, 2010).

4.2.1.4 Stage four: Performing

Thereafter, the team is ready to progress to "performing", the fourth stage, in which effective task implementation takes place (Tuckman, 1965:396). The interpersonal relational structure initiated and developed from the forming to norming stages becomes the basis for executing tasks, which necessitates a strong foundation of internal team relationships (Bonebright, 2010). Until the revision of the 1965 process model, which was undertaken a dozen years later, the small group development stages remained at a total of four, which increased by one stage in 1977, that of adjourning (Tuckman & Jensen, 1977:419), which is discussed in the subsequent section.

4.2.1.5 Stage five: Adjourning

Assuming the team is assembled for a finite duration only, it "adjourns" (Tuckman & Jensen, 1977:419-427), which is the final stage and represents the culmination of the entire team development process (Bonebright, 2010; Natvig & Stark, 2016; Rickards & Moger, 2000; Tuckman & Jensen, 1977). Given the discussion of the five stages of the small group development process, the succeeding section presents a critique of it.

4.2.1.6 Critique of the small group development process

While Kozlowski and Bell (2013) argue that the Tuckman model affords scholars and practitioners a useful contribution to help understand group development, other researchers have suggested that it suffers from limitations. Although Humphrey and Aime (2014) suggest that the model suffers from little empirical testing and bias in the tests that have been undertaken, there have been many other models proposed by scholars. However, relatively newer process propositions suffer from high similarity to the Tuckman (1965) and Tuckman and Jensen (1977) models. In addition, Rickards and Moger (2000) criticise the model for having idealised stages, which do not allow for the levels of complexity that exist in interpersonal relations; for example, some teams will never eventuate at a performance norm. Despite its shortcomings, it remains a valuable means of understanding team dynamics and exploring them in research (Rickards & Moger, 2000). As such, this process model is

deemed appropriate as a point of departure for the current study in the same spirit as Natvig and Stark (2016). Given the discussion of the team development process, the next section briefly reflects on the intersection of team development and the other relevant research streams.

4.2.1.7 A brief reflection on the intersection of theories

Regarding the literature on the management of innovation, Tidd and Bessant (2013:133) have put forth that the Tuckman and Jensen (1977) process model is also relevant to team development in the innovation milieu. However, a search in the body of literature pertaining to the post-acquisition integration process saw no intersection with team development processes insofar as the author is knowledgeable, which led to the impetus of the study: the key considerations for managing the three processes – innovation execution, the PAIP and team development processes – simultaneously.

4.2.2   Success factors for innovation-driven teams

A recent study conducted by Natvig and Stark (2016) has produced some valuable success factors. Firstly, effective planning by the team leader prior to group formation on striking a balance between internal structures and external support systems is important to ensure project completion. Secondly, selection of team members and the leader, particularly, is important; the person leading should be able to guide members through each stage, which promotes overall team performance. Thirdly, the use of a team charter was found to be perhaps the most valuable key success factor (Natvig & Stark, 2016).

Natvig and Stark's (2016) three main findings – namely, the need for boundary spanning (between the team and external structures), the selection of a leader and team members as well as the use of a team charter – thus overlap with Govindarajan and Trimble's (2010a) framework for executing innovation in DTs that add to an organisation's ambidexterity (Virta, 2017). This is evident as, in both cases, external relations must be proactively managed, such as between the DT and ongoing operations (or production function), which make up the project team (Govindarajan & Trimble, 2010a:27-28). Additionally, the project team must both be led by an identifiable individual vested with certain authority and the team must be itself made up of the best candidates available; thus, the composition of the team warrants significant attention (Govindarajan & Gupta, 2001). Lastly, the team charter has been recommended as a valuable tool for supporting teams (Wilkinson & Moran, 1998) especially those that strive to accomplish complex goals (Natvig & Stark, 2016), such as executing innovation experiments (Schilling & Hill, 1998). Therefore, the team charter concept is considered and discussed in the following section.

4.2.3   The value in a team charter

Team charters are documents detailing the mission and vision of the team as well as how it is to realise these; the major value that charters add to team development and performance is in clarifying and centralising the goals early on to prevent confusion and frustration at later stages (Wilkinson &

Moran, 1998). A useful example of the components to include in the team charter is summarised in Table 4.1 below.

TABLE 4.1: Team charter components

Component	Question(s) the component answers about the nature and future of the team
Purpose of the team	Why are we forming the team? What is the desired outcome?
Alignment with organisation strategy	How does the team's project fit in with organisational goals?
Team leader and project sponsor	Who is held accountable for team leadership and activities? Who is championing the project from top management?
Stakeholders (key)	Who are the stakeholders, both internally and externally?
Project objectives	What are the primary goals and priorities of the team?
Deliverables	What are the outcomes desired at the end of the project?
Boundaries	What lies beyond the scope of the project?
Member responsibilities	Who are the project's team members and what roles do they have to carry out?
Time commitments to team	How much time does each member need to give?
Performance measures	How will successes be determined (measured)?
Risks	What are the risks to achieving success and how can they be mitigated?
Communication plan	How does the team leader plan to manage team communication?
Assumptions	What are the assumptions surrounding the team's works?
Necessary resources	Which human, financial and other resources are necessary to gain access to? What skill sets are needed in the team?
Team interaction rules	What are the ground rules of the team, regarding interaction and conduct in meetings?
Signatures agreeing to charter stipulations	Are members of the team demonstrating their commitment to successful performance by signing the charter?

(Source: Adapted from Mathieu & Rapp, 2009:103; Natvig & Stark, 2016:677)

As can be seen in the above table, various components of team charters are also relevant to the organisational innovativeness, innovation execution and team development literature, such as: specifying a purpose, delineating team leadership and external boundaries as well as stipulating performance measures, recognising assumptions and gaining access to the necessary resources (Govindarajan & Trimble, 2010a); alignment with organisational strategy (Davila *et al.*, 2013); and team interaction rules as "norming" (Tuckman, 1965:396).

While Tidd and Bessant (2013:134) view the team development model in Figure 4.1 as necessary for team development in the context of innovation, this approach does not adequately address the leadership and management of teams of innovative post-acquisition integration cases. Thus, the following sections address the literature regarding relevant theories and themes of management and leadership, beginning with a definition of both and a critical comparison of these concepts.

4.3   COMPARING MANAGEMENT AND LEADERSHIP

The exploration of managerial and/or leadership considerations for integrating small innovation acquisitions into teams is the aim of this study, which makes the concepts and literature pertaining to management and leadership. The concepts are often used interchangeably in the literature but this is erroneous (Maccoby, 2000). Bočková (2011) makes the salient point, however, that managers are always viewed as leaders by their subordinates in practice. It has been consistently advanced by scholars that leadership is considered as having a separate purpose in the organisation to management (chronologically: Zaleznik, 1992; Gronn, 2002; Nienaber, 2010; Reiche, Bird, Mendenhall & Osland, 2017). The concepts of management and leadership are first reviewed separately and the section culminates in the form of a critical comparison.

4.3.1   General management

The original functions of general management were proposed by Henri Fayol in 1916 (Lopez, 2014), which lead to him being considered as one of the founding fathers of classical management (Parker & Ritson, 2005). His book, *General and Industrial Management* (1955), advanced five main elements of management, which all remain universally relevant; however, modern researchers such as Lopez (2014) and Maccoby (2000) have renovated these slightly. Fayol's five elements are comprised of the following terms (Wren & Bedeian, 1994:221-227): plan; organise; control; command; and coordinate.

4.3.1.1 Planning

The first of Fayol's management functions is planning, which operationalises that creation of short- and long-term forecasts and plans of action that puts resources to optimal use (Fayol, 1955). Initially, Fayol published his work in French, at which time it was referred to as *prevoyance*, which was translated and understood as "planning" by other scholars (Pryor & Taneja, 2010:491). In recent years, the understanding of the planning function has been extended to encompass "forecasting" and "foresight" (Parker & Ritson, 2005:176-180). This function largely developed in the twentieth century literature in the strategic management research stream under strategic planning, which should be conducted along with critical strategic thinking to develop sound, executable and effective strategies (Mintzberg, 1994); as such, the concepts of strategic management and leadership are also considered in the current study in section 4.5.

4.3.1.2 Organising

Secondly, organising refers to the efficient administration, structuring and aligning of the organisation's activities and employees (Fayol, 1955). The organising function refers to how top managers systematically assemble the reporting relationships of all employees and managers in the organisational structure (Scott & Mitchell, 1976). Traditionally, highly formalised hierarchies characterised by a bureaucratic, mechanistic organisation were favoured by organisations, which simply aimed to increase efficiency and effectiveness (Jain, 2004; Morgan, 1980). However, the

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modern competitive environment requires organisations to facilitate and develop organisational innovativeness, flexibility and a high output rate of innovation value propositions (Claver-Cortés *et al.*, 2007; Smith, 2010). Thus, the demand on modern managers to organise is very different today than it was when Fayol (1955) first proposed it as a key management function in 1916.

4.3.1.3 Controlling

Moreover, the controlling function seeks to realise the overall organisational strategy or strategic plan and is undertaken by managers who exert control over activities by supervising employees and directing their energies (Fayol, 1955). As Koontz (1959) found the managerial control literature fragmented, this scholar argued for a systematic approach to centralising a scholarly understanding of the concept. Thus, he put forth the following understanding of the nature of managerial control: all divergences in practice from the strategic plan must be recognised by qualified managers who are held accountable for the implementation of plans in the early stages of the deviation, so that the managerial control may be said to be efficient (Koontz, 1959). This definition is more detailed than others that were found in the literature, such as that of Flamholtz, Das and Tsui (1985) who understand control as managerial attempts to change employee behaviour to achieve the objectives they are charged with realising. However, the Koontz (1959) definition provides a more profound explanation of control where deviations are accounted for, as they are changed upon identification and redirected to a more appropriate undertaking of the strategic plan. Given the understanding of managing employees through controlling their efforts to achieve goals, the functions of commanding and coordinating are discussed in the following section.

4.3.1.4 Commanding, coordinating and leading

Additionally, Fayol (1955) proposes the functions of commanding, which concerns engaging subordinates with directives to the end of achieving strategic goals, and coordinating, which involves harmonising and complementing all organisational activities interdependently (Fayol, 1955). However, modern scholars have ultimately merged these two functions to form one element – that of leading (Conkright, 2015). However, Maccoby (2000) states that leading does not form part of any management function and explores this distinction by comparing the core differences of the two concepts. Maccoby (2000) goes on to suggest useful differentiating terminology to more certainly conceptualise these ideas; more specifically, he suggests thinking of 'management' as a function and, in contrast, to consider 'leadership' a relationship (Maccoby, 2000:57). Moreover, Laufer (2012) puts forth that management is simply a starting point for eventually understanding leadership and being able to lead effectively. As such, effective leadership in the business context is examined in the next section.

4.3.2   Effective leadership in the business context

Leadership in the business literature has been defined as the purposeful guidance of followers in a relational sense (Nutt & Backoff, 1993). In 1996, Tait investigated the traits common to successful

business leaders and identified four foremost qualities: vision, people skills and communication, character and integrity as well as ambition and drive (Tait, 1996). Another study was done by Drouillard and Kleiner (1996) outlining the characteristics of effective leaders, which is discussed in this section, which includes an additional characteristic not identified by Tait: that of competence.

4.3.2.1 Vision

Firstly, the vision attribute is explained by Tait (1996) as a long-term strategic inclination, which can be thought of as a big picture outlook. By visualising the preferred result with clarity, the leader is more able to express it clearly to others, devoid of ambiguity. In addition, the more frequently the vision is delivered, the more people will understand what success will look like (Tait, 1996). Effectively leading in business requires the creation of a vision and directing followers towards it (Goleman, Boyatzis & McKee, 2002), to the point that clearly projecting this picture of what followers are working towards is considered as one of the main forces of effective leaders (McMillan, 2010). This only emerges from leaders who are idea-oriented, visionary and look to the long run by consulting their inner reason and intuition (Drouillard & Kleiner, 1996).

4.3.2.2 Communication and people skills

Secondly, communication and people skills represents another area integral to effective leadership, as people-oriented and communicative leaders both plainly and captivatingly communicate the vision to followers in such a way as to motivate followers into action (Tait, 1996). An aptitude for clear communication, with no small emphasis on the importance of actively listening to followers, has been argued for as an integral trait of effective leaders, particularly in communicating vision, values, philosophies as well as feedback (Drouillard & Kleiner, 1996). Tait's (1996:28) "people skills" also relates to three of Drouillard and Kleiner's (1996:31-32) characteristics, including: demonstrating an authentic interest in followers and others; recognising and rewarding achievement; and being orientated around teamwork. Furthermore, the literature recognises the trait of personal integrity and credibility of the leader is necessary for successful motivation.

4.3.2.3 Character and integrity

Thirdly, Tait (1996) isolates character and integrity together as a significant concept in valuable leadership attributes. Integrity is particularly vital and incorporates many honourable personality qualities including honesty, strong ethics, fairness, upstanding conduct, candour, compassion, sympathy, humility and generosity. Lack of predisposed conformity also signals great character and integrity as leaders are those that have ideas for progress (Tait, 1996), as is in the same vein as Maccoby's (2000) view of leaders as change agents. Similarly, Goleman *et al.* (2002) maintain that real leaders radiate trustworthiness, transparency and fairness, all of which are rooted in an ethical value system. However, actions speak far louder than words or written value statements; in fact, integrity is a demonstrated quality in leaders that acts on all the virtues t professes to have (Drouillard & Kleiner, 1996). Moreover, the study of Drouillard and Kleiner (1996) identified an additional

characteristic of effective leaders related to character, which is a demonstrated sense of decisiveness and accountability.

4.3.2.4 Ambition and drive

A final mutual trait amid leaders, according to Tait (1996) is that of ambition and drive as internal: self-motivation is doubtless necessary to pursue the course of change and climb the corporate ladder. Exceptional commitment and personal drive are put as the defining characteristics of ambition. However, she found that a 'putting organisation before self' attitude and mentality was the only foundation of drive likely to be successful (Tait, 1996:29).

4.3.2.5 Competence and technical expertise

Competence as a necessary attribute for leaders (Drouillard & Kleiner, 1996) is somewhat consistent with the view of Kim *et al.* (1999) who argue that research and development leaders must have a certain level of technical expertise for team members to follow them. However, Drouillard and Kleiner (1996) argue that the settled disposition that emerges from a combination of intellect, knowledge and experience is more important to followers than detailed expertise. Given the distinct definitions and discussions of management and leadership, a brief critical comparison is given in the following section.

4.3.3   A critical comparison of management and leadership

Many researchers have substantiated these contemporary interpretations of the differing concepts of management and leadership. Fairholm (2004) approves of the perception that management is primarily a function carried out when dealing with finite, quantifiable tasks; the same author concurs with Maccoby (2000) that leadership describes a discipline far more qualitative, abstract and relational in nature (Fairholm, 2004). Similarly, Zaleznik (1992) remarks that leadership requires carrying out those abstract duties of disseminating meaning and articulating strategic vision whereas management is a concept involving actions of constructing strategies and generating action plans. The latter resembles Fayol's planning element (Fayol, 1955; McLaughlin, 2004; Zaleznik, 1992).

Leadership, as advanced by authors Maccoby (2000) and Zaleznik (1992), has the capacity to transform both whole organisations and employees through providing direction with energy and motivation. Maccoby (2000) pronounces leadership a relationship that energises the organisation's personnel. Lopez (2014) emphasises leadership qualities including vision, influence and the propensity to be motivational as a basis for creating the type of relationship Maccoby (2000) recommends. It also entails talent selection for the organisation, inspiring those selected as well as mentoring and coaching them to realise their potential and, finally, building on trust within a people-valued environment (Maccoby, 2000). Although, Zaleznik (1992) warns that this atmosphere can turn out to be emotionally charged and turbulent if not led appropriately. Edgar Schein (2004)

distinguishes between leadership and management by arguing that leadership creates and changes cultures, whereas management acts within a culture.

For the purposes of the current study, organisational management can be defined as a strategic, functional role that serves to execute plans through organising, controlling and coordinating the energies of employees (Conkright, 2015; Fayol, 1955). Organisational leadership can be defined as a strategic, relational, motivating role which organisations set in motion to execute the strategic vision and mission (Conkright, 2015; Lopez, 2014; Maccoby, 2000; McLaughlin, 2004; Zaleznik, 1992).

Given the critical comparison of management and leadership themes in literature presented here, the literature regarding: general business management, effective business leadership, strategic management and leadership, innovation management and leadership, project management and leadership, change management, transformational leadership and team leadership, respectively, are considered in the sections that follow.

4.4 RELEVANT THEORIES OF MANAGEMENT AND LEADERSHIP TO THE CURRENT STUDY

This section serves to discuss and justify the theories and concepts included in the current study as there is no existing precedent in this exploratory study. Firstly, the three broad research perspectives are identified. Secondly, the purpose for including both management and leadership as broad, overarching concepts (as discussed in the previous section) is explained. Thirdly, the selected theories and styles of management and leadership included in the current study are argued for and intersections between them and the three broad research perspectives are identified and argued for.

4.4.1 Three broad research perspectives considered

The review of literature in the previous two chapters as well as section 4.2 above has particularly discussed the process-orientated subject matters of the innovation execution process, the post-acquisition integration process and the team development process. It is salient at this juncture to note the overarching research question of this study, which is: "What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?"

Importantly, what has become evident through the review of literature is that the appropriate answering of the above research questions requires a multi-disciplinary approach to this exploratory question. In other words, gaining deeper insights into the experiences faced by innovation project leaders and managers aiming to integrate a small acquisition at the team level requires a broad understanding of the secondary research. As such, the three aforementioned process perspectives have been discussed; the following section explicates the inclusion of both management and leadership in the study.

4.4.2   Purposeful inclusion of both management and leadership

Moreover, through the review of literature on these perspectives, it has become clear that the inclusion of both managerial and/or leadership considerations is necessary. For example, Haspeslagh and Jemison (1991) have posited that the chief managerial concerns for effective post-acquisition integration are expectation management, institutional leadership and interface management. In addition, the body of existing research relating to innovation initiatives and teams has largely emphasised the significance of leadership. As such, it has been deemed incumbent upon the researcher, as a result of the literature reviewed thus far, to include a discussion of the relevant theories of both management and leadership as they pertain to the study. Therefore, the theories and styles of management and leadership relevant to and included in the study are introduced, justified and summarised in the following section and further discussed throughout the remainder of the chapter.

4.4.3   Management and leadership theories and styles reviewed in this chapter

This section culminates in a matrix summary (Table 4.2) that serves to present the various management and leadership theories which this study encompasses and a selection of the relevant intersections these share with the three broad research streams discussed above. Prior to presenting the matrix summary table to the reader, however, the list of concepts and theories is in need of introduction and justification, however. First, the overarching theories of management and leadership, labelled here as "general business management" and "effective business leadership" in section 4.3.1 and 4.3.2 respectively, are argued for. Thereafter the selected theories and styles of either of these that exist in the existing literature are justified, including: strategic; innovation; project; change; the PAIP; transformation; and team.

4.4.3.1 General business management and effective business leadership

The fundamental functions of managers, first proposed by the engineer Fayol in 1916 in a French treatise, then translated into English four decades later due to the World Wars preventing dissemination of information (Wren & Bedeian, 1994), have been considered in the discussion and conceptualisation of management itself in section 4.3.1. The modernisation of these functions has been included in the discussion in section 4.3.1 as well as 4.3.3 and what has been made evident through the review of renovated management functions is that the idea of organisational leadership itself is encompassed and indeed entrenched in the functions advanced by Fayol just more than a century ago (Conkright, 2015; Maccoby, 2000). However, leadership as a separate but related discipline took some time to eventuate in researcher's investigations. Nevertheless, both management and leadership remain relevant today and indeed to the current study, which is why the researcher considers the body of knowledge pertaining to the relevant theories and styles, which are discussed in the subsequent sections, beginning with strategic management and leadership.

4.4.3.2 Strategic management and leadership

The importance of strategic management and its relevance to the study became evident through the literature review of innovation processes and the factors that facilitate these as well as in the M&A literature's major theoretical lenses. Firstly, from the innovation perspective, the significance of the TMT, specifically the CEO, in its role of supporting the creation of organisational innovativeness and its ongoing maintenance (Anderson *et al.*, 2014; Davila *et al.*, 2013; Finkelstein, Hambrick & Cannella, 2009; Govindarajan, 2011; Tidd & Bessant, 2013), which was discussed at length in section 2.3. At this juncture, the active strategic management of innovation objectives (Leiponen & Helfat, 2010), cultures (Grant, 2016; Hambrick & Mason, 1984; Yoo & Kim, 2015), climates (Isaksen & Tidd, 2006; Tidd & Bessant, 2013) and slack resources (Malhotra *et al.*, 2017; Tidd & Bessant, 2013), for example, enjoyed especial emphasis.

Furthermore, the research lens of strategic management has also been drawn from in the creation of the fifth generation of innovation processes and models (see section 2.5.1.5) (Rothwell, 1994) as well as in the generic and adaptable processes furthered by (chronologically:) Utterback (1971) and then Tidd and Bessant (2013). The Govindarajan and Trimble (2010a) model for innovation experimentation and execution, which has been identified as useful for achieving organisational ambidexterity (Virta, 2017) and has been adopted in this study due to its focus on the dedicated innovation team, also emphasises the importance of strategic thinking (see section 2.6.1.2) to the formalisation of innovative business experiments. Additionally, strategic thinking, it is advanced by Heracleous (1998), precedes strategic planning in a perpetual cyclical relationship to produce effective strategic management, which is further examined in section 4.5.1. Moreover, the field of strategic management has encompassed studies on M&A as well (Birkinshaw *et al.*, 2000; Datta, 1991; Larsson & Finkelstein, 1999; Zollo & Meier, 2008). Finally, the corresponding discipline of leadership insofar as it regards a strategic point of departure is also considered in the current study as the inclusion of both management and leadership is required.

4.4.3.3 Innovation management and leadership

Innovation as a managerial discipline has been strongly emphasised by Tidd and Bessant (2013) throughout their widely cited work. In fact, these scholars continually referred to and argued that the undertaking of innovation is a highly complex and uncertain endeavour, one which must be constantly worked on by managers to eventuate at effective environments and systems in which innovation can thrive. In contrast, the work of Govindarajan and Trimble, adopted in this study, has comparatively less to say on the matter of managers but rather focuses attention on innovation leaders (Govindarajan & Trimble, 2010a:9-10,15-16,21,151-158).

Moreover, in recent years, the management of innovation activities within organisations has become more formalised and localised in the addition of a new post in the executive management team, that of the chief innovation officer (CINO), a role which has been characterised by (chronologically:)

Laurent and Chollet (2013), di Fiore (2014) as well as Meige (2016). Beyond the TMT, additional roles that facilitate the innovation project (Markham *et al.*, 2010) or which are performed by effective R&D project leaders (Kim *et al.*, 1999). However, it must be said that Govindarajan and Trimble (2010a:77-78) underscore the need for a supervisory executive from the level of senior management to support the initiative's effective and efficient execution. In summation, what has become evident through the review of literature pertaining to the authoritative control of innovation activities and projects within an organisation, management and leadership have both been established as necessary for effective administration in the innovation milieu.

4.4.3.4 Project management and leadership

As the literature regards project management, it is evident that this concept plays a key role in the integration workstream model advanced by Galpin and Herndon (2007:77) (refer to Figure 3.7), which is the case as these scholars underscore the significance of continuous integration planning as well as project management for sustained acquisition survival, performance and success. The insights of the aforementioned model are consistent with the other similar, yet fragmented proposed process models found in the literature, synthesised in Table 3.3. Thus, the concept of project management is relevant for consideration in the management and leadership literature review in this chapter.

Moreover, in the literature review presented in the second chapter, the demands that innovation and R&D projects put on the person(s) who administrate them were presented and discussed. These projects required leaders to facilitate the project both externally and internally. Briefly, from the external viewpoint, these facilitation roles included: sponsoring the project (for example, by means of availing resources); acting as a gatekeeper; and championing the cause (Markham *et al.*, 2010). Internally, the roles of gatekeeping (therefore, undertaken both internally and externally), team-building, technical expertise and strategic planning are emphasised as necessary for effective project leadership in innovation team-based initiatives (Kim *et al.*, 1999). Thus, the concept of project leadership has been deemed important to the study.

4.4.3.5 Change management

The importance of managing change has become apparent in the review on innovation and its process as well as the focus on the PAIP. Firstly, regarding the former, areas business administrators ought to be cognisant of include, at the organisation level, organisational structures, culture (Büschgens *et al.*, 2013; Grant, 2016; Janićijević, 2013) and climate (Schneider *et al.*, 2013; Stone *et al.*, 2005) as well as, at the team/group level, team climate (Isaksen & Tidd, 2006; Tidd & Bessant, 2013) and pivots in the team's innovation experimentation process (Ries, 2011). Moreover, the importance of managing change extends to responding pre-emptively to the ever-changing external environment (Tidd & Bessant, 2013). What can be deduced from these focal areas of change is that

change management should be conceived of from the TMT through to lower-level managers, such as the leader of an innovation initiative.

Secondly, with reference to the bearing change management has on the broad field of M&A and the narrower one of the PAIP, the literature has also clearly addressed the need for managing the various changes the acquisition and its integration brings about. The changes to culture, strategic independence and organisational autonomy as well as their consequences have been conceptualised and investigated in the literature, such as cultural-driven scholars (Nahavandi & Malekzadeh, 1988; Weber, 1996) and integration-autonomy dilemma researchers (Angwin & Meadows, 2015).

Moreover, and what is more pertinent to the current study, in the manageable changes that are embedded in the process of post-acquisition integration itself. These are most notably referred to in section 3.13, which served to discuss the PAIP process challenges posited by Haspeslagh and Jemison (1991), and section 3.14, which served to present and examine critical success factors of effective PAIPs according to Gomes *et al.* (2013).

4.4.3.6 Managing and leading the post-acquisition integration process

The seminal work on the PAIP by Haspeslagh and Jemison (1991) has put forth that most acquisitions fail to meet initial expectations at the least or indeed fail altogether at the extreme, which is most often due to poor management and leadership of the process itself. To combat and indeed overcome this, more attention should be focused on the PAIP by managing expectations, leading from the institutional (organisational) level and managing the interfaces (boundaries) between the existing and new organisations. Therefore, the management and leadership concepts which these authors propose and advance for effective PAIPs are: expectation management; institutional leadership; and interface management. These are thus also deemed relevant to the current study and are further considered in this chapter for review.

4.4.3.7 Transformational leadership

In the post-acquisition integration process literature, more specifically the integration-autonomy dilemma literature, the concept of transformation plays a role (Marks & Mirvis, 2001). Furthermore, an empirical study by Vasilaki (2011a) investigated the relationship between post-acquisition performance and transformational leadership and found that the latter is highly impactful regardless of the decision made on the degree of integration, especially with regards to stimulating the intellects of new and existing employees (which is further deliberated later in the chapter in section 4.11). Moreover, another empirical study by Nemanich and Keller (2007) determined that transformational leadership has positive relationships with job satisfaction, supervisor-rated performance and, perhaps most importantly, acquisition acceptance. Additionally, these researchers found that transformational leaders lend their abilities and efforts towards clarifying goals and supporting

creative thinking (Nemanich & Keller, 2007). As the importance of transformational leadership has been explicitly indicated in the PAIP literature reviewed, it is deemed relevant to the current study.

4.4.3.8 Team leadership

Finally, team leadership is deemed significant to consider in the current study as the post-acquisition integration process and innovation experimentation take place in the context of a team, which is characterised as a dedicated team by Govindarajan and Trimble (2010a). As a result, the leadership of teams is also designated as within the bounds of this study. What is salient for the reader to note at this juncture is that the dedicated team and team referenced above are not related by any means to the critical success factors put forth by Gomes *et al.* (2013) as the post-acquisition-leadership team; per these scholars, this team is made up of leaders in the combined organisation that simply focus their energies and attentions on coordinating PAIPs and have no other responsibilities to see to in their daily tasks.

4.4.3.9 Management and leadership theories' intersections found in three broad streams literature

As aforementioned, the above management and leadership theories and concepts are included in the current study and have been justified in this section. Given the argument for their inclusion, a further justification was deemed appropriate and necessary by the researcher. This justification is a detailed summary that serves to find the intersections of the three broad research streams and the above management and leadership theories in the body of existing knowledge, presented in Table 4.2 below. The first and second rows of the table show the three broad streams of research, discussed in section 4.4.1 above. The first and second columns of the table (from the left-hand side) lists the management and leadership concepts deemed relevant. These include: general business management; effective business leadership; strategic management; strategic leadership; innovation management; innovation leadership; project management; project leadership; change management; expectation management; institutional leadership; interface management; transformational leadership; and team leadership.

TABLE 4.2: Matrix summary of relevant management and leadership theories intersections with innovation, post-acquisition integration and team development processes' literature

		Broad streams of research relevant to current study		
		Innovation process and/or organisational innovativeness	Acquisitions and the post-acquisition integration process	Team development process and/or performance
Research stream/ theory on manage-ment and/or leadership	General management	• Van de Ven, 1986: 590-591; • Winch, 1998: 274-277	• Angwin & Meadows, 2015:236-242; • Haspeslagh & Jemison, 1991:31-32; • Van Grinsen, 2011:26	• It appears that no such study exists
	Effective business leadership	• Oke, Munshi & Walumbwa, 2009: 67-71; • Tidd & Bessant, 2013:109-150	• Appelbaum, Lefrancois, Tonna & Shapiro, 2007:191-197; • Schweizer & Patzelt, 2012:298-301	• Tidd & Bessant, 2013:122-136; • West, Borrill, Dawson, Brodbeck, Shapiro & Haward, 2003:393-408; • Zaccaro, Rittman & Marks, 2001:451-477
	Strategic management	• Adams, Bessant & Phelps, 2006:30; • Barringer & Bluedorn, 1999:426; • Hambrick, 1989:13	• Birkinshaw *et al.*, 2000:397; • Larsson & Finkelstein, 1999:4; • Waldman & Javidan, 2009:130	• Grant, 1996:113; • Kim *et al.*, 1999: 153; • Sanchez & Mahoney, 1996:63
	Strategic leadership	• Elenkov, Judge & Wright, 2005:669; • Palladan, Kadir & Chong, 2016:1-18	• Ireland & Hitt, 1999: 73; • Krug & Aguilera, 2005:142	• Hitt & Ireland, 2002:4; • Maccoby, 2000:58-59
	Innovation management	• Adams *et al.*, 2006: 21-37; • Bal-Wozniak, 2016:62-71; • Smith, Busi, Ball, & van der Meer, 2008:655; • Tidd & Bessant, 2013:46-48	• Dagnino & Pisano, 2008:56-58; • Puranam *et al.*, 2006:263	• Hauschildt & Kirchmann, 2001:41-48; • Thamhain, 2003:297

TABLE 4.2: Matrix summary of relevant management and leadership theories intersections with innovation, post-acquisition integration and team development processes' literature (Continued)

		Broad streams of research relevant to current study		
		Innovation process and/or organisational innovativeness	Acquisitions and the post-acquisition integration process	Team development process and/or performance
Research stream/ theory on manage-ment and/or leadership	Innovation leadership	• Hill, Brandeau, Truleone & Lineback, 2014:1-10; • Hirst & Mann, 2004:147-157; • Tidd & Bessant, 2013:145-150	• It appears that no such study exists	• Hirst & Mann, 2004:147-148
	Learning management	• Hurley & Hult, 1998:42-45; • Stata, 1989:63; • Vera & Crossan, 2004:230-233	• Galpin & Herndon, 2007:77	• Montes, Moreno & Morales, 2005:1159
	Project management	• Tidd & Bessant, 2013:80-528	• Birkinshaw et al., 2000:403-409; • Meckl, 2004:455-461; • Merali & McKiernan, 1993:113	• Desmond, 2015:14-15; • Slevin & Pinto, 2007:2
	Project leadership	• Adams et al., 2006: 21-37; • Kim et al., 1999: 153; • Lindkvist, 2004:4-15	• It appears that no such study exists	• Kim et al., 1999: 153; • Laufer, 2012:213-238; • Slevin & Pinto, 2007:6
	Change management	• Al hmeidiyeen, 2015:60-65; • Peisl, Reger & Schmied, 2009:117-118	• Quinones, 2011:40; • Vancea, 2011:167-178; • Van Grinsen, 2011: 11-16	• It appears that no such study exists
	Expectation management	• King & Burgess, 2006:66; • Patist & Bates, 2008:152-153	• Haspeslagh & Jemison, 1991:156-162; • Hubbard & Purcell, 2001:17-22; • Yuseph, 2012:6-76	• Bosch-Sijtsema, 2007:358; • Ginsberg & Hay, 1994:387-389

TABLE 4.2: Matrix summary of relevant management and leadership theories intersections with innovation, post-acquisition integration and team development processes' literature (Continued)

		Broad streams of research relevant to current study		
		Innovation process and/or organisational innovativeness	Acquisitions and the post-acquisition integration process	Team development process and/or performance
Research stream/ theory on manage-ment and/or leadership	Institutional leadership	• Taylor, Machado & Peterson, 2008:383; • Van de Ven, 1986: 590-605	• Haspeslagh & Jemison, 1991:156-163; • Plaquet, 2000:100-101	• Batista & de Figueiredo, 2000:246; • Damian, 2007:25-26; • Somech, 2006:132-152
	Interface/ boundary management	• Marrone, 2010:912-938; • Reid & de Brentani, 2004:170-182	• Di Santo, 2013:26-59; • Drori, Wrzesniewski & Ellis, 2013:1717-1719; • Haspeslagh & Jemison, 1991:156-164; • Weber & Tarba, 2012:299	• Marrone, 2010:911-917; • Van Osch & Steinfeld, 2016:207-222
	Transformation-al leadership	• Gumusluoglu & Ilsev, 2009:461; • Jung, Chow & Wu, 2003:525; • Razari & Attarnezhad, 2013:228-231; • Sarros, Cooper & Santora, 2008:145-146	• Appelbaum, Gandell, Shapiro, Belisle & Hoeven, 2000b:681-682; • Colombo, Conca, Buongiorno & Gnan, 2007:204; • Nemanich & Keller, 2007:49-51	• Dionne, Yammarino, Atwater & Spangler, 2004:177; • Schaubroeck, Lam & Cha, 2007:1020
	Team leadership	• Pirola-Merlo *et al.*, 2002:561-578; • Thambain, 2003: 297-308	• Govindarajan & Trimble, 2010a:53	• Isaksen & Tidd, 2006:186-192; • Tidd & Bessant, 2013:135-139

4.4.4   A brief reflection on literature's intersections

As can be seen in Table 4.2, intersections were not found in the literature on the following topics:

- General management and the team development process and/or performance;
- Innovation management and the post-acquisition integration process;
- Project leadership and the PAIP; and
- Change management and the team development process and/or performance.

Thus, the lack of the above intersections are areas of potential research expansion. However, what is salient to the current study is that no previous research has addressed the intersection of the three fields, no matter the various management and leadership theories and styles delineated above. As these have relevance to the study and to the fields separately, they have been summarised in the above matrix. The sections that follow, namely 4.5 to 4.12, serve to introduce, discuss and review the literature of Table 4.2's management and leadership theories and styles insofar as they are relevant to the current study. The following section discusses strategic management and leadership.

4.5   STRATEGIC MANAGEMENT AND LEADERSHIP

The management of strategy is a paradigm that was formally advanced in the late 1970s and has served as the impetus to additional research streams and concepts relevant since then, including that of strategic leadership (Durand, Grant & Madsen, 2017). The concepts of strategic management and strategic leadership are examined in this section.

4.5.1   Strategic management

Scholars have suggested that organisations should institute strategic management processes if they are looking to undertake transformation and change (Nutt & Backoff, 1993), such as innovations and corporate entrepreneurial ventures (Sundbo, 1997). However, it has been said that strategic management comprises a fragmented field of academic inquiry (chronologically: Scherer, 1998; Koch & Hubbard, 2002; Nag, Hambrick & Chen, 2007; Durand *et al.*, 2017).

One of the earliest definitions of strategic management refers to it as a process that comprises the commercial activities of the organisation, the organisation's rejuvenation and growth as well as supervising current operations for both effectiveness and efficiency; therefore, it is a multidimensional task by the managers of any organisation (Schendel & Hofer, 1979). In more recent years, a more comprehensive definition has been synthesised and proposed by Nag *et al.* (2007), which is that strategic management is a field dealing with the planned strategic initiatives to be undertaken in response to the external environment as well as the internal organising efforts assumed by general management to support effective and competitive organisation performance (Keupp, Palmié & Gassmann, 2012).

It has been suggested that strategic management is made up of two major components: strategic thinking and strategic planning (Heracleous, 1998). Strategic thinking is described as "synthetic" (in this case, meaning surreal and outlandish), "divergent" (deviating from the norm) and "creative" (meaning original, resourceful and innovative) (Heracleous, 1998:485). Conversely to strategic planning, the rationale behind the strategic thinking thought process is to realise new, visionary competitive strategies, which can essentially create new futures that differ from current operations (Heracleous, 1998). Secondly, strategic planning is an "analytical" (diagnostic and investigative in nature), "convergent" (concurrent and merging in nature) and "conventional" (conservative and orthodox in nature) thought process (Heracleous, 1998:485). Heracleous (1998) advocates that the purpose of strategic planning is two-fold: it involves operationalising strategy – that has come to light from the thought process of strategic thinking – as well as supporting the process of strategic thinking (Haycock, Cheadle & Bluestone, 2012). The interaction of strategic thinking and planning in the conducting of strategic management is graphically illustrated below in Figure 4.2.
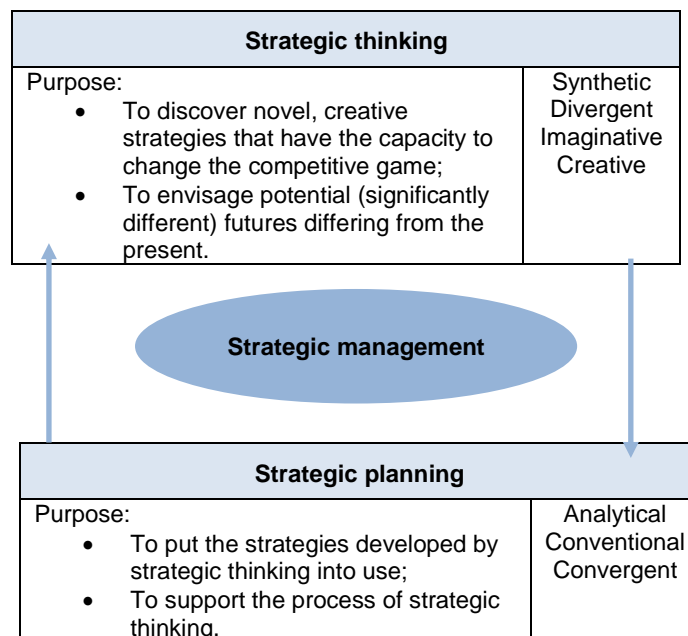
FIGURE 4.2: Components of strategic management

(Source: Adapted from Heracleous, 1998:485)

Similarly, Haycock *et al.* (2012) maintain that the strategy literature has emphasised these two distinct but interrelated concepts – strategic thinking as vision and strategic planning as execution – since as early as before the Common Era in *The Art of War* by Sun Tzu (5th century BCE). The business literature on strategy refers to these concepts as strategic thinking and planning as can be seen in the above figure. These scholars accentuate Graetz's (2002) reconceptualisation of Heracleous' (1998) model (Figure 4.2) as she enhances the model by suggesting that the attributes and roles of strategic thinking and planning respectively are interdependent on each other as well

as on strategic management (Graetz, 2002; Haycock *et al.*, 2012). Moreover, the importance of strategic thinking has also been emphasised in the innovation management literature as an important skill and quality of innovation managers (Bočková, 2011), which is further discussed in section 4.6.

Furthermore, one of the main questions in the strategic management literature regards the value which strategic leaders, such as the CEO and TMT, add in an organisation (Bergh, Aguinis, Heavey, Ketchen, Boyd, Su, Lau & Joo, 2016). As both management and leadership theories are considered in the current study, the following section discusses the existing literature regarding strategic leadership.

4.5.2   Strategic leadership

Strategic leadership takes the definition of business leadership (discussed in section 4.3.2) further: the guidance of the strategic leader explicitly directs followers to commit to achieving an explicit purpose or motive, which commonly means a new organisation-wide strategy is put into action (Nutt & Backoff, 1993). In contrast, Ireland and Hitt (1999:43) define the concept of strategic leadership as a leader's aptitude for anticipating, envisioning, maintaining flexibility, thinking strategically and working alongside others for the purposes of initiating changes that will create a sustainable future for the organisation. However, Norzailan, Othman and Ishizaki (2016) maintain that strategic leadership is chiefly concerned with responding to changes external to the organisation. What is also pertinent to note is that researchers such as Elenkov, Judge and Wright (2005) as well as Hambrick (1989) advance that strategic management scholars' writing on the subject of leadership strongly emphasise the pursuit and role of vision in gaining followers' cooperation.

Schoemaker, Krupp and Howland (2013) conducted a lengthy investigation involving over 20 000 organisational executives broadly concerning strategic leadership, which led to the identification of six essential skills organisational leaders should master and apply to reason strategically as well as to traverse through unknowns effectively. These researchers state that each of the skills they found have received treatment in the literature; although, they had not been considered collectively in one strategic leader at the time. The six skills are as follows: anticipate (trends); challenge (assumptions); interpret (data, findings, learning); decide (select an option decisively); align (stakeholder interests); and learn (make mistakes or make it big) (Schoemaker *et al.*, 2013:134; Schoemaker & Krupp, 2015:30).

4.5.2.1 Anticipate trends

Firstly, anticipation requires communication with various stakeholders (customers and suppliers, for example) both internally and externally to gain a better understanding of their challenges; this skill also requires scenario planning, market research and post-mortems on failures. Taking these actions enables strategic leaders to get a feel for changing factors in the external environment (Schoemaker

et al., 2013; Schoemaker & Krupp, 2015). Planning processes are instituted by strategic leaders that allow organisations to predict trends that will shape the future (Williams & Johnson, 2013). For instance, keeping abreast of external trends is recognised as necessary for ventures that seek to explore potentially novel value offerings (Jansen, Vera & Crossan, 2009).

4.5.2.2 Challenge assumptions

Secondly, challenging assumptions involves critically thinking about those deeply rooted conventions that make up the internal dominant logic of the organisation, which can also be considered as questioning the status quo; executing the skill of challenging assumptions requires encouraging debate, questions and other forms of input (Schoemaker *et al.*, 2013; Schoemaker & Krupp, 2015) as well as possibly hiring outsiders with different perspectives (Govindarajan & Trimble, 2010b).

4.5.2.3 Interpret various information sources

Third, interpreting refers to making sense of data relevant to the venture; to undertake this effectively is to look deeply at details as well as having an eye on the big picture scenario (Schoemaker *et al.*, 2013; Schoemaker & Krupp, 2015). Groups and teams that are exceedingly capable gain access to and scan relevant data and information from the external environment (Ireland & Hitt, 1999).

This thinking is consistent with the strategy and strategic management literature, such as Michael Porter's five forces that shape strategy (1979; 2008), including competitive industry rivalry, threats of new entrants and substitutable offerings as well as bargaining power of suppliers and buyers, as well as his books on competitive strategy (Porter, 1980) and competitive advantage (House & Aditya, 1997:446-447; Porter, 1985).

4.5.2.4 Decision-making

Moreover, leader indecisiveness may cost the organisation valuable resources, such as time; a sound recommendation that Schoemaker *et al.* (2013) make regarding leading strategic decision-making is to consider business experiments in lieu of betting with valuable resources on projects with high uncertainty. While strategic decision-making is a key activity undertaken by leaders (Boal & Hooijberg, 2000), it is a complex task as those factors that signal external change are often highly ambiguous and difficult to comprehend (Norzailan *et al.*, 2016), which leads to lags in taking decisions (Vagadia, 2013) as well as often poorly conceived strategies and tactics (Smith, 2014).

4.5.2.5 Align the interests of stakeholders

Furthermore, aligning the interests of stakeholders towards the successful completion of the strategy or venture is necessary; implementing this requires early communication drives, being wary of hidden agendas, addressing misunderstandings and resistance as well as incentivising employees (Schoemaker *et al.*, 2013; Schoemaker & Krupp, 2015). Managing the varied interests of several stakeholders is also recognised elsewhere in the strategic leadership literature, which must be

conducted while simultaneously addressing the organisational needs of effectiveness and efficiency (Hambrick, 1989).

4.5.2.6 Ensure organisational learning is taking place

Lastly, organisational learning should benefit everyone, even if attempts at innovation result in failures. Therefore, in any event, the insights gained from projects should be diffused through the workforce. In addition, from a TMT perspective, managers who attempt radical and admirable ventures should be rewarded for their efforts; besides, a corporate culture that allows employees to view mistakes as results of pursued learning opportunities should be fostered by all levels of management (Schoemaker *et al.*, 2013; Schoemaker & Krupp, 2015).

As has been discussed in section 2.7, learning must be prioritised in order to justify the expenditure of valuable resources during rigorous planning for innovation processes, even if business experimentation results in failures. Thus, the theories and literature related to innovation management and leadership are examined in the following section.

4.6   INNOVATION MANAGEMENT AND LEADERSHIP

In the current study, the concepts of innovation management and leadership are deemed relevant and salient to review as the innovation experimentation process executed by the dedicated team and spearheaded by an innovation acquisition champion must be both managed and led. Tidd and Bessant (2013) advance that, from a management perspective, innovation should be thought of as a core process, which managers organise and proactively manage to enable and support corporate renewal. This belief is consistent with the view of Bočková (2011) as well as complementary to the process perspective in M&A that is adopted in the current study. Thus, the concepts of innovation management and leadership are discussed in this section.

4.6.1   Innovation management

Several tenets senior managers should abide by to drive innovation in the organisation have been advanced in the literature (Hambrick, 1987; Hambrick, Cho & Chen, 1996). Moreover, effective innovation managers directly involved in the research, development and commercialisation of novel value propositions demonstrate various skills and abilities, which are discussed in this section (Bočková, 2011).

4.6.1.1 Innovation management principles throughout the organisation

Senior managers spearhead innovation throughout the organisation by instituting certain measures and fostering behaviours by employees, such as the seven principles put forth by Hambrick (1987) and Hambrick *et al.* (1996).

(a)   Challenge complacency to delight the customer

To lead by innovation, the leadership should instil an organisation-wide aspiration which seeks to challenge employee complacency and comfort in current performance levels. The overarching aim

should be to delight the customer base through novel solutions to issues with products (Hambrick, 1987; Hambrick *et al.*, 1996).

(b)   A vision that mobilises the organisation

A central vision that sets the organisation on one common path is necessary to involve the skills and capabilities of all employees in the innovation effort (Hambrick, 1987; Hambrick *et al.*, 1996).

(c)   Committed to allocating resources to innovation initiatives

Possibly one of the most important internal strategic moves an organisation's leadership can make is the freeing up of resources for use by entrepreneurial, inventive employees (Hambrick, 1987; Hambrick *et al.*, 1996).

(d)   Create innovation systems, processes and strategy

An innovation strategy should also be one of the first checkboxes to see to by leadership. To accompany this strategy, a set of supporting systems and processes should be established. If implemented well, these could ensure that the entire workforce appreciates where and who they can go in the organisation to pitch ideas and execute innovations (Hambrick, 1987; Hambrick *et al.*, 1996).

(e)   Leadership by example

Personal credibility in cultivating organisational innovativeness and executing innovations is imperative. Thus, the leadership of the organisation should demonstrate their commitment to the cause by creating messages directed to all employees (Hambrick, 1987; Hambrick *et al.*, 1996).

(f)   A well-defined sense of command

Innovation initiatives are subject to resource constraints and trade-offs in the same way other divisions and departments are. Senior managers may have to make tough decisions, such as discontinuing an initiative, because of unjustifiable expense (Hambrick, 1987; Hambrick *et al.*, 1996). A significant quality of an effective innovation manager is that they utilise their intellectual abilities to harness the efforts of subordinates (Bočková, 2011).

(g)   A receptive culture that encourages original ideas and change

Culture is a pervasive force that is difficult to impossible to manage (Morgan, 2006). A part of managing innovation, however, requires a culture to be created that allows for and supports new ideas and change (Hambrick, 1987; Hambrick *et al.*, 1996). However, climate is an easier organisational element to manage than culture (as discussed in section 2.3.3). Given the discussion of organisation-wide innovation management principles, the following section deals with the more localized issue of managing innovation teams.

4.6.1.2 Innovation management principles of innovation teams

Bočková's (2011) study resulted in four categories of skills and abilities of innovation team managers that are relevant and effective in executing the innovation process, including technical, human and conceptual skills as well as the ability to empathise.

(i)   Technical skills

Firstly, effective innovation managers have technical proficiencies in the milieu of their followers and demonstrate these through the techniques and methods necessitated to execute the innovation (Bočková, 2011:75). This view is consistent with other management scholars, who emphasise effective leaders' comprehension of the tasks and activities undertaken by their specialised personnel (Drouillard & Kleiner, 1996; Kim *et al.*, 1999).

(j)   Human skills

Secondly, human or people skills also go some way towards facilitating interpersonal interactions in the innovation execution team and these include collaboration, understanding, motivation as well as effective communication (Bočková, 2011).

(k)   Conceptual skills

Furthermore, Bočková (2011) maintains that conceptual skills are vital for effective management of the team, such as their abilities to integrate, manage and mutually bring together the interests and activities of members so ensure employee engagement.

(l)   Ability to empathise

Finally, the innovation team manager has the capacity to empathise with employees and takes the time to immerse herself in another's point of view in order to understand subordinates' needs, concerns and opinions (Bočková, 2011). Empathy, caring and openness are demonstrated to team members through communicating with subordinates (Unterschuetz, Hughes, Nienhauser, Weberg & Jackson, 2008) as well as recognising, praising and motivating employees on both the collective (Gallo, 2013; Schrage, 2015) and individual levels (Li, Zheng, Harris, Liu & Kirkman, 2016).

4.6.2 Innovation leadership

Innovation, particularly exploratory innovation, requires strong leadership (Jansen *et al.*, 2009). Exploratory innovations are novel and, at some extremes, even discontinuous and radical in nature (Henderson & Clark, 1990). In the process of researching and developing these types of innovations, institutionalised logic is naturally challenged (Jansen *et al.*, 2009). Logic and assumptions are challenged by means of various activities that need to be led in the journey of exploration, such as idea search, flexibility, business experimentation and risk-taking (March, 1991). Moreover, Barsh *et al.* (2008) recommend that certain capable managers should be pigeonholed to be turned into innovation leaders. However, as is consistent with Tidd and Bessant (2013), managing innovation

supersedes leading innovation initiatives as managers must be frugal and disciplined, particularly in experimentation initiatives.

While the literature related to innovation leadership competencies has been found lacking in the past, the field is developing (Vlok, 2012). Vlok sought to profile the major competencies of innovation leaders, which include the following four: strategist; capability builder; matchmaker; and achiever (Vlok, 2012:219-220).

4.6.2.1 Strategist

Firstly, as a strategist, the innovation leader produces a vision and converses with followers about it; thinks critically about the venture's offering; shapes the thoughts of the collective; facilitates and supports decision-making; sets a respected example for followers and leads by this; and, finally, exhibits remarkable leadership abilities and skills (Vlok, 2012).

4.6.2.2 Capability builder

As a builder of capabilities, Vlok (2012) advances that the innovation leader must: evaluate and manage throughout the value chain of the innovation; support an environment that enhances innovativeness; facilitate continuous improvement, development and organisational learning; enable the management of knowledge; form and sustain teams that perform well; and, lastly, construct and conserve networks.

4.6.2.3 Matchmaker

The third profile this scholar identifies is that of matchmaker, a role which serves to: comprehend the context of the innovation venture; employ entrepreneurial thinking; communicate in a clear and persuasive manner; finally, be an acknowledged influencer in the environment external to the venture and organisation (Vlok, 2012).

4.6.2.4 Achiever

As an achiever, the innovation leader exercises the following critical competencies: the talent of motivating others, particularly followers, to perform effectively; to develop a culture of high performance; to manage this performance on individual and team/group levels; and, lastly, to be proficient in realising objectives and results (Vlok, 2012).

The characterisation of the innovation leader by Vlok (2012) has advanced the importance of their task of ensuring organisational learning, as has been emphasised by Govindarajan and Trimble (2010a) and which is present elsewhere in the literature as well (chronologically: Hurley & Hult, 1998; Montes *et al.*, 2005; García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012); as such, the following section deals with what the current study regards as learning management.

4.7   LEARNING MANAGEMENT

Organisational learning is generally thought of as a major means of realising the strategic renewal of an organisation (Crossan, Lane & White, 1999), which requires the human elements of the organisation to explore new domains and opportunities for growth and simultaneously exploit those that have already been learned in the past (March, 1991). Crossan *et al.* (1999) posit that learning occurs through the three levels of analysis, including the organisation, the group/team and the individual (Litchfield *et al.*, 2015). At the group/team level, the process of learning undertaken is referred to as "integrating", which entails gaining shared understandings of knowledge inputs (such as innovative ideas) and developing additional knowledge through interactive systems, which then leads to knowledge outputs (Crossan *et al.*, 1999:525).

Huber (1991) similarly addresses this subject, saying that one means of acquiring new knowledge is that of experiential learning in which organisational experiments are undertaken, such as in R&D (Das, 2002; Schrage, 2016). The effectiveness and efficiency of these experiments and thus the learning that accompanies them is moderated by managing the collecting, availing and accessing feedback of such experiments (Huber, 1991). This concept of feedback has also been termed "stocks" of knowledge by Bontis, Crossan and Hulland (2002:440), which regards the previous or existing cognitively-learned knowledge the organisation possesses; therefore, as new evidence arises, the stock of knowledge grows and needs continuous maintenance by a managerial entity within the organisation (Bontis *et al.*, 2002; Kogut & Zander, 1992).

In the framework of Govindarajan and Trimble (2010a), the innovation initiative leader is held accountable for adding to the organisation's learning, which suggests this individual is thus responsible for communicating and sending the new knowledge to the managerial entity. This has been referred to as "knowledge management" (Mårtensson, 2000:204) and relates to storing knowledge systematically for the purposes of sharing and applying it to explorative and exploitative organisational activities (Alavi & Leidner, 2001). One means of implementing strategy is through projects (Kenny, 2003). This vehicle for the execution of strategy, more specially the innovation strategy, is the focus of the current study; thus, project management is also considered in this section.

4.8   PROJECT MANAGEMENT AND LEADERSHIP

Modern organisations are increasingly using more team-based projects to accomplish their means, particularly in the case of innovation (Govindarajan & Trimble, 2010a; Serrat, 2009). Thus, aspects of project management and leadership that are of particular interest to the current study are reviewed in this section.

4.8.1   Project management

Techniques of project management have been effective in implementing strategy and can be versatilely applied across several organisational functions. This is chiefly due to the practice of project management being strongly rooted in the highly disciplined application of techniques, skills, tools and knowledge to meet often stipulated, inflexible requirements (Kenny, 2003; Project Management Institute, 2013).

4.8.2   Managing uncertain projects

Problems can arise regarding the monitoring of projects that represent high levels of change and innovation (Kenny, 2003). In these cases, imposing conventional rigid accountability measures and demanding results at the earliest opportunity – as is consistent with project management practices in the traditional sense, especially for non-innovation projects – can be detrimental to the lifespan of an innovation initiative (Govindarajan & Trimble, 2010a; Kapsali, 2011; Kenny, 2003).

Shenhar and Dvir (1996) found that the more complex and uncertain the project in question, the more communication channels that were added to support the success of the venture. The researchers also found that these teams were comparatively more densely populated by highly educated professionals. The managers on these teams assumed flexible management styles and anticipated many changes (Shenhar & Dvir, 1996). Sheasley (1999:54-55) suggests that innovation projects tend to require an "expectations" management style, which encompasses: continually evaluating and reviewing; identifying the learning that has taken place; and improving learning further through modifying plans (Govindarajan & Trimble, 2010a; Sheasley, 1999). Kapsali (2011) also emphasises the importance of flexibility in the management of innovation projects. Flexible planning, controlling and communicating must be applied to support organisational innovativeness, to manage complexity and to reduce uncertainty more successfully in innovation projects (Kapsali, 2011). Given the discussion of project management, particularly of uncertain ventures, the following section introduces and discusses project leadership, which is necessitated because both management and leadership in projects are important (Anantatmula, 2008; 2010).

4.8.3   Project leadership

Effective project leadership results from a continuous learning process, for which Laufer (2012) suggests nine best practices in project leadership whereas Juli (2010) only advances five principles of project leadership, which together comprise the project leadership pyramid.

4.8.3.1 Nine best practices for project leadership

Laufer's (2012:214) best practices include the following: embrace uncertainty ('living order') at the project's inception; adapt project practices to its context; contest the status quo; staff the project with the right people; form the right culture; continuously plan, monitor developments and anticipate outcomes; utilise face-to-face communications predominantly; ensure the project is orientated for

action; and, lastly, demonstrate leadership to be able to manage. The model is presented in Figure 4.3 below in graphical form and, thereafter, discussed.

FIGURE 4.3: Nine best practices for project leadership

(Source: Adapted from Laufer, 2012:213-238)

(a)   Embrace uncertainty

The first practice involves embracing 'living order' at the beginning of any project (Laufer, 2012:214). This concept refers to the significant levels of uncertainty that project members face at inception. Such uncertainty may be attributed to the demands of a dynamic environment and innovative tasks in the project. Effective project leadership requires tolerating the unavoidable living order (Laufer, 2012).

(b)   Adapt practices to the context

Secondly, the project leader should adjust the other practices in the model to the particular context to enhance creativity and flexibility. This is a significant project leadership practice as it deviates greatly from conventional project management literature which maintains that a standardised, one-best-way approach is superior (Laufer, 2012).

(c)   Challenge the status quo

Thirdly, the leader should pioneer the challenging of the status quo consistently during the project. The capability and confidence to challenge dominant logic is the essence of leading project versus managing them (Laufer, 2012).

(d)   Recruit the right people

Fourth, the leader should do their utmost to enlist the right people for the project. Indeed, people seem to be the resounding make-or-break feature across projects. Therefore, it is imperative that the hiring of team members is conducted well (Laufer, 2012).

(e)   Shape the culture appropriately

Moreover, the right culture should be shaped and nurtured by the leader. A common frame of reference and shared behavioural norms contribute to the project culture in an organisation. However, projects are often made up of a diverse set of members that originate from various disciplines, levels of management, nationalities, demographics and perhaps even external corporate cultures, as is the case in acquisitions. As projects are finite in nature and often involve the inclusion of temporary recruits, creating and sustaining a single, unique culture is nearly impossible (Laufer, 2012).

(f)   Undertake planning, monitoring and anticipating

Furthermore, the sixth practice involves planning, monitoring and anticipating. These actions are closely related to the management literature, going as far back as 1916 when Fayol first introduced his elements of general management. Targets are established in the planning stage and performance is reviewed (monitored) based on these yardsticks. Lastly, anticipation here involves focussing on identifying irregularities so that if a problem arises, the leader may ready the project team to respond (Laufer, 2012).

(g) Communicate verbally and in person

Moreover, the primary mode of communication recommended for use is face-to-face interactions. As project teams are generally finite in nature, communication glues their members together for the duration of their term. If projects have conditions of high uncertainty, such as innovation experiments, the role of project communication is made far more crucial (Laufer, 2012).

(h) Orientate the team around action

Additionally, the eighth practice for project leaders to keep in mind is the assumption of an action orientation for the purposes of gaining results. After all, the reason for the project being established in the first place is for the achievement of certain intended ends (Laufer, 2012).

(i) Lead, in order to manage

The final practice, per Laufer (2012:236), is termed "lead, so you can manage". The traditional view of plan-driven project management is only appropriate in a relatively predictable environment; thus, the significant complexity involved with operating in dynamic environments requires both leadership and managerial qualities. Managers engage in regular, routine activities; regarding the project leadership practices (see the above figure), these include numbers six through eight. Leaders' foci are on non-routine undertakings; these include numbers three through five (Laufer, 2012).

At the start of the section it was mentioned that the literature relating to the administration of projects is highly focused on the management thereof, not on the leadership. As Laufer's (2012) nine principles have been addressed in the above review, the project leadership pyramid, an additional project leadership model – albeit scarce – that of Juli (2010), is considered in the following section.

4.8.3.2 The project leadership pyramid

Juli (2010) proposed five key principles, which together comprise a dynamic pyramid model of interdependent and interrelated principles, which are also considered critical success factors of project leaders. These principles include: building a vision; nurturing collaboration; promoting performance; cultivating project learning; and, lastly, ensuring that the project delivers results (Juli, 2010:81-82). The pyramid is presented in Figure 4.4 below.
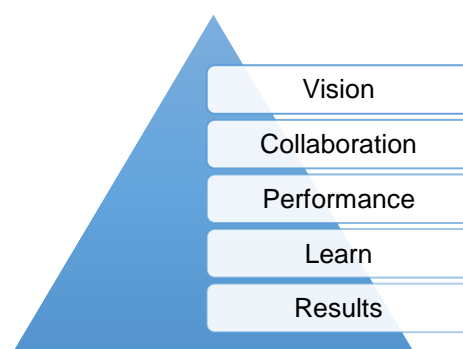
FIGURE 4.4: The project leadership pyramid

(Source: Adapted from Juli, 2010:77-85)

(a)   Build a vision

Firstly, effective project leaders build a vision for the project that serves to orientate followers around an outlook for the future and sets the overarching direction for the project (Juli, 2010). It is noteworthy to recognise the consistent significance of setting a vision throughout various parts of the literature thus far, such as at the core of the team charter (section 4.2.3), to lead effectively in an organisational milieu (section 4.3.2) and strategically (section 4.5.2) as well as to administrate innovation by means of management (section 4.6.1) and leadership (section 4.6.2), by acting as a strategist (section 4.6.2.1). For the purposes of leading organisational, strategic and innovative pursuits, vision has been advanced as a key success factor, which Juli (2010) also emphasises as a necessary component to the dynamic endeavour of project leadership.

(b)   Nurture a sense of collaboration

Secondly, the cultivation of team collaboration between the project's members is undertaken and linked back to the vision discussed above to realise the project's purpose, or vision (Juli, 2010). Further, the importance of collaboration is emphasised elsewhere in the literature, such as a social competence to manage relationships in the project as accentuated by Turner and Müller (2005). It has also been suggested in the literature that some prior relational ties between team members

working on a project contribute to the sense of collaboration between members (Hahn, Moon & Zhang, 2008). Fostering effective collaboration is also influenced by the project team leader's personality, in which case the trait of open-mindedness particularly prompts idea sharing between team members as well as with the leader in question (Gorla & Lam, 2004). Additionally, collaboration or interdependent exchanges between people is comparatively more important in projects engaged in non-routine activities and tasks (Bhatt, 2002), such as innovation (Chen, 2006; Tyssen, Wald & Spieth, 2013).

(c)   Promote performance

This principle, the promotion of performance, suggests that maintaining foci on the project vision and internal team collaboration leads to the effective promotion of project performance (Juli, 2010). This rationale is evident elsewhere in the literature, such as Limerick, Cunninton and Crowther (1998:41), in which a project leader with an inclusive, intuitive and collaborative stance towards employees succeeds in making them feel motivated and empowered to attain the project vision and, thereby, perform well (Bourne & Walker, 2004).

(d)   Cultivate project learning

As a result of the previous three principles, the cultivation of a learning-oriented mindset and environment is effective in allowing innovativeness and creativity to prosper in the following way: members that collaborate as a team to realise the vision of the project leads to higher levels of performance, which in turn fosters valuable learning (Juli, 2010). However, in practice problems often arise in attaining continuous learning, such as a tendency to project amnesia after the finite venture's conclusion, which often results from not undertaking a debriefing at the time of the resolution (Schindler & Eppler, 2003). For project learning to be made valuable, its relevant learnings should be disseminated across the other operational projects as well as at an organisational level (McKay & Ellis, 2013).

(e)   Ensure project delivers results

Projects that can cultivate organisational learning are only truly effective if they succeed in realising the vision of the project by delivering the outcomes and results its members set out to at inception (Juli, 2010). While the above factors are both important and necessary to manage and lead the human element of projects, the main purpose of these finite initiatives is to ensure that their objectives are met by the team members dedicated to realising them; as such, the human elements should facilitate their realisation rather than become the overarching objective (Anantatmula, 2010). The following section deals with the topic of change management as was justified in section 4.4.3.5, in which the literature reviewed was found to encompass organisational change in the PAIP as well as innovation management and execution literature.

4.9   CHANGE MANAGEMENT

Change management is aptly defined by Moran and Brightman (2000:66) as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers." Todnem (2005) argues that successful change management is vital to any concern operating in a constantly evolving and highly competitive environment, such as the recent years of the modern era. Truly effective top-level organisational managers have a thorough knowledge of the concept of change management (Beer, Eisenstat & Spector, 1990) and undertake organisational change efforts effectively by implementing programs of change management (Spencer & Mountford, 1997). Therefore, the models of Kotter (1995), an eight-stage process for successful organisational transformation, as well as PwC (2017), a model of key success factors for managing change during M&A integrations are considered in this section.

4.9.1   Managing organisational change per Kotter

Kotter (1995; 2014) is a significant pioneer of leading organisational change, whether the change in question deals with a case of innovation or the complexity of integrating an acquisition; his arguably more famous model that is prescriptive for change management is presented in Figure 4.5 below (Appelbaum, Habashy, Malo & Shafiq, 2012; Kotter, 1995; 2014; Kotter & Rathgeber, 2014; Todnem, 2005).
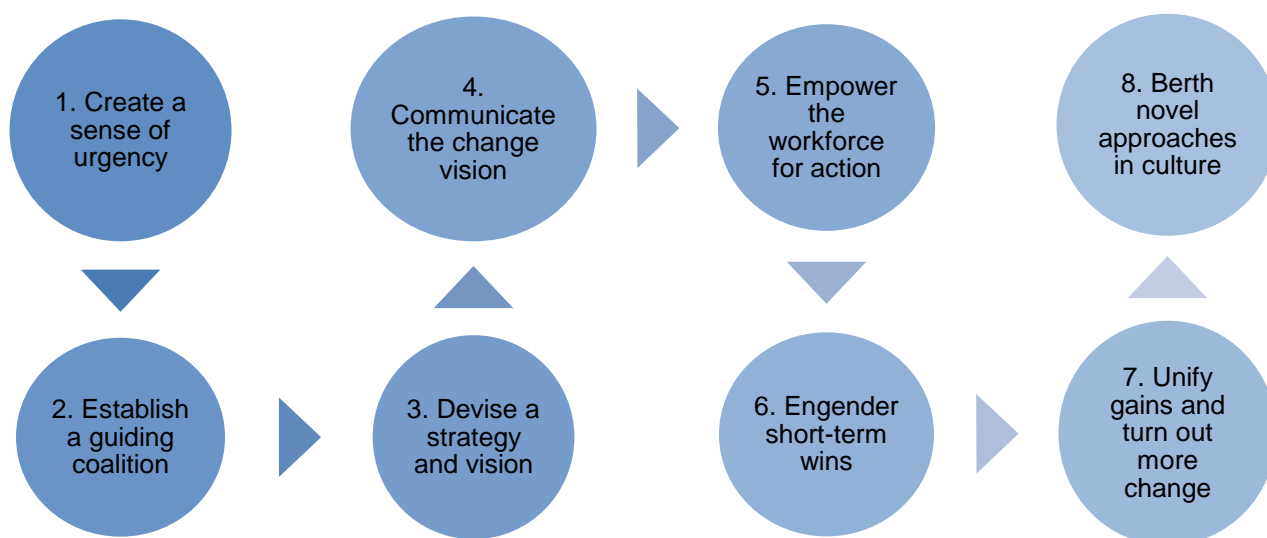
FIGURE 4.5: Kotter's eight-step process of change management

(Source: Adapted from Appelbaum *et al.*, 2012:765-766; Kotter, 1995:61; Kotter, 2014:82-103; Kotter & Rathgeber, 2014:43-122; Todnem, 2005:376)

Firstly, the need to bring about change needs to be established among all employees initially through creating a sense of urgency; in this sense, people will see the change as necessary and justified.

Secondly, a group (coalition) should be assembled and empowered with the necessary authority to influence and lead organisational change. Thirdly, a change strategy and vision should be developed and made available often to guide employees with their operational actions. Moreover, communication of the vision should be religiously undertaken and questions should be invited. Furthermore, the workforce itself must be empowered to act on the vision and strategy for organisational change. Besides, the creation and promulgation of short-term triumphs should be disseminated throughout the organisation. Additionally, wins should be pooled and more should continue to be produced to generate momentum among employee change agents. Lastly, the novel approaches taken must be affixed in the collective corporate culture for institutionalisation of change and its long-term survival in the organisation (Appelbaum *et al.*, 2012; Kotter, 1995; 2014; Kotter & Rathgeber, 2014; Pollack & Pollack, 2015; Todnem, 2005).

4.9.2   Change management for successful post-acquisition integration

A recent report by the global consulting organisation PwC (2017), otherwise known as PricewaterhouseCoopers, proposes critical success drivers of change management in integration efforts. These include: culture; communications; leadership; organisation; policies and procedures; employee 'onboarding'; and incentives (PwC, 2017), as can be seen in Figure 4.6 below.
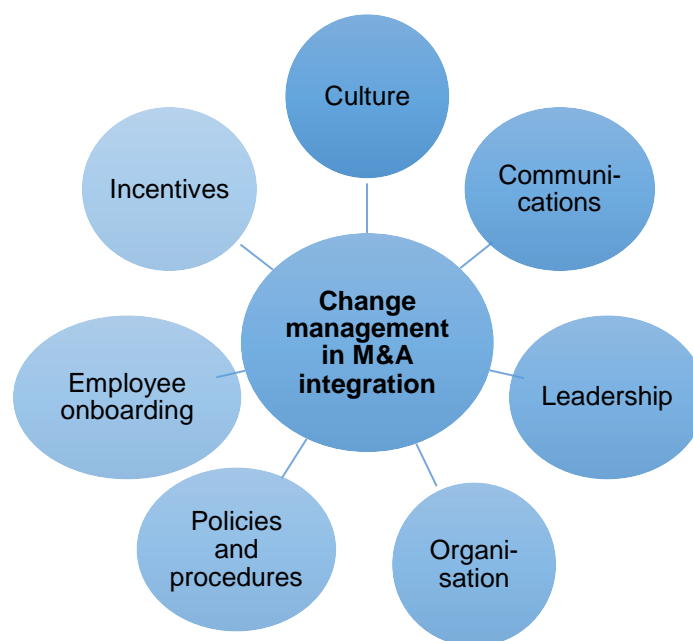
FIGURE 4.6: Change management KSFs in M&A integrations

(Source: Adapted from PwC, 2017:3)

Firstly, per the PwC report (2017), culture is often the wrong scapegoat for M&A failure. However, cultural change should still be proactively managed for the integration to be successful by outlining preferred behaviours, utilising central role models and offering incentives that have meaning. Moreover, communication can stabilise relations between previously unrelated groups by keeping

all parties informed, while building support for the new entity and the changes needed to bring it into being (PwC, 2017).

Thirdly, the integration leadership must be selected through an efficient process of identifying talented, charismatic individuals and appointing them to lead the integration so that employees feel comfortable with the new organisational entity. Fourth, organisation involves devising the employee interrelationships for the post-acquisition entity. Moreover, new policies and procedures need to be instituted for people to follow in day-to-day organisational activities in the post-acquisition phase of the M&A process (PwC, 2017).

Furthermore, 'employee onboarding' (PwC, 2017:5) refers to training the workforce in the new changes that characterise the post-acquisition organisation. For these changes to take root in the minds of employees, all involved must have a thorough comprehension of new systems and processes, which can eventuate through broad-based training programs. Finally, incentivising staff can support appropriate behavioural changes; such incentives can be financial (a bonus), non-financial (promotion) or a combination of the two in nature. In summary, managing change must be a pre-emptive, centralised program that works towards getting employees on board with all new changes (PwC, 2017).

4.10   MANAGING AND LEADING THE PROBLEMS OF THE POST-ACQUISITION INTEGRATION PROCESS

The process perspective as developed by Haspeslagh and Jemison (1991) requires forms of both management and leadership to eventuate in successful integration, which are deliberated in this section, including: expectation management; institutional leadership; and interface management (Haspeslagh & Jemison, 1991:155-168).

4.10.1 Expectation management

According to Haspeslagh and Jemison (1991), at the inception of the post-acquisition integration process, varied expectations are at play among the acquiring and acquired employees. Integration managers must preside over their own expectations. Haspeslagh and Jemison (1991) found that managers often cling to the determinations arrived at during early stages of the M&A (for example, during due diligence) as a means of increasing their level of certainty towards the process, goals and outcomes of the integration. However, in acquisitions where learning needs to take place, "managers are constantly testing and modifying their hypotheses about how things actually work or should work" (Haspeslagh & Jemison, 1991:161). Haspeslagh and Jemison (1991) also warn against the contrary behaviour, that of exercising disproportionate caution or a blasé approach to achieving integration objectives. As such, a balance must be struck between learning during the integration and achieving the objectives as they were stipulated at the outset.

4.10.2 Institutional leadership

Institutional leadership denotes the direct participation and interaction of senior management with employees involved in the integration; although it is a perennially imperative factor in integration processes, it is often found lacking or absent entirely (Haspeslagh & Jemison, 1991). In acquisitions that require the resulting of capability transfer and organisational learning, the bidder leadership must send evident signals to redefine both organisations' purposes and to urge capability transfers in each direction. The former can be achieved by instilling and inspiring a new vision in the integration employees, which will also facilitate the operationalisation of the latter. Establishing such a unified vision is not sufficient; it must be credibly and authoritatively communicated by institutional leaders. The force of this leadership form is necessary to combat negative effects, such as insecurity, uncertainty and value destruction (Haspeslagh & Jemison, 1991).

However, Haspeslagh and Jemison (1991) warn that if institutional leadership is found highly lacking, integration managers are obliged to substitute high levels of interpersonal leadership. This added stress on them leads to the impoverishment of time that could have been allocated to achieving organisational learning and capability transfer. Thus, institutional leaders should use their position to expedite the process of effective integration by engaging with the integration in person (Haspeslagh & Jemison, 1991).

4.10.3 Interface management

The post-acquisition integration process necessitates the interaction of existing and acquired players by its nature, if the procurement is not intended to operate only as an independent subsidiary. Therefore, for value creation to eventuate from the acquisition, interactions must be managed between the joining parties. Two main goals are specified in achieving this. Firstly, an atmosphere that supports the transfer of strategic capabilities must be developed. Secondly, integration managers must remove all obstacles to the realisation of strategic objectives and effective integration. Therefore, quality interface management is key for creating value for the acquirer. Executing interface management requires 'gatekeepers' (Haspeslagh & Jemison, 1991:156-164). Individuals acting in this capacity are tasked with unlocking value by bridging the differences and need support from institutional leaders to manage the interface and the issues that arise in integration management and leadership (Haspeslagh & Jemison, 1991). The following section deals with transformational leadership.

4.11   TRANSFORMATIONAL LEADERSHIP

Braun *et al.* (2013) intimate that the concept of transformational leadership is likely the most investigated concept in leadership (Schaubroeck, Lam & Peng, 2011). Bass (1999) declares that the main role of a transformational leader is that they are charged with aligning the interests of the employee and the organisation. Scholars, such as (chronologically:) Marks and Mirvis (2001),

Nemanich and Keller (2007) as well as Vasilaki (2011a), have advanced the importance of transformational leadership during the post-acquisition integration process.

Moreover, transformational leadership is also important to organisational innovativeness (Jung *et al.*, 2003), such as creativity and exploratory innovation. Regarding creativity, this form of leadership psychologically empowers and allows followers to be more creative (Gumusluoglu & Ilsev, 2009). Jansen *et al.* (2009) state that the form of transformational leadership is the most suited form to exploratory innovations because it facilitates the challenging of widely held assumptions, taking risks and inspiring others. In addition, the latter also poses a relevant scenario for the application of transformational leadership as a prescriptive tool (Babić, Savović & Domanović, 2014; Nemanich & Keller, 2007; Vasilaki, 2011a). Thus, this form of leadership is applicable to the current study both in terms of leading novel innovation experimentation and the PAIP.

Bass proposed the "Four I's" of transformational leadership (Hughes, 2014:8), in which Bass (1999:11) states the four dimensions of transformational leadership as: intellectual stimulation; individualised consideration; idealised influence; and inspirational motivation. A later study on the four dimensions focused on how they influence the context of the team and its performance. The third broad research stream considered in this study, by creating and fostering the following: shared team vision; team commitment; empowerment of the team environment; and creating functional (or constructive) team conflict (Dionne *et al.*, 2004:177). As such, the highly studied concept of transformational leadership is relevant to the three broad fields studied: innovation execution; the PAIP; and the team context.

4.11.1 Intellectual stimulation

Firstly, intellectual stimulation involves the transformational leader actively seeking out divergent perspectives for problem-solving efforts and emphasising non-traditional and creative thinking (Hughes, 2014). Bass (1999) describes this thinking as innovative. It is a stimulating challenge to followers to engage their faculties in critical thinking (Gong, Huang & Farh, 2009). The empirical study by Vasilaki (2011a) identified this dimension of intellectual stimulation as enhancing post-acquisition performance.

4.11.2 Individualised consideration

Secondly, Hughes (2014) states that transformational leadership requires considering the individual on a personal level and is executed by spending time teaching and coaching followers to stimulate self-development. The needs, proficiencies and ambitions of each individual should be kept in mind and form part of decisions made by the transformational leader to ensure that subordinates' development is prioritised (Bass, 1999). Vasilaki (2011a) advances that they should have regular consultations with followers on individual bases. Effective transformational leaders achieve this by

building on the self-confidence of each follower and expanding their personal autonomies (Razari & Attarnezhad, 2013).

4.11.3 Idealised influence

Thirdly, idealised influence refers to instilling a sense of pride in followers for having an association with the transformational leader in question as they are a role model (Vasilaki, 2011a). Leaders demonstrate to followers that they act not on their self-interest but for the benefit of the team's greater good as well as the more macro levels of the organisation or society (Bass, 1999). At the fore, a frequent and charismatic message dissemination of the values and mission of the group should be present which infuses people with a sense of purpose; for the message to be taken seriously by followers, the leader should be a clear personification of the ideals they preach (Hughes, 2014).

4.11.4 Inspirational motivation

Finally, inspirational motivation is carried out through the articulation of an optimistic, compelling vision for the future of the team (Bass, 1999) to achieve success in marketing innovations (Razari & Attarnezhad, 2013). The leader should motivate the team through addressing what needs to be accomplished and, simultaneously, emphasising their confidence in team members' abilities to achieve the vision through inspirationally motivating the team with spirit and zeal (Hughes, 2014). Besides, Razari and Attarnezhad (2013) contend that the promotion of employees' intrinsic motivation must be undertaken by transformational leaders to boost the creativity of otherwise traditionalist and conforming individuals. To support inspired and motivated followers, the organisational climate and structure must both stimulate and support creative, risky ideas to begin the initiative stage (Razari & Attarnezhad, 2013).

4.11.5 Entrepreneurship and boundary spanning in innovation

A final success factor of transformational leaders that emerged through the review of literature is that of entrepreneurship and boundary spanning, whereby these leaders play roles external to the initiative; these external roles are necessary for expediting the market success of innovative value propositions (Howell & Higgins, 1990a; Razari & Attarnezhad, 2013). Finally, Howell and Higgins (1990b) advance that innovation champions most often exhibit transformational leadership behaviours in deploying influence tactics external to the venture or initiative to precipitate time to production and market. Therefore, given this discussion of transformational leadership, the subsequent section deals exclusively with the leadership of teams.

4.12 LEADING TEAMS

Teamwork is a significant concern in scenarios when relatively small groupings of people are expected to collaborate to achieve a mutual goal, such as researching and developing innovations (Isaksen & Tidd, 2006). It has been established that teams are valued vehicles for realising innovation objectives (Magnusson & Berggren, 2001). In addition, relevant management and

leadership styles have also been discussed. However, an important differentiating factor of the current study is the innovation acquisition being integrated at the team level; therefore, this section discusses the leadership of teams. Isaksen and Tidd (2006:186-190) put forth a host of characteristics which effective teams exhibit. Their work is also cited in the seminal innovation management work by Tidd and Bessant (2013:135-136). Thus, these characteristics are presented and discussed below.

4.12.2.1   A clear, shared, uplifting goal

The primary reason for a team's grouping should be unambiguous, mutually agreed upon and widely understood among all its members. Together, they work towards a commonly desired future state, which is illuminated by means of a shared vision (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). West *et al.* (2004) suggest that the fundamental task of the innovation team must be both intrinsically motivating and extrinsically demanding for all members to align their personal goals to the overarching team goal. Intrinsic motivation can be derived from setting challenging and significant tasks; extrinsic motivation can arise from external demands, such as building the case for innovation (West *et al.*, 2004).

4.12.2.2   Results-driven configuration

Team members of high-performing teams are more likely to produce results in configurations that are characterised by the following (Isaksen & Tidd, 2006:186; Tidd & Bessant, 2013:135):

- open communication;
- clear task coordination;
- unambiguous roles and responsibilities;
- performance monitoring;
- provision of feedback;
- judgement based on facts;
- efficiency; and
- robust, impartial management.

4.12.2.3   Capable team members

Competent team members can be described as conscientious and capable. As individuals, they should all be knowledgeable on their own tasks. They should strongly desire to contribute to the team's tasks through demonstrating their personal competencies, and everyone ought to be oriented towards collaborating to support the process of working together effectively to achieve desired results (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

West *et al.* (2004) propose that the group composition of innovation teams should be achieved by following two steps. Firstly, people with innovative competencies and experience should be selected:

these kinds of people are usually self-disciplined, have high levels of drive and are preoccupied with achieving excellence in their work. Secondly, among the people chosen, team diversity should be a focal point in terms of both skills and demographic factors. A diversity of skills and knowledge in a team is useful to bring together differing perspectives. Divergent demographic factors also add to team diversity and are evidenced on the bases of such factors as age, gender, personality, social status, nationality and ethnicity (West *et al.*, 2004).

As has been discussed in section 2.8, hiring outsiders brings new perspectives to the dedicated innovation team, according to Govindarajan and Trimble (2010a; 2010b) as well as Yoo and Kim (2015). As stated by West *et al.* (2004), teams such as these are likely to implement new ideas with more ease for three reasons. Firstly, the likelihood that potential problems are predicted is generally higher. Secondly, team members who can work with people that are somewhat different from them are better at networking, which is helpful for accessing the necessary resources. Finally, the team's diverse membership is likely to more fully analyse problems, which is likely to lead to more innovative actions (West *et al.*, 2004).

4.12.2.4   United commitment

In effective teams, members are unified by means of their shared commitment to the team's tasks, vision and values. Individuals mutually support one another and are dedicated to the anticipated outcomes of the venture (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.2.5   Collaborative team climate

For productive teamwork to fructify, a climate that emphasises collaboration and cooperation should be actively cultivated by the team leadership. Mutual trust in the capability and value systems of others is necessary for highly effective collaboration to take root (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). West *et al.* (2004) put forth that the organisational context should also be characterised by two climates: firstly, that of continuous learning and development and, secondly, that of innovation. The former regards continually changing team members' understandings by maintaining an external focus to learn from the outside. The latter can be achieved by encouraging risk-taking, generating and supporting new ideas with fairness, as well as allowing information to flow freely across the team (West *et al.*, 2004).

4.12.2.6   Standards that promote excellence

Team standards are developed by having clear, explicit comprehension of the norms and benchmarks that are expected. To arrive at these standards, team members should be committed, motivated, confident and should perform effectively at an individual level as well as strive to improve performance and productivity constantly (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). West *et al.* (2004) suggest that innovation norms need to be implemented in the team's process.

4.12.2.7   External recognition and support

For teams to be successful, several external conditions must also be met. Access to necessary resources is a prime example of tangibles that must be externally made available to the team. Various intangible conditions should also be met, including the provision of incentive rewards, recognition by the organisation, celebration of successes and respect for organisational learning (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). West *et al.* (2004) also emphasise the need for rewarding innovative efforts as a tangible means of demonstrating organisational support that originates from an overall culture that reinforces innovativeness.

4.12.2.8   Principled, value-driven leadership

Effective teamwork is supported by principled leadership and, in the team scenario, a leader may be formally appointed or emerge naturally; however, no matter how leaders come to the fore, they are consistently characterised by certain principles if they are effective (Isaksen & Tidd, 2006). Principled leadership is evidenced by the managing of human differences and protecting the more vulnerable members (Tidd & Bessant, 2013). Moreover, forming a fair playing field for each team member to provide suggestions or contribute by some other means is also an important action by a team leader, who typically guides, supports and encourages the team they lead (Isaksen & Tidd, 2006). In addition, they rely on their social capital networks within the organisation to gain access to the resources that the team requires to achieve its goals (Isaksen & Tidd, 2006; Tidd & Bessant, 2013), a practice which Govindarajan and Trimble (2010a) also emphasise the importance of. West *et al.* (2004) also propose that leadership must support innovativeness within the team.

4.12.2.9   Proper use of the team

Teams are highly valuable vehicles when they are led well and when they are relevant for the task(s) at hand. If a team is an unnecessary vehicle for achieving certain aims, its destruction is likely (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.2.10   Partaking in decision-making

Encouraging teamwork can be achieved through allowing members to participate in the decision-making process. This involves including all individuals in activities, such as: identifying improvement opportunities and challenges for the team as well as idea generation and putting these ideas into action. Allowing and encouraging the team to participate in decision-making increases the likelihoods of better teamwork, improved acceptance and superior execution (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.2.11   Team spirit

Team members intimately work together on projects which require a great deal of interpersonal collaboration. Thus, the team focus should (at times) be on building friendships and joining in recreation events solely assumed for pleasure. Relationship building in the team, especially in its

early stages, is necessary for effective listening and communicating in later stages. Teams that suffer from ineffectiveness often attribute issues to internal jealousy, hostility and politicking (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). A social relations focus in the context of innovation teams has been shown to add to successful innovating in large organisations, see for example: Dougherty and Takacs (2004).

4.12.2.12 Embracing suitable change

Habitually, teams face times of great change and for a multitude of possible reasons. In these times, tasks should be appropriately reorganised and redefined. In some cases, unfamiliar preferences, norms and values ought to be accommodated and embraced (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). Thus, this section has served to introduce and discuss the factors relevant to the leadership of teams, which are necessary for team leaders to consider. Furthermore, challenges of team leadership are dealt with in the section that follows.

4.12.3 Team leadership challenges

Zaccaro *et al.* (2001) summarise the challenges team leaders face in producing effective team performance. Firstly, the team leader is tasked with aligning the goals of each team member on an individual level with a shared team vision and mission. Secondly, this manager must also manage the resources available to the team to mitigate waste. Thirdly, a positive climate that makes members feel trusted and supported should be fostered by this individual. Lastly, this leader is also responsible for the coordination of information transfer and overseeing the completion of tasks (Zaccaro *et al.*, 2001).

Isaksen and Tidd (2006:190-192) also warn leaders to be cognisant of five additional challenges they are likely to face in the context of teams, including (Tidd & Bessant, 2013:138-139): the group versus the team; the ends versus the means; structured freedom; support systems and structures; and assumed competence.

4.12.3.1 Group versus team

Firstly, there is clear distinction between the meaning of a group and that of a team. A group is a collection of individuals that are loosely and vaguely assembled into a unit, whereas a team is much different. Members of a team are connected by virtue of their mutual accountability for the realisation of shared goals and the vision (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.3.2 Ends versus means

Secondly, regarding the challenge of team ends and means, Isaksen and Tidd (2006) state that effective teamwork is often undermined by an overshadowing focus on the means (the how) rather than the ends (the why and what) to be achieved. This occurs as leaders often verbalise and describe the ends inadequately, in terms of clarity and specifications to be achieved. With a clear strategic

vision in mind, team members are likely to comprehend the means of achieving it in terms of their individual role and responsibility in realising the ends (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.3.3   Structured freedom

Thirdly, loosely assembling people to undertake a major task requiring high levels of productive, effective teamwork puts the goal at risk of not being realised. Therefore, a configuration of "structured freedom" is recommended (Isaksen & Tidd, 2006:191). This encompasses structuring members around a well-defined task to be completed and specifying an authority figure(s), while allowing individuals to be free, autonomous and take initiative as well. Thus, this represents a fine balance, which leaders need to be aware of (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.3.4   Support systems and structures

Furthermore, teams are created to execute important goals for the wider organisation (for example, innovation experimentation). As teams are significant to overall organisation performance, support systems and structures should be established for team initiatives to attain the objectives laid out at their inception. Besides access to resources, a reward system is also considered an appropriate mechanism to demonstrate support from the wider organisation (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

4.12.3.5   Assumed competence

Lastly, organisations establishing teams may have too much faith in the systems they use to select individuals to join the team. People are commonly selected on the bases of technical skills, domain experience and expertise as well as other skills and abilities. However, for effective teamwork to eventuate, some coaching or experience in teamwork is an additional proficiency that could add to team effectiveness. The researchers suggest that the start-up phase is likely the best occasion to coach intended team members on how to productively and effectively work together and collaborate (Isaksen & Tidd, 2006; Tidd & Bessant, 2013).

Given the presentation of reviewed literature of teams, management and leadership, sometimes regarding innovation and M&A integration the secondary research findings are summarised in the following section.

4.13   SUMMARY OF PRESCRIPTIONS IMPORTANT TO MANAGEMENT AND LEADERSHIP OF INNOVATION, THE POST-ACQUISITION INTEGRATION PROCESS AND TEAMS

Addendum B (refer to page 314) summarises the reviewed scholarly intersections on management and leadership as they apply to strategy, innovation, projects, change, the PAIP, transformation and teams (discussed in section 4.2 and sections 4.5 through 4.12); these intersections are indicated by a marked "x" in the block where the prescription and the corresponding style of management or leadership. This summary table has been designed in the same vein as that of Nienaber (2010:666-

667). Nevertheless, the conceptualised prescriptions in the management and leadership literature, as shown in the table below, have need of further explanation.

Therefore, as can be seen in Addendum B, the first column specifies the chapter section in which the prescription was introduced and discussed. The second column identifies the prescription in question, which is then related to the rest of the columns. Thus, the third to seventeenth columns present the various forms and styles of management and leadership reviewed in this chapter. These include: general management; effective business leadership; strategic management; strategic leadership; innovation management; innovation leadership; project management; project leadership; innovation project management; change management; expectation management; institutional leadership; interface management; transformational leadership; and team leadership. In synthesising the second column, it is pertinent to note that not all the cited authors utilise precisely the same labels or terms to classify these themes or intersections. Additionally, not all the scholars explicitly refer to each of these intersections. Nevertheless, these prescriptions are regarded as a comprehensive register representing the recommended actions that should be taken by managers and leaders.

4.14   CONCLUSION

Managing and leading teams charged with undertaking innovation execution comprise a complex task. This complexity has served as an impetus for research on how managers and leaders should undertake the effort, such as Govindarajan and Trimble's (2010a; 2010b) framework for operationalising the innovation execution undertaken by a team dedicated to experimenting rigorously to find viable, innovative value offerings. In addition, developing teams was first deliberated on by Tuckman (1965) through his proposed process of group development and to assemble the best possible collection of skill-sets, Govindarajan and Trimble (2010a) prescribe considering undertaking small acquisitions. However, M&A have high failure rates; indeed, managing and leading the process of post-acquisition integration has been identified as a complex challenge in the M&A literature, which is one of the reasons for M&A failure (Haspeslagh & Jemison, 1991).

Thus, the broad aim of the study is to explore the managerial and/or leadership considerations for integrating small innovation acquisitions (with more than one individual) at the team level. Thus, the overarching research question of the current study is: "What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?" Given the literature reviewed in this chapter broadly regarding management, leadership and teams as well as the previous two chapters (which reviewed the subjects of innovation execution and experimentation as well as acquisitions, the PAIP and its challenges), the knowledge gap in the literature has been identified and stated above. Thus, the study aimed to initiate a dialogue about and contribute some early findings regarding the subject of managerial

and/or leadership considerations for the process of integrating small innovation acquisitions at the team level. Thus, the following chapter serves to discuss the research methodology undertaken in the study to address its overarching research question and to fulfil its aims.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1   INTRODUCTION

The preceding three chapters have furnished the study with a review of literature relevant to the key topics of the innovation experimentation process, the post-acquisition integration process and the team development process. Additionally, pertinent concepts of management and leadership have also been considered, reviewed and argued for (regarding their inclusion in the study) in the previous chapter. These have provided a broad context of managerial and/or leadership considerations relevant to practitioners. The primary research is driven by one overarching aim: to explore the managerial and/or leadership considerations for integrating small innovation acquisitions (with more than one individual) at the team level. Accordingly, this chapter serves to detail and argue for the research design deployed to address this research purpose.

The chapter order is as follows: firstly, the problem statement; secondly, the research questions; and, thirdly, the research design. The latter is undertaken in three main sections. The first discusses the secondary research design used in reviewing the existing body of knowledge considered in chapters two through four. The second section relates to the study's primary research design. As the study is exploratory in nature, the former section argues for the research design used in the study and the latter serves to explain the exploratory critical case study design undertaken in the paper, according to Collis and Hussey (2014).

5.2   PROBLEM STATEMENT

The study's identified problem, in this case a little-examined area of research, is discussed below regarding the previously demarcated knowledge gap. Subsequently, the purpose statement of the study is concisely summarised, according to Creswell (2016)'s generic format for qualitative studies, which is a penned expression of the central question of the research (Zikmund & Babin, 2010).

5.2.1   Research problem discussion

It has become clear that mergers and acquisitions have been conducted in waves since the latter years of the 1800s (Viviers *et al.*, 2014). Increasingly, acquisitions are undertaken for innovative purposes as a result of the growth in pushing for innovation as a basis for a modern competitive advantage; organisations pursuing innovation acquisitions wish to procure certain innovative value offerings, propositions and capabilities of target organisations (Ahuja & Novelli, 2014). Moreover, Tidd and Bessant (2013) advance that successful innovation is primarily a question of managing the process, as most innovation failures result from issues of process. If organisations are considering commercialising an innovation that requires more research and development, relying solely on historical data is inadequate, in which case organisations should consider embarking on simple

business experiments (Anderson & Simester, 2011) in its innovation execution process. Govindarajan and Trimble (2010a) put forth a framework for operationalising the execution and experimentation of innovation through internal corporate venturing (Virta, 2017). Established organisations achieve innovation execution through a partnership between a dedicated team and the performance engine of an organisation. To assemble a highly-effective team charged with innovation execution, the best possible candidates and skill-sets should be reflected in its members. For this strategy to be successful, all promising sources for employees should be considered. In addition, outsiders should comprise several key positions in this team. Internal transfers, external recruitment and acquisitions of smaller organisations should be taken account of in order to formulate the DT (Govindarajan & Trimble, 2010a; 2010b). The latter source of outsiders is relevant to this study.

Such acquired organisational elements provide large organisations with many advantages, such as enlisting outsiders who possess fresh perspectives with which to challenge widely-held assumptions, often deeply entrenched in organisational conventional wisdom, as well as acquiring patents and other intellectual property rights (Govindarajan & Trimble, 2010a; 2010b). Notwithstanding the popularity of acquiring innovative start-ups and SMEs, acquiring organisations continually find that post-acquisition integration can erode those innovative capabilities that justified the acquisition originally (Birkinshaw *et al.*, 2000; Graebner, 2004; Puranam *et al.*, 2009; Puranam, Singh & Zollo, 2003; Ranft & Lord, 2002). The integration process has been stated as a cause of smaller acquisition failure, drawing attention to the importance of deciding on an appropriate integration approach, an action which further shapes subsequent integration-related decisions (Haspeslagh & Jemison, 1991; Pablo, 1994; Puranam *et al.*, 2009; Zollo & Singh, 2004). Therefore, as small acquisitions may fail due to a problematic integration process, the implementation of this process requires careful consideration.

Little is known about the managerial and/or leadership considerations necessary to address the unique challenges posed by integrating small innovation acquisitions (with more than one individual) at the team level.

5.2.2   Purpose statement

This phenomenological exploratory cross-case study aimed to explore managerial and/or leadership considerations that exist for integrating small innovation acquisitions (with more than one individual) at the team level.

As this section has served to discuss the research problem and affirmed the purpose of the study, the following one deals with setting out the questions the study posed.

5.3   RESEARCH QUESTIONS

The study had an overarching primary research question and a couple of secondary research questions, which guided the direction of the research undertaken (Mouton, 2001). The study's questions were broad in nature due to the explorative purpose and strategy of the research; thus, conclusive, generalisable evidence was not an aim. Wide-ranging inquiries were deliberately utilised to reveal deep, possibly profound, insights into the research problem (Zikmund & Babin, 2010).

5.3.1   Primary research question

What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?

5.3.2   Secondary research questions

To answer the above primary research question that drives the study adequately, two discrete yet interdependent secondary questions are put forth in the current study below.

5.3.2.1 Secondary research question 1

Do innovation acquisition champions integrate small innovation acquisitions (with more than one individual), either fully or partially, similarly or differently to how they integrate acquired individuals into the team?

5.3.2.2 Secondary research question 2

What managerial and/or leadership considerations should innovation acquisition champions take into account while integrating small innovation acquisitions (with more than one individual) at the team level?

This section has served to elaborate on the purpose statement of the study put forth previously in section 5.2.2 by posing research questions which guided the research. Subsequent to this section, the design of the research methodology is detailed and argued for.

5.4   RESEARCH METHODOLOGY

Research methodology is explicated as the ways, procedures, techniques and methods employed to collect the requisite information pertaining to the research issue; it is a guideline for answering a research problem (Abu-Dalbouh, 2013). The research methodology of this study involves two sequential stages. Firstly, secondary research of which the aim was to glean learnings from the existing body of knowledge was undertaken (Collis & Hussey, 2014; Zikmund & Babin, 2010). The subsequently executed stage of research methodology was characterised as primary, thus original, investigation (Stewart & Kamins, 1993). This section serves to detail the research methodology employed in this study. Firstly, the design of the secondary research is discussed. Thereafter, the determination of the primary research methodology is discussed according to the sequence

Saunders, Lewis and Thornill (2008:102) put forth, namely regarding the research: philosophy, approach, strategy, choice as well as techniques and procedures.

5.4.1   Secondary research design

Secondary research has been assumed by means of appraising existing knowledge, which led to the presentation of a literature review of the salient aspects related to the research problem in chapter two to four in this thesis. The secondary research was conducted with a view to support the primary exploration, as the identified problem has not yet been addressed in the available literature (Collis & Hussey, 2014; Glass, 1976; Mouton, 2001; Zikmund & Babin, 2010). In the following section, elements of the secondary research design are addressed, including the consulted sources, the foci and keywords used in literature consultation and the seminal works that have been consulted.

5.4.1.1 Secondary research sources consulted

Journal articles, print books and Internet sources have been consulted in the review of literature, which are detailed below.

(a)   Journals

Assorted sources and e-databases of scholarly literature were consulted in the compilation and synthesis of the literature review, including various academic books, Google Scholar, EBSCOhost, ProQuest, Elsevier and the University of Stellenbosch's JS Gericke Library and Information Service. The following academic journals were consulted, including: *Journal of Management*; *Harvard Business Review*; *Strategic Management Journal*; *Management Decision*; *The Leadership Quarterly*; *Journal of Management Studies*; *Organizational Dynamics*; *Human Resource Development Journal*; *Academy of Management Journal*; *Long Range Planning*; *Organization Science*; *Academy of Management Review*; *Advances in Mergers and Acquisitions*; *California Management Review*; *MITSloan Management Review*; *Administrative Science Quarterly*; *Business Horizons*; *Journal of Creativity and Innovation Management*; *Strategy & Leadership*; *Human Resource Planning*; and *Management Science*. While this list is not exhaustive of all journal articles reviewed, the Reference List can be consulted.

(b)   Print books

Regarding print books, the works of reputable authors have been referenced. Well-regarded publishers have also been credibly used, such as McGraw-Hill Education, Pearson Education Limited, South-Western/Cengage Learning, John Wiley and Sons, Princeton University Press and the Oxford University Press as well as Harvard Business School Press, SAGE Publications and Palgrave Macmillan.

(c)   Internet sources

Moreover, a handful or so Internet sources were also accessed. A few online-published *Harvard Business Review* articles were retrieved, including: Anderson and Simester (2011); di Fiore (2014); Govindarajan (2011); Govindarajan and Srinivas (2013); Hamel and Tennant (2015); as well as Hauser and Luca (2015). Furthermore, Forbes was consulted, specifically Ilgaz (2014) as well as Koetzier and Alon (2009); Bloomberg, particularly Johnson (2010); Fast Company has also been accessed by way of the Kaye and Klepic (2012) article. In addition, the Society for Human Resource Management was also consulted for the article by Krell (2015). Some published articles, reports and interviews of major consulting organisations have also been retrieved, including: Boston Consulting Group's Taylor (2016), McKinsey's Barsh *et al.* (2008) as well as PwC (2014; 2016; 2017). The United States Department of Commerce's (2016) classification of mergers was also reviewed. The remaining online resources were those that cite journal articles in press, such as Aghasi *et al.* (2017).

5.4.1.2 Foci and keywords used in literature consultation

Relevant foci vis-à-vis the problem statement were researched to elucidate the knowledge gap. Several topics and keywords that were used to uncover relevant secondary information include: "organisational level elements that support innovation"; "innovation execution"; "innovation experiment"; "business experiment"; "dedicated team"; "M&A motive"; "innovation acquisition"; "M&A process"; "M&A research stream"; "post-acquisition integration"; "M&A process perspective"; "management" and "leadership"; "team leader"; and the "team development process". It is salient to note that the summarised list above is not exhaustive.

5.4.1.3 Seminal works consulted

In the review of literature, it became increasingly evident that certain longstanding seminal works today still hold profound sway with researchers and academics; refer to Table 5.1 below. For example, two prominent books initially notated in the final decade of the twentieth century have been considered in this study, including Haspeslagh and Jemison (1991) as well as Tidd and Bessant (2013), similarly to several others of the current decade. More specifically, Haspeslagh and Jemison's (1991) *Managing Acquisitions* has been consulted in a number of recent studies, such as Angwin and Meadows (2015), Graebner *et al.* (2017) as well as Zaheer, Castaner and Souder (2013). Furthermore, *Managing Innovation: Integrating Technological, Market and Organizational Change* by Tidd and Bessant (2013), a fifth edition of the widely cited work in 1997 by these authors and another colleague, Pavitt (Tidd, Bessant and Pavitt, 2005).

TABLE 5.1: Seminal works' citation

Broad research stream	Original (full) in-text reference of the work	The name of the work	Edition, if book	Number of citations on Google Scholar
Post-acquisition integration	Haspeslagh and Jemison (1991)	*Managing acquisitions: Creating value through corporate renewal*	1st	2526 citations
Innovation execution and management	Davila, Epstein and Shelton (2013)	*Making innovation work: How to manage it, measure it, and profit from it*	2nd	1001 citations
	Tidd, Bessant and Pavitt (2005)	*Managing innovation: Integrating technological, market and organizational change*	3rd	8214 citations
	Tidd and Bessant (2013)	*Managing innovation: Integrating technological, market and organizational change*	5th	59 citations
Team/group development	Tuckman (1965)	*Developmental sequence in small groups*	N/A	7256 citations
	Tuckman and Jensen (1977)	*Stages of small-group development revisited*	N/A	2989 citations

(Source: Adapted from Google Scholar searches conducted on 9 February 2018)

Additionally, the number of citations a published work has is indicative of its acceptance within the scientific community (Baltussen & Kindler, 2004). As such, the current study has also considered the work of Tidd and Bessant (2013) as well as Tuckman (1965) and Tuckman and Jensen (1977). The number of times the key seminal works have been consulted in the scientific community is tabulated in Table 5.1 above (as at 9 February 2018). The works included in this tabulation include Davila *et al.* (2013), Haspeslagh and Jemison (1991), Tidd *et al.* (1997), Tidd and Bessant (2013), Tuckman (1965) as well as Tuckman and Jensen (1977). Moreover, the following section deals with explaining how the knowledge gap was identified.

5.4.1.4 Identifying the knowledge gap

One of the principles put forth in *The Other Side of Innovation* by Vijay Govindarajan and Chris Trimble (2010a) is that characteristics of ideal candidates must be identified to populate the most effective and efficient team possible. These scholars suggest all conceivable sources ought to be considered when hiring team members and put forth three potential avenues for recruitment. These include reassigning employees from within the organisation as internal transfers; the second regards hiring employees from outside of the organisation; and the third involves the consideration of

acquiring small organisations (Govindarajan & Trimble, 2010a:53). The latter, however, constitutes an M&A transaction, of which the literature warns organisational practitioners of high failure rates (Hitt *et al.*, 2001; Loderer & Martin, 1992; Lubatkin & Lane, 1996; Porter, 1987; Sirower, 1997), especially owing to the post-acquisition integration process (Haspeslagh & Jemison, 1991). Given this theoretical context, the researcher realised that the consideration of small acquisitions for integration at the team level within an innovation initiative may well prove challenging or otherwise.

At this point, she embarked on a review of the literature to identify whether or not this context has been investigated by other scholars previously. However, the researcher could not find or identify any research, to her knowledge, that has addressed the integration of small organisations at the team level of the acquiring organisation. As a result, this context was deemed fit for examination through the vehicle of an exploratory study. The ensuing sections detail the specific research design of the exploratory cross-case study undertaken.

5.4.2   Primary research design

Primary research is the novel or original research undertaken by a researcher or team thereof and flows from the impetus of a specific research question and its ensuing aims (Zikmund & Babin, 2010). Furthermore, studies in which primary research is characterised by exploratory, qualitative research designs are emergent and should thus be argued for and justified by the researcher (Collis & Hussey, 2014), explicitly in studies that employ case study research (Meyer, 2001). The order advanced by Saunders *et al.* (2008:102) for determining primary research methodology is utilised in the ensuing sections to introduce and describe the study's primary research methodology. Firstly, the selected research philosophy of interpretivism is discussed, followed by the inductive approach employed and the case study research strategy. Thereafter, the choice of qualitative research as well as techniques and procedures associated with data collection and analysis are detailed.

5.4.3   Interpretivist research philosophy

Methodological philosophies or paradigms, particularly as they relate to organisational management scientists in the region of South Africa in which the study has been assumed, suffer from tensions in the academic community (Goldman, 2016). Essentially, the two dominant paradigms, positivism and interpretivism, are considered by local management scholars to be unequal in terms of value gained by employing one (Goldman, 2016); therefore, for example, some academics hold positivism to be more superior a paradigm than the interpretivist paradigm. It can be said that positivist and interpretivist paradigms are easily understood by placing them on a spectrum (Lin, 1998), which is illustrated in Figure 5.1 below.

POSITIVISM   INTERPRETIVISM
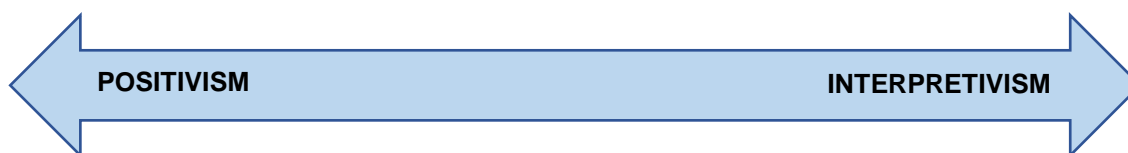
FIGURE 5.1: Positivism-interpretivism continuum

(Source: Adapted from Lin, 1998:162)

Generally, positivism favours quantitative research methods, whereas interpretivism is partial to humanistic, qualitative methods (Maxwell, 2012). In addition, the latter endeavours to comprehend the world from subjective perceptions and experiences from the individual's point of view (Krauss, 2005). Interpretivists use methodologies oriented around meaning and implication, such as interviews or observation: methods which rely on subjective relations between researchers and research subjects (Hirschman, 1986).

Table 5.2 below serves to expand on the spectrum as it has been presented above (in Figure 5.1) in a tabulated format. The information presented in the table endows the study with a comprehension of the meta-theoretical inferences about positivism and interpretivism on the subjects of: the nature of reality; certainties versus opinions; the research object; examples of relevant methods; and theories of truth (Weber, 2004). The table is discussed below.

TABLE 5.2: Comparing positivism and interpretivism

Meta-theoretical inferences	Positivism	Interpretivism
The nature of reality	Researcher as an individual and reality are isolated	Researcher as an individual and reality are indivisible
What discriminates between certainty from opinion	An objective reality persists beyond the limits of human minds	A subjective reality is conceived by lived experiences of a worldview
Research object	Research object possesses inherent qualities that exist separate to the researcher	Research object is regarded within the individual's worldview
Examples of relevant methods	Analysis of statistics and content	Hermeneutics and phenomenology
Theory of truth	Correspondence (Truth determined by means of demonstrating causal relationships)	Intentional fulfilment (Interpretations relate to lived experiences)

(Source: Adapted from Weber, 2004:iv)

Firstly, the nature of reality can be construed as the abstract, philosophical conception the individual has within themselves, which defines how they understand the world or formulate a worldview. In the positivist paradigm, they do not interpret reality, while the perception of the nature of reality in

the interpretivist paradigm is the unqualified assumption (Weber, 2004). As managerial and/or leadership considerations and the post-acquisition integration process are interpretative constructs, they can be deemed as subjective and inseparable from reality.

Secondly, the discrepancy between certainty and opinion as viewed by these two paradigms shows that positivism accepts a predominantly objective reality whereas the supposition of interpretivism submits a subjective worldview, one which is linked inextricably to the individual who endeavours to make sense of their reality (Weber, 2004). The qualitatively studied person seldom forms an entirely objective reality of their external domain; in this case, the innovation acquisition champion's managerial and/or leadership modi operandi are an interpretivist reality.

Thirdly, the research object (in this case, whether managerial and/or leadership considerations unique to the integration of small innovation acquisitions at the team level, while experimenting on a novel value offering) was interpretivist, as it might not have been quantifiable, due to the lack of existing literature and research propositions that exist in the scholarly realm. Besides, truth is perceived as understanding the innovation acquisition champion's lived experience, which is recognised as a phenomenon (Weber, 2004). Thus, Weber (2004) affirms that appropriate research methodology in interpretivist studies is the study of phenomena, or phenomenological study, which is further discussed in section 5.4.9. The following section serves to detail the inductive research approach.

5.4.4   Inductive research approach

Inductive reasoning is relevant for research studies that have situations which are complex or otherwise ill-defined, and in which natural persons use predictable reasoning methods (Arthur, 1994). Deductive reasoning, on the other hand, is the logical deduction of reasoning from general statements or premises to reach logical and definite conclusions (Sternberg & Sternberg, 2012). Whereas deductive reasoning tests an idea or hypothesis from the outset, utilising primary data either to confirm or negate the hypothesis, inductive reasoning generally uses primary data to generate ideas and hypotheses (Thorne, 2000). The inductive reasoning approach was deployed in a case study research strategy.

5.4.5   Case study research strategy

The research design ultimately culminated in the selection of a case study research design with the use of three cases in which a cross-case analysis. The case study is apposite in studies in which researchers aim to explore specific contexts for how phenomena occur (Collis & Hussey, 2014).

(a)   Defining a case study

Case study research allows scholars to focus on perceiving and interpreting the dynamics which exist within a particular setting (Eisenhardt, 1989). Thus, the widespread use of the case study as a vehicle for undertaking qualitative primary research (Darke, Shanks & Broadbent, 1998) facilitates

scholars' investigation of phenomena as they occur in natural settings (Bonoma, 1985), which in turn facilitates the phenomenological approach (Stake, 1995) discussed above. Cases investigated may be an organisation, a group of employees, an event, a process, a single person or any other relevant phenomenon (Collis & Hussey, 2014). A recognised strength of the case study methodology is that it allows studies to tailor the research design and data collection techniques to the study's particular research questions (Meyer, 2001).

(b)   The role of context in case study research

In case study research, context is a central factor to take into consideration as various circumstances make up the specific backdrop of each case under analysis and so it was deemed significant to regard each case's particular dynamics (Collis & Hussey, 2014). Furthermore, Bonoma (1985) counsels that for case study research to be of value, the researcher ought to be sensitive to the context. As such, the researcher in the current study was required to take cognisance of the fact that managerial and/or leadership behaviours were present in situational conditions of the cases' contexts. Therefore, these contexts were considered during the stages of data collection (see the ensuing section) and analysis as well as the juncture at which findings of the case were written up in the sixth chapter.

(c)   Case study types

Furthermore, according to Collis and Hussey (2014:68-69), there are various types of case studies, including: exploratory; opportunist; comparative; descriptive; illustrative; experimental; and explanatory. Firstly, exploratory case studies are used when the existing body of knowledge is deemed deficient and lacking at the outset (Collis & Hussey, 2014). Secondly, opportunist case studies are selected when the opportunity to research a particular phenomenon presents itself (for example, the researcher may be an employee of an organisation in which a phenomenon exists) (Otley & Berry, 1994). Thirdly, comparative case studies encompass more than one case in the research design, which allows for insights and themes to be realised between cases (Kaarbo & Beasley, 1999), which is also known as a cross-case analysis (Goodrick, 2014). Exploratory and opportunist case studies can be undertaken on single cases, whereas comparative case studies always use multiple cases.

The latter four types of case studies are descriptive, illustrative, experimental and explanatory (Scapens, 1990). The first of these, descriptive, is a suitable design where the research's aim is limited to providing only an account of interventions, such as best practices (Baxter & Jack, 2008). Illustrative case studies endeavour to clarify new, innovative and conceivably "best" practices implemented by effective organisations (Halinen & Tömroos, 2005:1292). Furthermore, experimental case studies are put in action where research serves to examine the efforts involved in the execution of novel procedures, processes and techniques within the context of an organisation;

in addition, this type of case study also serves to evaluate benefits associated with the experiment (Cho, Kim, Kim & Jang, 2005). Lastly, explanatory case studies utilise existing theory to understand and explain events (Yin, 1981). Of the types of case study available to the researcher, the exploratory case study is the most relevant primary research mechanism for this study as it is the most appropriate to address a research problem resulting from a deficient body of existing knowledge (Collis & Hussey, 2014).

(d)   Exploratory cross-case study design

The exploratory cross-case study served to address the lack of knowledge found. Research questions with a main focus on a "what?" can be justifiably well-answered by the research design of an exploratory case study, especially to develop important hypotheses from the research questions and propose future avenues of research (Yin, 2003:5-6). The primary research question of this study had a main focus on a "what?" as it was: "What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?" Since the research problem was novel, the exploratory cross-case study design was apposite; the five stages of case study research are consecutively presented in Figure 5.2 below.

Stage 1:	Selecting the cases
Stage 2:	Preliminary investigations
Stage 3:	Data collection
Stage 4:	Data analysis
Stage 5:	Writing the case studies' findings
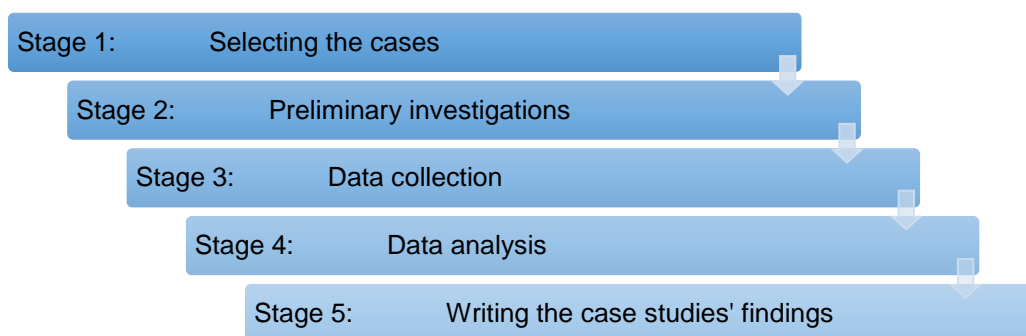
FIGURE 5.2: Case study research stages

(Source: Adapted from Collis & Hussey, 2014:69)

As can be seen in the figure above, the stages are as follows: selecting the cases; preliminary investigations; data collection; data analysis; and writing the case studies' findings (Collis & Hussey, 2014:69). Furthermore, the research method used in the study was qualitative.

5.4.6   Qualitative research method

Primary research designs may encompass either a qualitative or quantitative method or indeed one that includes a combination of the two, in which case it is regarded as a mixed methodological approach (Creswell, 2013; King & Horrocks, 2010). However, to grasp the nature of these two methods as separate entities, Table 5.3 is presented below; it serves to illustrate the characteristic features of qualitative and quantitative research. In a broad sense, qualitative inquiry is a superordinate that refers to interpretive primary data collection and analysis techniques, which

ultimately intend to discern social phenomena through the gleaning of more profound insights (Staller, 2010; van Maanen, 1983). Quantitative inquiry can be understood as a paradigm concerned with the accurate and precise measurement of data, with a view to express findings numerically, which is therefore dissimilar to qualitative inquiry (Creswell, 2016; King & Horrocks, 2010).

TABLE 5.3: Characteristics of qualitative and quantitative research processes

		Qualitative research	Quantitative research
Differentiating characteristics of processes	Design	Emergent design	Fixed design
	Views expressed	Research subjects' views	Researchers' views
	Complexity	Higher complexity of scenario or context	Narrower picture
	Researcher bias	Probable researcher bias	Little to no researcher bias
	Setting	Context or setting is central to understanding of research problem	Engineered (predetermined) setting
	Data collection	Open-ended data collection	Closed-ended data collection
	Data analysis	Inductive data analysis	Deductive data analysis
	Writing style	Flexible writing design	Exceedingly structured writing

(Source: Adapted from Creswell, 2016:15)

Consistent with the above table, qualitative research was conducted owing to its appropriateness to exploratory research studies that require emergent designs which investigate social phenomena. Firstly, it permitted the researcher to gather research subjects' complex thoughts, opinions, answers and various accounts that pertain to the research question (Creswell, 2016; Morse & Richards, 2002; Zikmund & Babin, 2010). The qualitative research process of this study aimed to cultivate understanding centred on gaining profundity of research subjects' worldviews (Marshall & Rossman, 2011; Staller, 2010), which allows for gleaning greater complexity of the context (Creswell, 2016). The design of the qualitative research has been directed towards attaining deeper findings by the means of open-ended data collection techniques which allowed the researcher to grasp complex states. The innovation acquisition champions as research subjects' views were voiced through the data collection methodology, which was open-ended to ensure a more natural, interpretive exploration of singularities (Creswell, 2016).

Moreover, in qualitative studies, researcher bias is ever-present (Creswell, 2016). The nature of qualitative analysis recognises that the researcher, often without meaning to, insinuates their personal beliefs, identity, values and attitudes into the research process (Staller, 2010). Yet, the current study attempted to moderate such a bias through framing the study by undertaking secondary research from a range of sources, the resulting findings of which were synthesised.

Furthermore, this literature review made a significant contribution to the study insofar as it became integral to forming the measurement instrument, broadly due to the research design that was characterised by qualitative inquiry. In contrast, quantitative studies usually test a model or hypothesis, which is generally known from the inception of the research, whereas qualitative studies are largely composed of original or emerging designs of primary research techniques. Therefore, by utilising a broad frame of reference, researcher bias was moderated (Creswell, 2016).

Additionally, the setting or context is important in qualitative research designs (Creswell, 2016); in fact, sensitivity to the specific context is regarded as a central feature of the qualitative process of research (Bryman, Stephens & à Campo, 1996). To aid the interpretation of the data derived from qualitative studies, these have need of contextualisation, which is undertaken by gaining information pertaining to the background of the research subject and object, for example: location, time and influences of an economic, political, social or legal nature (Collis & Hussey, 2014). The depth and richness of the study's findings are thus facilitated by contextualising qualitative data through critical reflection on the setting in which the research was undertaken (Cepeda & Martin, 2005). In the study, contextualisation of the case study was assumed by undertaking a preliminary investigation of the research setting (Collis & Hussey, 2014:69).

Other characteristics of qualitative research, per Creswell (2016) and which can also be seen in Table 5.3 above, include open-ended data collection, inductive data analysis and a flexible writing design. Collecting data in qualitative studies is supported by open-ended questions or items in the measurement instrument, which provides research subjects with the opportunity to elaborate and fully explain their experiences (Fontanella, Campos & Turato, 2006). In addition, data was inductively analysed as discussed in section 5.4.4; in other words, themes are identified through the study of the open-ended data collected by finding similarities or links in either verbal or printed material (Thomas, 2006), across cases in this study. Finally, design of the writing is less structured and more flexible than that of quantitative studies (Creswell, 2016). The exploratory purpose of the research is discussed in the following section.

5.4.7   Exploratory purpose of the research

The purpose of any research undertaking is significant in determining the means by which to examine the identified problem, that is to say the process, outcome, paradigm, approach, design and data analysis by which inquiry is conducted (Collis & Hussey, 2014). To this end, three types of research exist: exploratory, descriptive and causal studies (Zikmund & Babin, 2010); regarding this study, the first is appropriate. To move towards understanding why this is the case, Table 5.4 (see below) clarifies the differences between the research types. Whereas the latter two, descriptive and causal type studies, necessitate a phenomenon(a) shown to be manifest from the study's commencement, the former type of exploratory research does not. As such, this study deals with a possible phenomenon(a) that is considered understudied as was not initially evident and thus has

been investigated as per the exploratory research type (Collis & Hussey, 2014; Marshall & Rossman, 2011; Webb & Auriacombe, 2006; Zikmund & Babin, 2010).

TABLE 5.4: Characteristics of the three main research purposes

	Research type		
	Exploratory	Descriptive	Causal
Objective of the research	To ascertain unexplored insights, beliefs and opinions	To uncover explanations for previously ascertained findings from exploratory studies	To prove empirically cause-and-effect relationships from descriptive explanations
Characteristics of research type	Versatile In many instances these initiate new dialogues	Test hypotheses Structured primary research designs	Manipulate variable(s) to determine empirical causality
Hypotheses	None or somewhat vague and inexact hypotheses Guiding research questions	Speculative Tentative Slightly uncertain	Highly specific

(Source: Adapted from Webb & Auriacombe, 2006:590-591; Zikmund & Babin, 2010:50-54)

Exploratory research has enabled researchers to: consider and understand phenomena that are either as yet unstudied or suffer from a lack of prior academic inquiry; gain greater understandings of the significance of research findings through identifying key findings that became evident from questioning and probing research subjects; and/or to engender objectives, questions and hypotheses for future research (Marshall & Rossman, 2011).

Furthermore, the characteristics of exploratory research have allowed the researcher to investigate relatively unchartered territory that has so far gone unstudied. Thus, hypotheses and research questions of exploratory studies are habitually vague and indistinct in nature (Zikmund & Babin, 2010). At the study's start, the question of whether phenomena unique to the context exist was unclear. In addition, the exploratory study type provides the impetus to initiate a novel dialogue about an understudied area recognised from a review of the available and accessible literature. It is also pertinent to note that the study did not aim to offer any conclusive evidence owing to its relative newness (Zikmund & Babin, 2010). Following the discussion of the qualitative research process, the outcome of the research study is discussed in the next section, which, in this case, is basic or pure.

5.4.8   Basic (pure) research outcome

At the start of the study, the research did not occupy a specific, quantifiable issue or problem; rather, it was concerned with exploring an area as yet disregarded. Thus, the research hoped to contribute to a general understanding of integrating small acquisitions at the team level. This overarching research question of the study was driven by the researcher's interest to investigate and add

knowledge to an area of research as yet understudied (Jugenheimer, Kelley, Hudson & Bradley, 2014:5). For this reason, basic or pure research has been undertaken, which initiated understanding of the issue. Moreover, the basic research intended to afford a groundwork and perhaps research proposition(s) for analysis in future studies, for instance testing of the early theoretical basis advanced by this study (Collis & Hussey, 2014). Given the discussion of basic research in this section, the subsequent section discusses phenomenological research.

5.4.9   Phenomenological research

This study is of a phenomenological nature (Moran, 2000). Founded by Edmund Husserl in the early twentieth century, phenomenology is a practice ascribed to the field of philosophy. It can generally be expressed as a method of philosophical inquiry with a view to unearth the conscious perceptions of individual experiences and matters, often manifest in the collective (Arbnor & Bjerke, 1997; Creswell, 1998; King & Horrocks, 2010; Moran, 2000; Morse & Richards, 2002; Polkinghorne, 1989).

Analyses of the phenomenological tradition of inquiry are centered on several factors proposed by Husserl. The phenomenological study is the first of these and it aims to uncover the "essence" of the lived experience, which regards the profound meaning that the experience holds to the human perception and understanding (Creswell, 1998:52; Dahlberg, 2006:11; Patton, 2002:363). This is evident in the dimension of narrative report focus in Table 5.5 below serves as a depiction of the phenomenological research.

TABLE 5.5: Characterising phenomenological research

Dimension	The phenomenological qualitative research approach
Purpose	To explore or to describe personal experiences of phenomena
Origin	Philosophy
Data analysis approach	• Register statements of significance • Understand and specify the essence of each statement • Ultimately discern the phenomenon's meaning
Narrative report focus	Profound, deep exploration and description of the dominant or essential structures of the phenomenal experience (the common qualities or "essences" thereof)
Primary method of data collection	In-depth interviews (approximately an hour or longer perhaps) 1 to 10 people (usually with a maximum of 15 people in total)

(Source: Adapted from Collis & Hussey, 2014:46; Creswell, 1998:112-113; Patton, 2002:363)

Secondly, this essence mainly requires the conduct and actions assumed by people within their perceived reality insofar as the perception is shared by the individuals making up the collective; thus, the human perception of reality outweighs the real truth (Creswell, 1998; Morse & Richards, 2002). The perceptions of innovation acquisition champions were thus under analysis to study phenomena related to managerial and/or leadership considerations. Additionally, Husserlian philosophy decrees suspending judgement until such a juncture as findings are discovered in the study of phenomena

(Creswell, 1998; 2016; Morse & Richards, 2002); this adds to the significance of decreasing researcher bias in the current qualitative study (Creswell, 2016). Lastly, the reality being experienced by the research object, in this case the managerial and/or leadership considerations, was only perceived as the experience's interpretation within the individual (leader) (Creswell, 1998). This was what the researcher studied to arrive at phenomena (Rapley, 2012). In conclusion, the phenomenological approach was considered suitable for this study on the integration of small innovation acquisitions. Given the discussion of the research methodology in the above sections, the following section details the sampling that was undertaken in the study.

5.4.10 Sampling

As per Zikmund and Babin (2010), samples are smaller subsets of larger populations and are used in research to gain the information required to serve problem statements. This section discusses the unit and levels of analysis of the study as well as the sampling technique, criteria and size. Moreover, this section describes the research subjects and entities that were sampled and discusses the inclusion of the cases in the study.

5.4.10.1   Unit and levels of analysis

The sampling assumed in the current study adhered to the first stage of the case study methodology posited by Collis and Hussey (2014). The case selection stage involves several choices, including: number of cases; unit of analysis; and sample cases (Meyer, 2001). Regarding the first, this is discussed in section 5.4.10.4 on sample size.

Secondly, it is necessary to delineate the levels of analysis and, indeed, the main unit of analysis of the study, as per Meyer (2001). Research subjects related to the selected cases in their capacity as being held accountable for integrating acquisitions into teams, referred to in this study as innovation acquisition champions, were the study's unit of analysis (Cavaye, 1996; Perry, 1998).

The primary characteristic of elements of the greater population, also identified as the first level of analysis, were that all possible candidates for the purposive sample should be organisations that undertake full or partial acquisitions of smaller organisations. Furthermore, the second level of analysis was identified as research subjects that are employed in a managerial and/or leadership capacity in which they are accountable for directly managing and leading a post-acquisition integration effort at the team level, namely innovation acquisition champions. The final level of analysis was that these innovation acquisition champions undertake the effort within the context of a team (Zikmund & Babin, 2010).

5.4.10.2   Purposive sampling technique

To select these individuals for study, the sampling technique known as purposive (or judgement sampling) was employed in this study, which Creswell (1998:118) has advocated for the use of in studies of a phenomenological nature and which he terms the "purposeful sampling strategy". This

sampling technique is the considered selection of a research subject due to the qualities they possess; furthermore, it is a non-random technique (Etikan, Musa & Alkassim, 2016). The researcher finds research subjects who can and are willing to offer information relevant to the study by virtue of their experience (Bernard, 2002).

Purposive sampling is employed in qualitative research to isolate and select those cases which are rich with relevant information (Patton, 2002), which means identifying and choosing those individuals or groups that are both well-informed and proficient about a phenomenon(a) under study (Creswell & Clark, 2011). Moreover, scholars stress the significant of finding research subjects that are available and willing to participate as well as having the talent of articulately expressing their opinions and experiences in a reflective manner (Bernard, 2002; Spradley, 1979). This study's target population (Zikmund & Babin, 2010) broadly encompassed organisations that undertake small innovation acquisitions, either fully or partially, for innovative purposes. Therefore, in the study, sampling was purposively carried out and the researcher was able to execute the sampling given the parameters posed by sampling criteria discussed in section 5.4.10.3 as well as levels and unit of analyses in the previous section.

The implementation of purposive sampling in this study commenced after ethical approval was gained for the primary research to be undertaken. The ethical considerations of the study and approval gained is detailed in section 5.4.14 of this chapter. Through a professional social media platform, LinkedIn, potential interviewees were contacted. The researcher sent a personalised message to each potential subject along with a broad outline of the research and a request for their participation. The sampling took place over a three-month period in mid-2018 and 104 prospective interviewees were contacted.

Individuals with the words "acquisition", "integration" and "M&A" in their profile titles were searched for and contacted by means of LinkedIn's direct messaging service. The organisations of which these individuals were employees included: Walgreens, Google, Cisco Systems, Deloitte, Barclays, Facebook, NBCUniversal, Rand Merchant Investment Holdings, General Electric, PayPal, Silvertree Internet Holdings, International Business Machines Corporation, Hewlett Packard, 7-Eleven, Microsoft and Cipla as well as one other organisation that will remain anonymous as it forms part of the Rome case which enjoys anonymity in this study. It is salient to note that, in her liaisons with potential research subjects, the researcher observed that these innovation acquisition champions displayed reluctance to be interviewed on this subject matter. Thus, as very few were willing to discuss the integration of acquired innovative organisations at the team level with the researcher despite being extended full anonymity, the cases that were selected were willing to be interviewed and fulfilled the contextual criteria for the study. Of the 104 prospective research subjects, five individuals acquiesced to participate in the study. These five interviewees availed themselves to the research interviews in late July 2018 and over the course of August 2018.

5.4.10.3   Sampling criteria

The sampling criteria in this study were necessary to study the possible phenomena (Collis & Hussey, 2014) regarding managerial and/or leadership considerations that exist for integrating small innovation acquisitions (with more than one individual) at the team level. Three main sampling criteria relevant to the current study were: firstly, a full or partial acquisition, secondly, the acquisition of an innovative organisation and finally a team-level integration.

The individual research subjects sampled within the cases were leaders and managers charged with the responsibility of integrating small innovation acquisitions at the team level, namely innovation acquisition champions. To protect the anonymity of these individuals, they were referred to by pseudonyms, such as "Ptah", "Apollo" and "Romulus". Prior to interviewing a research subject, they were provided with an informed consent form, which outlined and detailed the anonymity extended to them as participants; this form can be referred to in Addendum C on page 320. Given the discussion of the sampling of this study which eventuated in three cases – referred to anonymously as the Egypt case, the Greece case and the Rome case – the next section introduces the pseudonyms relevant to each of the cases.

5.4.10.4   Sample size

As this study was a cross-case study, it was necessary to select and approach more than one case for analysis (Leonard-Barton, 1990). As reaching conclusive statistical generalisations was not an objective of the study, a purposive sample set of two or more cases passed muster to gather the necessary knowledge by interviewing research subjects related to the selected cases, the study's unit of analysis (Cavaye, 1996; Perry, 1998).

Three cases were the only ones to consent to participate in the study and the researcher experienced an unwillingness among sampled prospective candidates. Given these sampling criteria, these cases acquiesced to be a part of the study and met the criteria to varying degrees: the cases of two business incubators with dynamic integration and partial acquisition processes as well as one full acquisition by resource buy-out of an innovative software start-up. The following section serves to introduce the sampled research subjects and cases, which is succeeded by a discussion on the inclusion of the cases.

5.4.10.5   Introduction of the sampled research subjects and cases

As this study extends full anonymity to its research subjects, their identities, the identities of those they mentioned and the organisations they are involved with (as well as any other entities), all parties are extended pseudonyms in this study. The following section serves to introduce the organisations referred to in the Egypt, Greece and Rome cases.

(a) Entity pseudonyms of the cases studied

As there are a number of legal entities at play in the Egypt, Greece and Rome cases, Table 5.6 below serves to summarise the pseudonyms of the acquirer and the acquired of all three cases, which is followed by a discussion of the table.

TABLE 5.6: Organisation pseudonyms used in the cross-case study

Case	Entity	Pseudonym
Egypt case	Bidder organisation (of 15 per cent stake)	Nile
	Target organisation (15 per cent equity stake procured by Nile)	Sphinx
Greece case	Bidder organisation (of intended 20 per cent stake)	Ilissos
	Target organisation (intention to acquire 20 per cent equity stake by Ilissos)	Agora
Rome case	Bidder organisation	Tiber
	Target organisation	Pantheon
	Previous potential acquirer	Colosseum

Firstly, the Egypt case consisted of an organisation that acquired an equity stake in a conceptual stage micro-organisation made up of four co-founders. The equity stake acquirer is referred to in this study as Nile and the initiative in which the stake was acquired is named Sphinx. Similarly to the Egypt case, the Greece case consisted of an incubator, which is known as Ilissos in the context of the study. Ilissos intended to acquire an equity stake in an early idea-stage partnership, which is referred to as Agora in this study. Lastly, the Rome case consisted of an acquiring organisation, referred to under the pseudonym Tiber, which procured the majority of a software start-up, Pantheon, by undertaking a resource buy-out of the value offering, organisation and some employees. However, Pantheon was nearly acquired previously by a similar organisation to Tiber, which is given the name Colosseum in this study. Given the introduction of the entities referred to in the study, the Table 5.7 below serves to introduce the pseudonyms of the research subjects, their colleagues and other direct or indirect stakeholders in the initiatives above; the three sections that follow discuss the cases' stakeholders presented in the table below.

TABLE 5.7: Stakeholders' pseudonyms in the cross-case study

Case	Stakeholder role	Original organisation	Pseudonym
Egypt case	Managing Director of Nile (Indirect stakeholder in Sphinx)	Nile	Amun
	Senior commercialisation manager (Indirect stakeholder in Sphinx)	Nile	Osiris
	Project commercialisation manager	Nile	Ptah
	Co-founder CEO	Sphinx	Nun
	Co-founder CTO	Sphinx	Isis
	Co-founder COO	Sphinx	Hathor
	Co-founder CFO	Sphinx	Tawaret
Greece case	Managing Director of Ilissos	Ilissos	Hera
	Agora Coach, Ilissos Manager	Ilissos	Apollo
	Ilissos coach (Indirect stakeholder in Agora)	Ilissos	Demeter
	Co-founder, Client and Supplier Relations	Agora	Athena
	Co-founder, Finance and Administration	Agora	Hecate
Rome case	Co-founder, Client and Supplier Relations	Pantheon	Romulus
	Co-founder, Finance and Administration	Pantheon	Remus

(b) Stakeholder pseudonyms of the Egypt case

As can be seen from the table, the managing director of Nile is an indirect stakeholder in the Egypt case as he himself neither manages nor leads the initiative but oversees the strategy and operations of the entire Nile organisation; in this study, he is referred to as Amun. Amun agreed to be a research subject in the study and provided salient background information on Nile. Furthermore, within the ranks of the Nile organisation there are two other stakeholders in Sphinx. The first, Osiris, worked with Sphinx approximately two years before the research interviews were conducted and had long since transitioned from a direct to indirect stakeholder in the Sphinx venture. The final Nile employee, who has been given the pseudonym Ptah, now directly administrates the Sphinx initiative in a project management capacity; his title and job description will be further dealt with in the findings chapter that follows this one.

The table above also lists the four innovators who co-founded the Sphinx initiative. In this study, their identities are protected by referring to them as Isis, Nun, Hathor and Tawaret, respectively. These

four South African women met early on in their careers through a large corporate-sponsored competition that serves to recognise and give opportunities to young entrepreneurs. Firstly, Nun was the chief executive officer of the Sphinx initiative; while she had been at the forefront of the organisation for a number of months, she resigned from the organisation very near to the time of the research interviews. Secondly, Isis is Sphinx's chief technology officer. She is credited with originally having the idea for the innovative medical device, which is the main value offering of the Sphinx initiative. Isis has since taken over the CEO role from Nun as well as maintaining her role as CTO. Thirdly, Sphinx has a chief operations officer referred to in the study as Hathor. Hathor currently works at a large organisation and works in product innovation. Finally, Tawaret serves as the chief financial officer of the initiative and has an academic background in organisational studies. Given the characterisations of the direct- and indirect stakeholders of the Sphinx initiative, the following section provides a discussion of the pseudonyms presented in Table 5.7 as it regards the Greece case.

(c) Stakeholder pseudonyms of the Greece case

As can be seen in Table 5.7 above, in the Greece case, the small organisation was made up of two female co-founders; it was managed and coached by one Ilissos employee; and it was overseen by the incubator's Managing Director. The two innovators who co-founded this initiative are given the pseudonyms Athena and Hecate; whereas the former underwent Ilissos' training programme for potential incubatees, the latter did not. In this case, the entrepreneurs were integrated into a team, which consisted of their coach, who happened to be the manager of Ilissos as well, named Apollo in this study, and the acquiring organisation's managing director, Hera. Lastly, a preliminary interview was conducted with Demeter, another coach at Ilissos; while she is, however, not a direct stakeholder of the Greece case, she was able to provide valuable contextual information to Ilissos.

(d) Stakeholder pseudonyms of the Rome case

With reference to Table 5.7, the organisation acquired by resource buy-out, Pantheon, was started by two male co-founders, referred to in this study by the pseudonyms Romulus and Remus. Romulus was the research subject that availed himself to the study.

Given the introduction of the chosen cases, the following section serves to discuss the inclusion of the cases in respect of the contextual criteria necessary to study the possible phenomena (Collis & Hussey, 2014) in the study, which consisted of the following: a full or partial acquisition; of an innovative organisation; and an integration at the team level.

5.4.10.6   Inclusion of the cases

This section serves to discussion the inclusion of each of the cases, Egypt, Greece and Rome, using Table 5.8 below as a reference point.

TABLE 5.8: Comparison of case criteria and inclusion

Criteria	Key findings		
	Egypt case	Greece case	Rome case
Acquisition (full or partial)	Nile undertook a 15 percent equity stake in Sphinx	Ilissos planned to take a 20 percent equity stake in Agora	Pantheon was acquired by means of a full resource buy-out
Innovative organisation	Sphinx was an innovative organisation developing a medical device	Agora was an innovative organisation developing an occupational therapy product	Pantheon is an organisation that developed mature, innovative software
Team-level integration	The Sphinx co-founders were integrated into the team with Ptah, the innovation acquisition champion	The Agora co-founders were integrated into the team with Apollo, the innovation acquisition champion	The Rome case did not meet the third criterium of team-level integration

(a) Egypt case inclusion

As can be seen in Table 5.8 above, in the Egypt case, Nile acquired a 15 percent equity stake in Sphinx. The taking of this equity stake was paid for by allocating a Rand amount agreed upon between the parties to the Sphinx organisation, which would be paid out for services that aimed to develop the organisation. This study defines a partial acquisition as similar to a full acquisition in the sense that it is similarly dependent on an existing organisation and enjoys the various advantages and disadvantages associated with this dependence (Jakobsen & Meyer, 2008). The acquirer, however, does not secure a full claim to the partially-acquired organisation's earnings, nor does the former hold full equity control: the acquisition is only partially undertaken through the acquiring organisation purchasing an equity stake in the target business, rather than securing full ownership of it (Jakobsen & Meyer, 2008). Nile's acquisition of an equity stake in Sphinx was purchased with money allocated to Sphinx, which was purposed for the payment of services that would serve to develop the organisation. The purchase of the equity stake, which was how a partial acquisition was defined, was done with money, money which was allocated to the development of the organisation.

The post-acquisition team increased with the addition of Ptah as innovation acquisition champion, who worked closely first with Nun and then with Isis to integrate and manage the members of the initiative and the tasks necessary to operate and develop the business. Whereas Isis was the team leader amongst Sphinx's four co-founders due to her technical understanding of the medical device and the most time available to dedicate to the initiative of the original co-founders at the time, Ptah acted as the innovation acquisition champion in his capacity as advisor, liaison and integrator between all team members for decision-making and task planning as well as interfacing with and

representing the acquiring organisation, Nile, in the Sphinx team. As a result of these duties as the innovation acquisition champion, Ptah was interviewed and not Isis.

(b) Greece case inclusion

In the literature review undertaken, the acquisition process was found to be a sequential three-phase process, made up of distinct, separate phases: pre-acquisition, acquisition and post-acquisition (von Krogh, 2016), the latter of which involved the integration process (Haspeslagh & Jemison, 1991). However, in some of the cases studied, the sequential undertaking of these distinct phases was not found in reality. Instead, a more dynamic approach to the acquisition process came to light. Integration, a task for the post-acquisition phase as found in the literature, started in the pre-acquisition phase in the Greece case when the Agora co-founders were presented with the memorandum of understanding (MOU). They were given a month to sign the MOU during which time they were integrated into Ilissos. Thus, in reality, the three-phase acquisition process was not sequentially and distinctly applied in the Greece case. In fact, the integration of Agora into Ilissos was based on the assumption that the Agora co-founders would sign the memorandum, which they did not, as can be seen in Table 5.8. In the Agora case, there was indeed an integration process which was assumed during a period of intended acquisition, which culminated in a failed integration and therefore an intended acquisition which did not come to fruition.

(c) Rome case inclusion

While the Pantheon organisation was indeed acquired by means of resource buy-out, after the acquisition of these resources, the organisation that once existed there no longer existed as the value offerings, human resources and all other parts of the organisation had been moved or bought. In other words, upon the acquisition by resource buy-out of Pantheon, Pantheon as a separate entity ceased to exist. Having said that, however, it is the case that team integration did not take place (as can be seen in Table 5.8) with a view to develop or commercialise a value offering as in Pantheon's case, the offering was mature enough to operate independently. However, the Rome case not meeting all three of the criteria explained the differences in the first five themes identified in both the Egypt and Greece cases. The Rome case was retained in the study as it allowed the research to consider differences with regards to the size and nature of the acquisition.

Given the discussion of inclusion of the cases, criteria and size presented above, the following section describes the collection of the study's data.

5.4.11 Data collection

According to Collis and Hussey (2014), data collection methods used in case study methodology often include interviews, observation and documentary analysis. The data collection of this study was undertaken through a series of semi-structured, in-depth interviews (Flick, 1998:368; King & Horrocks, 2010; Roberts *et al.*, 2003) with managers and/or leaders in the team scenario, which

were complemented by observation and preliminary investigation (Collis & Hussey, 2014). This section serves to discuss the issues of reliability, validity and generalisability as well as the preliminary investigation interviews and, finally, the data collection methods.

5.4.11.1 Reliability, validity, generalisability and trustworthiness

It is important to discuss the matters of reliability, validity and generalisability (Noble & Smith, 2015) and trustworthiness (Rolfe, 2006) of the cases selected.

(a) Reliability

Regarding the first, reliability is the accurateness and exactness of the measurement undertaken in a given study to the extent that the results of the research would be repeatable if the study were replicated (Collis & Hussey, 2014:52-53). One way in which reliability is demonstrated in interpretivist studies is if a certain observation or interpretation is made on separate occasions (Collis & Hussey, 2014). In this cross-case study, a finding was considered reliable if it was observed or interpreted in two or more of the cases; in other words, only cross-case findings were reported as the key findings of the study.

(b) Validity

Concerning the second matter, that of validity, this concept is defined as the degree to which an investigation assesses what the researcher wants it to assess and the findings reflect the phenomena relevant to the study (Collis & Hussey, 2014:53). The validity of the study was protected by selecting cases relevant to the study by considering its contextual criteria, which were as follows: a full or partial acquisition of an innovative organisation, which was integrated at the team level. One individual from an organisation that was not a business incubator availed himself to the study; he is the co-founder of a software start-up which was acquired by resource buy-out. The others who were willing to be interviewed work in business incubators in which the organisation acquires an equity stake in its incubatees – in other words, partially acquires a small organisation. The research subjects within the three cases were selected based on their managerial and/or leadership responsibilities in the small innovation acquisitions' integrations at the team level. The meeting of these contextual criteria in the selection of cases and research subjects allowed the researcher to uncover findings relevant to the phenomena of interest in the study.

(c) Generalisability

Furthermore, generalisability is the degree to which the findings of the research can be applied generally, that is to say to similar cases or to a larger population (Shi, Hodges, Drummond, Ahn, Li, Hu, Augustovski, Hay & Smeeding, 2010). As attaining conclusive generalisable results was not an objective of the exploratory study, the purposive sample set of three cases was considered satisfactory for the purposes of gathering the early findings in the field by interviewing the innovation acquisition champions of these cases (Cavaye, 1996; Perry, 1998). In interpretivist studies, it is

possible to gain an understanding of the phenomena at play in a particular setting with few cases and generalise these findings into similar settings (Collis & Hussey, 2014; Gummesson, 2000). In this study, the research questions posed aimed to provide some managerial and/or leadership considerations for integrating small innovation acquisitions at the team level; these considerations should thus be generalisable to similar settings.

(d) Trustworthiness

Firstly, to address the issue of triangulation, the researcher conducted preliminary interviews with research subjects that acquiesced to make themselves available to participate in the study. Specifically, in the Egypt and Greece cases, the colleagues of Ptah and Apollo were interviewed to get an additional viewpoint on these cases by an additional interviewee. Secondly, regarding checking the contribution of the research subjects, the verbatim data was continually revisited by the researcher when and where relevant to ensure trustworthiness of all key findings and cross-cases themes found as they would therefore be based on verbatim statements made by interviewees during their interviews. Given the discussion of trustworthiness in terms of triangulation and the members' contribution (research subjects), the preliminary investigation interviews undertaken in the study are undertaken.

5.4.11.2   Preliminary investigation interviews

Once the cases were chosen and approved by Stellenbosch University and the research subjects, initial investigations of the cases were undertaken. This involved the researcher becoming familiar with the context of each case through preliminary conversations and observation (Collis & Hussey, 2014). In two of the three cases, a preliminary interview was granted and conducted with an additional colleague of the innovation acquisition champion, which allowed the researcher more insight into the broader context of the case as well as the previously separate legal entities. These interviews were undertaken with Amun of the Egypt case and Demeter of the Greece case. These preliminary interviews were conducted using the same interview guide used with the innovation acquisition champions, Ptah and Apollo, respectively in these cases, which is detailed and discussed in the following section.

5.4.11.3   Data collection methods

Besides what has been discussed above, this section also serves to explore: qualitative data collection techniques; in-depth interviews; semi-structured interviews; the broad outline of the semi-structured interview designed and undertaken; its probing capability; both advantages and drawbacks of face-to-face interviews; and, lastly, the fieldwork that was assumed.

(a)   Qualitative data collection techniques

Several techniques are available for the collection of qualitative primary research, including: focus group interviews; in-depth interviews; conversations; and free association techniques. Firstly, in this

qualitative research study, a focus group interview was not utilised due to the constraint of having too few a number of research participants which had availed themselves. Secondly, the conversational technique was considered too informal to be suitable for such an academic study. Additionally, free association techniques were not expected to provide enough significant insights as this technique does not allow for probing by the interviewer. However, the primary research technique employed in this study was the in-depth interview, as it was considered most appropriate for the exploratory research problem at hand (Collis & Hussey, 2014; Zikmund & Babin, 2010).

(b)   The in-depth interview

In-depth interviews are one-on-one discussions or meetings, which share certain traits of conventional therapeutic techniques used by psychoanalysts. The technique of in-depth interviewing was employed in the study to question research subjects, allowing for engagement with the interviewer; furthermore, interviewees were given the opportunity to provide detailed answers centred on their personal knowledge and experience (Zikmund & Babin, 2010). The in-depth interview is an appropriate technique for case study research (Collis & Hussey, 2014). Morse and Richards (2002) characterise the diverse qualitative interview techniques, all of which are associated with in-depth interviews or phenomenological studies, as can be seen in Table 5.9 below.

TABLE 5.9: Techniques for personal interviews in qualitative research

Technique	Characteristics	Disciplines commonly used in
Unstructured/ interactive interviews	- Fewer questions that have been prepared beforehand - Researcher listens actively to the subject and endeavours to learns from them - Unanticipated, spontaneous questions are often asked - These interviews allow for probing	Ethnography and case studies
Informal conversations	Researcher is far more active than in interactive interviews	Phenomenology and ethnography
Semi-structured interviews	- Open-ended questions are devised and established in advance - Prepared probes are included (often italicised) - Unanticipated, spontaneous probing may also take place	Ethnography, grounded theory and phenomenology

(Source: Adapted from King & Horrocks, 2010:182-186; Morse & Richards, 2002:91)

Firstly, unstructured, interactive interviews are not wholly typical of emergent research designs (Creswell, 2016), such as in this study, as there were many prepared questions and anticipated probes, which can be seen in Addendum D. During the interviews, the researcher actively listened to interviewees to acquire learnings from them by using unanticipated probes and lines of questioning in response to subjects' statements and answers (Lillrank, 2012).

Secondly, informal conversations are commonly utilised in phenomenological studies; nonetheless, the informality of the interviewer-interviewee interaction led to it not being the selected technique. However, the researcher played an active part during interviews, which allowed for superior exploration for understanding subjects' experiences (King & Horrocks, 2010).

Moreover, King and Horrocks (2010) and Smith and Osborn (2008) assert that the final technique shown above in Table 5.9 – the semi-structured interview – is the most applicable and suitable form of qualitative, phenomenological, exploratory research studies.

(c)   The semi-structured interview

Semi-structured interviews, as can be seen in the table above, have open-ended questions (Millwood & Heath, 2000), which this study's measurement instrument (Addendum D) was mainly comprised of. Essentially, open-ended questions are not dualistic, one-word answer questions; instead, these measurement instrument items allowed the interviewees to elaborate on their perspectives and experiences with the phenomena studied (Creswell, 2016; King & Horrocks, 2010), which are, in this study, the post-acquisition integration managerial and/or leadership considerations relevant to integrating a small innovation acquisition at the team level.

Furthermore, prepared probes are also a distinguishing factor of semi-structured interviews (Chan, Fung & Chien, 2013; Morse & Richards, 2002). Moreover, the interview also followed the semi-structured interview format as some of the research subjects' answers and responses had already adequately answered upcoming items; thus, the need for elaboration on these items were not necessitated by follow-up questions, which was moderated by the researcher's discretion (King & Horrocks, 2010). In other words, the researcher endeavoured not to repeat items which had already been addressed in the research subject's answers.

(d)   Broad outline of the semi-structured interview

The broad outline of the study's phenomenological semi-structured interview is illustrated in Figure 5.3, which Creswell (2016) refers to as the protocol of the interview (Rabionet, 2011). As can be seen in the figure below, the interview is made up of three sequential phases of which the second has six consecutive parts. Regarding the first phase of the interview (items 1.1 through 1.8), Emory (1976) submits that interviewers ought to open the interaction with introductory conversation of a warm, courteous nature in an effort to put the research subject at ease and build rapport, which allows the parties to establish confidence in one another (Whiting, 2008:37). Furthermore, Creswell (2016) asserts that basic information concerning the interview is recorded along with a brief introduction to the research study is given. These steps are presented in the measurement instrument in Addendum D and further detailed in items 1.1 through 1.8 in Figure 5.3 below.

| PHASE 1: Meeting/welcome, build rapport, give information about the interview. Items: 1.1-1.8 | PHASE 2: Opening questions, content questions, planned probes and opportunities for unanticipated probes during the semi-structured interview. Items: 2.1.1-2.3.7. | PHASE 3: Concluding items and thanks for time. Items: 3.1-3.5. |

PART 2.1	Regarding the innovation acquisition champion
PART 2.2	Regarding the team and the acquisition
PART 2.3	Regarding post-acquisition integration process and the innovation acquisition champion's role

FIGURE 5.3: Broad interview protocol used in the study

(Source: Adapted from Creswell, 2016:129-132)

Phase one grouped items 1.1 to 1.8 together, which are the introductory and interviewee welcome, rapport-building and essential information items concerning the interview, as can be seen in the above figure. Item 1.1 served to welcome the interviewee, recognise them for their participation and convey the gratitude of the researcher for the contribution of time, effort and knowledge they made to the study. Item 1.2 and 1.3 reassured the subject that their anonymity would be retained in the writing up of the study and that confidentiality and ethics would be upheld. Item 1.4 gave the interviewee a brief overview of the purpose of the study. Additionally, Item 1.5 asks for confirmation of consenting to participate in the study while Item 1.6 requests consent to audio record the research subject's responses during the interview. Item 1.7 asks whether the subject has any additional questions or concerns before the second phase of items commences (see figure above). Lastly, the final item of the first phase reassures the interviewee that there are no right or wrong answers in the succeeding phases of the interview (Creswell, 2016). Moreover, the interview schedule or protocol discussion guide was designed to ask content questions so that the spoken responses of the interviewed party were recorded on an electronic device for later transcription (Creswell, 2016; Rabionet, 2011).

Besides, Figure 5.3 above expands on the protocol's second phase as containing additional opening questions, content questions and probes, which together form the "long interview protocol" Creswell (1998:113) refers to. The phase two items and prepared probes can be reviewed in Addendum D.

Regarding the opening questions of this phase, in Part 2.1, item 2.1.1 was the maiden question of the content questions; it is: "I understand that you are currently or have previously been involved in a team which was made up – at least in part – of an acquired start-up's employees, is that correct?"

This serves as an easy initial enquiry about the research subject, which is followed by more items asking more about the individual's title, managerial and/or leadership role, how they came to occupy the position and whether or not they have led and managed a post-acquisition integration of a small innovation acquisition into a team. In some instances in the semi-structured interviews, some of these items had already been covered by previous items and probes as well as the research subject's unsolicited explanation, which led the researcher to move on to other items. This part's items are further supported by prepared probes, demonstrated by italicising these prepared probes, such as regarding their managerial and/or leadership role: "*[H]ow would you describe it? How did you come to occupy this position? Were there other leaders in the team?*" These questions serve to get to know the research subject, give them an idea of the question format and further build rapport with the interviewer. Item 2.2.1 follows in a similar vein by asking whether there is an organisational strategy or policy for innovation exists, whether it applies to teams and, if so, whether the interviewee can offer a description of it.

Regarding the content questions and probes following the opening items of the second phase (Part 2.2, refer to figure above and Addendum D), the subsequent items were grouped in parts related to the subject matter of the items' content. As can be seen in the above figure, these content questions and probes' subject matters include:

● The innovation acquisition champion (Part 2.1; Items 2.1.1-2.1.4);
● The team and the acquisition (Part 2.2; Items 2.2.1-2.2.7);
● The post-acquisition integration process and the innovation acquisition champion's role (Part 2.3; Items 2.3.1-2.3.7).

Lastly, the interview's concluding items and thanks were grouped together in the third phase, which spanned item 3.1 through 3.5, served to resolve the interview constructively. Firstly, they offered the subject the chance to add any remaining comments on assorted keywords of the subject matter, including:

● The post-acquisition integration process within the team;
● The innovation experiments and the innovation acquisition champion's role;
● Any final insights about integrating small acquisitions within the team while developing their innovation.

Subsequently, a last opportunity was given for the research subject to add concluding comments, about any field or topic, and the final item of the measurement instrument, item 3.5, which thanked the interviewee for their contribution and once again accentuated the gratitude of the interviewer.

(e)   The capability of probing

The semi-structured, in-depth interview (Flick, 1998:368; Roberts *et al.*, 2003) gave the interviewer the chance to probe research subjects on their responses to collect the most exhaustive and detailed responses possible during the interview (Zikmund & Babin, 2010). Probing was employed where interviewees did not respond to the question satisfactorily in terms of whether it met objectives of the given item was intended to achieve. Besides, bias was a conceivable consequence of probing as new, unplanned for prompts and questions were insinuated in the verbal exchange. These may have created a slight deviation in the interview's direction; therefore, interviewer neutrality was the particular purpose of the probe (Bryman & Bell, 2003; Emory, 1976; Hill & Wright, 2001). The interviewer was aware of various probing styles and devices to execute probing neutrally and effortlessly; for instance, a pregnant pause, once again repeating the question or an unprejudiced comment on the response given stimulated interviewees to respond more fittingly (Cooper & Schindler, 2003). Therefore, probing was employed during the interviews to address fully the exploratory overarching research question of the study.

(f)   Advantages and drawbacks of face-to-face interviews

The interviews conducted in the study were undertaken in face-to-face settings, which advantage primary research in a number of ways. Face-to-face interviews have the benefits of superior response rates, the capability of probing, the chance to explain ambiguous or vague questions (items) respondents may have misunderstood or misinterpreted and, finally, interpret participant reactions – be it facial, verbal or body language – which can be perceived first-hand and recorded in writing with an accompanying notebook if significant (Persaud, 2010). These advantages and disadvantages can be seen in Table 5.10 below.

TABLE 5.10: Face-to-face interviews' advantages and disadvantages

Advantages	Disadvantages
Higher response rate (percentage) than is common in self-administered surveys	Research subjects are required to supply answers in real time, which may possibly decrease accuracy
Lessens the number of 'do not know' responses as probes can be used to counter and request more insight	Interviewers require excellent social skills to achieve cooperation and trust between themselves and their research subjects
Interviewer has the opportunity to clarify questions which the subject does not immediately understand	Poorly undertaken interview administration as well as interviewer bias may result in errors, such as measurement error
Acquire useful additional information, such as body language and other reactions	Definitively higher cost in terms of time, effort and money (among other things)

(Source: Adapted from Persaud, 2010:633-637)

Regarding the disadvantages of face-to-face interviews, it is possible that subjects may feel providing responses on the spot does not allow for sufficient time to reflect on the questions asked, firstly; this drawback may reduce the accuracy of data gained. Secondly, interviewers require good social skills to stimulate the research subject's trust and cooperation without which a face-to-face interview may suffer from subject mistrust and a lack of cooperation from them (Persaud, 2010). Thirdly, if items are not correctly administered, bias and error can be input into the study, which may lead to less valid, reliable data collected. Moreover, a major disadvantage of in-depth, face-to-face interviews are the levels of high costs in terms of committing resources, including money, time and effort (Persaud, 2010).

The discussion guide used in the primary research conducted in this study was created by considering the primary research methodologies discussed above, namely: qualitative data collection techniques; the in-depth interview; the semi-structured interview; broad outline of the semi-structured interview; the capability of probing; as well as advantages and disadvantages of face-to-face interviews. The discussion guide can be referred to in Addendum D on page 324.

Given the discussion of the design of the study's interview guide in this section, the measurement instrument was submitted and approved by the DESC; the proof of ethical clearance can be referred to Addendum A on page 307. The researcher implemented the in-depth, semi-structured phenomenological interviews with the innovation acquisition champions identified in section 5.4.3.1(a) from July to August 2018. The execution of the primary research, namely the fieldwork, is detailed in the following section.

(g)   Fieldwork

The actual collection of data was undertaken by means of a measurement instrument to analyse data for results and conclusions to be drawn (Zikmund & Babin, 2010). In this study, a single researcher undertook the fieldwork. All the approximately hour-long face-to-face interviews were audio-recorded on a portable mobile device. Although these recordings were transcribed verbatim by the researcher for the purposes of data analysis, they have not been made available to this study in the addenda as these transcriptions compromise the anonymity extended to the research subjects. Thus, those relevant quotations which do not explicitly or implicitly identify participants, their colleagues or organisations have been extracted and quoted to add depth to the cross-case thematic findings of the study.

Given the discussion of data collection methodology of the third stage of case study methodology in this section, the study utilised in-depth phenomenological, semi-structured interviewing as this was deemed to be the most suitable inquiry method for the exploratory case study (King & Horrocks, 2010). The analysis of the qualitative data that emerged from the fieldwork is dealt with in the next section.

5.4.12 Data analysis

Regarding data analysis in case study methodology, there are two broad options available for the research: within-case and cross-case. As the study comprised of three cases, cross-case analysis was undertaken by interpreting the resultant data of the primary research, which consisted of transcribed verbatim answers of the interviewees. The researcher then drew out and described key findings found, particularly with a view to uncovering phenomena, which was the main aim of this phenomenological study (Collis & Hussey, 2014). Qualitative data collection often culminates in large, complex texts that are the direct result of focus groups and interviews (Tong, Sainsbury & Craig, 2007) as well as written documents and field notes (Ritchie & Spencer, 2002:176). Qualitative data analysis – more specifically, interpretative phenomenological analysis – was assumed to identify key findings within the distinctive cases and themes across the interviews, which were written up and summarised in the next chapter, which focuses on findings. The interpretation of the verbatim data took place by means of coding, which is recognised as the most utilised point of departure in analysing qualitative data (Bryman & Bell, 2003:435). More specifically, interpretative phenomenological analysis (IPA) took place.

5.4.12.1   Qualitative data analysis

Prior to the data analysis stage, Miles and Huberman (1994) put forth that the initial stage comprises a full read-through of all the texts (Miles & Huberman, 1994); while examining the verbatim transcriptions of the interviews, the researcher noted her early thinking about the research questions and the possible strategies she might have employed in coding the raw data to arrive at key findings (Miles & Huberman, 1994). Furthermore, the qualitative data analysis process consisting of four stages developed by Bryman (2012:576-577) was used to frame the analysis of the raw, transcribed text and was undertaken as follows:

1. Stage one: Read over initial array of transcripts, field notes and any other relevant documents.
2. Stage two: Read over it once again.
3. Stage three: Code the raw text.
4. Stage four: Relate general theoretical ideas to the codes and text.

These stages are also presented in Bryman and Bell (2003:435-436). Firstly, the text in its entirety was read over by the researcher, which was necessary to gain a general understanding of the broad subject matter and discover findings (Bryman & Bell, 2003:435; Gibbs, 2011a). The value of fully reading through all raw data is consistent with the argument of Miles and Huberman (1994). At the culmination of this stage, the researchers are advised to make note of those general areas of interest that strike them as significant, relevant and prominent (Bryman, 2012:576; Gibbs, 2011a), which was undertaken by the researcher of the current study.

Secondly, the researcher returned to the original raw data once again and reviewed it in a scrutinising and detailed manner by marking the text with highlighting, underlining and circling (Gibbs, 2011a). This manner was demonstrated by the researcher making as many relevant notes as possible in the raw text's margins insofar as these notes regarded the important remarks made by research subjects and observations made by the interviewer on the former's behaviours during the interviews (Bryman & Bell, 2003:435-436). Bryman (2012:576-577) puts forth that these early notes may be very basic in nature, such as identifying prominent and often occurring keywords, which together make up an index of terms that assist in interpreting and theorising based on the data; this is known as coding.

5.4.12.2   Coding

According to Gibbs (2011a), coding is the identification of ideas, concepts and themes within the raw text and naming them clearly so as to represent the finding or phenomenon. Analysing the data by means of coding, which is one key mechanism of analysing the qualitative data (Bryman, 2012:577), was undertaken in the study by determining the categories, relationships and assumptions that contributed to the research subjects' worldviews (Basit, 2003). As a result, the raw data was transformed into meaningful parts by coding key findings in a systematic and scrutinising way and presenting verbatim quotations from the interviews in the findings chapter (Basit, 2003).

The third stage of qualitative data analysis is one in which Bryman (2012:577) enjoins that the codes should be reviewed to avoid the following coding pitfalls: having redundant phrases or words describing phenomena, in which case codes are consolidated; having codes that already exist in the secondary research, in which case existing codes or keywords are used; and, lastly, not noticing connections that exist between the codes, which perhaps represent associations or causation factors, in which case these should be categorised and sub-categorised accordingly. With the knowledge of these common pitfalls, the researcher consciously avoided them in her coding of the raw data. Gibbs (2011a) regards this as the systematic coding of the raw text and calls for awareness of the potential connections, which are to be grouped together. Moreover, qualitative researchers may find that this stage culminates in a plethora of codes but these can be reduced in number at the later stage (Gibbs, 2011a).

The last stage entailed linking the general theoretical ideas gained throughout the coding process with the data and codes (Bryman, 2012:577). At this juncture, the researcher generated some broad theoretical ideas that had been interpreted from the data and attempted to ascertain connections linking concepts, findings and categories the research developed. Coding was undertaken in the systematic manner and process as outlined in this section with the aim of uncovering key findings, especially thematic findings across the cases.

5.4.12.3   Thematic coding

Gibbs (2011b) advocates for thematic coding as researchers are essentially searching for central themes through the review of the raw primary data, which become thematic codes and require thematic analysis. There are a number of types of thematic analysis: grounded theory; interpretative phenomenological analysis; template analysis; framework analysis; analytic induction; and theory-led thematic analysis (O'Neil & Koekemoer, 2016). As the research approach of this study is phenomenological, the researcher utilised this appropriate form of thematic analysis. The phenomenological analysis undertaken comprised of listing and classifying the important responses recording during the in-depth interviews and interpreting the meanings of statements. This allowed the researcher to ascertain the 'essences' of the phenomena (Creswell, 1998:52; Dahlberg, 2006:11; Patton, 2002:363). Moreover, the identified phenomena were linked back to the research questions, which framed the study (Creswell, 1998; Patton, 2002) in the findings chapter.

5.4.12.4   Interpretative phenomenological analysis

Moreover, according to Gibbs (2011b), interpretative phenomenological analysis is a coding approach that encompasses characteristics of other methods, particularly owing to the iterative approach it takes. IPA is a type of qualitative analysis that seeks to explore, understand and interpret the meanings of subjects' experiences, state of mind and their worldviews or perspectives (Smith & Osborn, 2004), known in phenomenology as their 'essences' (Creswell, 1998:52; Dahlberg, 2006:11; Patton, 2002:363), which has been discussed above and in section 5.4.2.5 of this chapter. This type of analysis also required the researcher to conduct interpretative work in an effort to make sense of the words, stories and events which the interviewees had related to her. IPA is also significantly influenced by phenomenology and, thus, the term interpretative phenomenological analysis is appropriately descriptive of this type of analysis, as it encompasses both interpretation and phenomenology (Smith & Osborn, 2004).

In terms of the IPA conducted in the primary research of this study, the analysis started by interrogating case studies in detail, in order to submit intimate portrayals of personal experiences within each case (Smith & Osborn, 2007). In line with the norm of research subjects usually numbering between five and ten (Smith, 2004), the current study had a sample size of five interviewees. According to Smith and Osborn (2004), IPA is also consistent with the use of purposive sampling (Cavaye, 1996; Creswell, 1998:118; Perry, 1998), which was employed in this study, as discussed in section 5.4.3.1. Moreover, IPA researchers are interested in cognitive and emotional elements of the phenomena under exploration, which is to say they are concerned with uncovering what research subjects think and feel about the experiences they relate (Smith & Osborn, 2004). In addition, IPA researchers collect data through the vehicle of the semi-structured interview, which has been designed for the study (see Addendum D) is discussed in section 5.4.3.3, and which is audio recorded and transcribed verbatim (Smith & Osborn, 2004). Furthermore, IPA is an apposite

type of analysis in studies where the research problem is novel or suffers from a lack of prior investigation, where the issues explored are either complex or ambiguous and in which the overarching themes of process and change are under consideration (Smith & Osborn, 2004). Due to the aforementioned factors, IPA was considered a relevant form of data analysis to the current study and the researcher utilised IPA to conduct the analysis, which is further discussed in the following section.

5.4.12.5   Analysing the data using interpretative phenomenological analysis

This section discusses the systematic approach which IPA requires in its data analysis and which the researcher of this study implemented, in accordance with Smith and Osborn (2004). The researcher searched through the first of the interview transcripts and identified findings that arose in it. Thereafter, the researcher forged connections, which led to the isolation of superordinate findings for the first case. Once the initial case had been analysed, the researcher moved on to the second and third, and repeated the above IPA analysis strategy until all three cases had been systematically searched through. At this juncture, the researcher then sought patterns between the cases with the goal of finding master themes across the Egypt, Greece and Rome case studies, which are presented with quoted examples of each theme to support it (Smith & Osborn, 2004). Thus, the data analysis employed in the case study primary research design assisted the researcher in arriving at key thematic findings across the cases.

5.4.12.6   Writing the cross-case study findings

Proceeding the IPA of the data, which eventuated in key findings within each case and thematic findings across the cases, these findings were written up in the sixth chapter. As this study followed the interpretivist paradigm, quoting from the raw, transcribed data extensively is significant (Collis & Hussey, 2014). In the findings chapter, comparisons across the cases were drawn and alluded to with a view to identifying common phenomena across the cases (Collis & Hussey, 2014). In terms of employing the interpretative phenomenological analysis approach, once the researcher has presented the themes found across the case studies, she proceeded to convert the list of themes into a consolidated narrative account by introducing the topic and theme in turn (Smith & Osborn, 2004). In this account, themes were described as well as supported with verbatim extracts taken from the transcribed interviews with research subjects; in this manner, participants were given a voice or presence in the written-up sixth chapter of the thesis (Smith & Osborn, 2004).

5.4.13 Ethical considerations of the study

In all research studies necessitating direct interaction with natural persons, conducting primary research ethically is important to add to protecting the dignity, safety, rights and well-being of actual and potential participants in economic, social, behavioural and educational research undertaken (*Human Research (Humanities) Ethics*, 2018). As this study did not solely involve the consultation of secondary data in a literature review format, primary research was undertaken in the manner and

methods described in this chapter, in which the participation of respondents was made necessary by interviews (DESC, 2012).

The Departmental Ethics Screening Committee (DESC) of Stellenbosch University has outlined a process by which university-affiliated studies are required to adhere. The procedure determines the level of risk associated with the research methods employed. Studies categorised as medium or high ethical risk undergo further screening before gaining ethical approval. To mitigate ethical risk, clarifications or small modifications may be necessitated for approval (DESC, 2012). Studies that are judged to be of minimal or low risk, ethical clearance is granted early on. Notwithstanding, these studies are restricted to the following only: studies merely undertaking secondary research analysis; those including market research surveys with uncontentious subject matter; uncontroversial research foci and objectives; and studies only involving mature, adult participants, to protect vulnerable youths (DESC, 2012).

As the current research study required research subjects to reveal their identities to the researcher and her supervisors for the purposes of informed consent to the study but not to publish or allude to their identities in publicly available publications, this study was considered of low risk. The researcher also informed the participants in the study that they may stop participating in the study at any time. The ethical clearance of the thesis can be referred to in Addendum A on page 307; the ethics reference number of this study is ONB-2018-6702. Given the ethical considerations of the study discussed in this section, the following section deals with researcher bias.

5.4.14 Researcher bias

In qualitative studies, researcher bias is ever-present (Creswell, 2016). Bias can be defined as any inclination that prevents unprejudiced deliberation of a question and can transpire in any research phase, including research design, the collection of data, the analysis of the data and writing the findings (Pannucci & Wilkins, 2010). Researcher bias arises when a researcher's personal biases or the assumptions they regard as self-evident, which they are unable to set aside, are transferred into the research by means of their interaction with research subjects, tarnishing study procedures or vitiating the techniques used for collecting data (Onwuegbuzie & Leech, 2007).

The nature of qualitative analysis recognises that the researcher, often without meaning to, insinuates their personal beliefs, identity, values and attitudes into the research process (Staller, 2010). Yet, the current study attempted to moderate such a bias through framing the study by undertaking secondary research from a range of sources, the resulting findings of which were synthesised. Furthermore, the study's literature review made a significant contribution to the study insofar as it became integral to forming the measurement instrument, broadly due to the research design that was characterised by qualitative inquiry. In contrast, quantitative studies usually test a model or hypothesis, which is generally known from the inception of the research, whereas

qualitative studies are largely composed of original or emerging designs of primary research techniques. Therefore, by utilising a broad frame of reference, researcher bias was moderated (Creswell, 2016).

A flawed research design is one source of researcher bias (Pannucci & Wilkins, 2010). According to Smith and Noble (2014), selecting a research design appropriate to meet the aims of the study as well as articulating the rationale behind the methodology chosen can reduce researcher bias. As primary research studies characterised by exploratory, qualitative research designs are emergent and should thus be argued for and justified by the researcher (Collis & Hussey, 2014); the appropriateness and reasoning behind the emergent primary research methodology undertaken in this study was articulated and argued for in section 5.4.2. In addition, ethics committees, such as the DESC, play an important role in their consideration of the appropriateness of the proposed research design as well as methodological approaches in addressing the research question being explored (Smith & Noble, 2014). As this study has been submitted to the DESC for ethical approval, which has been granted (see Addendum A on page 307), this role has been fulfilled; that is to say, the research design of the study has been deemed appropriate and able to culminate in answers to the research questions it posed. The justification of the research methodological approaches taken in this study has been undertaken with a view to motivating the research design and ensuring that it is devised in such a way as to gain valuable, real insights from the lived experiences of the research subjects.

In qualitative studies which are not confirmatory – such as exploratory studies that might be considered precursors to studies of a confirmatory nature (Sasaki, 2000) – researchers structure their interviews with open-ended questions that seek to reveal expansively the worldviews, phenomena and perspectives of research subjects (Chenail, 2011; Qu & Dumay, 2011). Bias management is a critical challenge for qualitative researchers who utilise interviewing as a data collection technique, which can be addressed with a pilot study (Chenail, 2011). Such a pilot is a means of testing a specific research instrument before employing it more widely (Baker, 1994). Furthermore, it is advantageous in that it provides the investigator with sufficient prior warning of potential weaknesses in the research instrument or protocol, such as where it may be difficult to follow, inappropriate or overly complicated (van Teijlingen & Hundley, 2001). The data collected in the pilot studies are typically excluded from the data analysis of the main study (Chenail, 2011).

In this study, one pilot interview was undertaken with an anonymous research subject who acquiesced to be interviewed in late June 2019; this research subject was a project manager operating in the innovation milieu. It was during this interview that the researcher had the opportunity to test the measurement instrument, the semi-structured interview guide (see Addendum D on page 324). The interview lasted just over an hour and the interviewer had the opportunity to test the semi-

structured guide. In this interview, the researcher focussed on covering the significant thematic items in the interview guide, building rapport with the interviewee and probing for the relevant, sought after information. Thus, this interview provided the researcher the opportunity to conduct the interview, with which she was satisfied and considered ready to deploy in the main part of the research, namely the conducting of interviews with the sample of research subjects. As the interview progressed, the investigator realised that while the research subject had experience and knowledge of integrating small innovation acquisitions at the team level post-acquisition, he had very little (if any) direct experience and knowledge of the management and leadership thereof. In addition to this interview being undertaken as a pilot study for the research, which is typically excluded from the data analysis (Chenail, 2011), this research subject did not fully meet the criteria for being considered in this study; as such, the collected data was excluded from the main part of the study and was not analysed.

5.5   CONCLUSION

The current chapter considered the study's research methodology, which explored whether and which managerial and/or leadership challenges exist that are posed by the integration of small innovation acquisitions at the team. The research design specifically addressed this research purpose, which was deployed to serve the identified knowledge gap. Moreover, an exploratory cross-case study was assumed by means of qualitative, in-depth, semi-structured interviews to create a cross-case report. Phenomena were searched for within the primary raw data – verbatim transcriptions of the interviews – by means of data analysis using manual thematic interpretation.

In the following chapter, the cross-case study findings are presented, which emerged from the data analysis methodology discussed. The structure of the cross-case study assumed a three-part configuration. Firstly, the cases are presented by considering the preliminary investigations undertaken as well as offering descriptions of the roles and titles of each research subject, innovation acquisition champions, are presented. Secondly, a summary of key findings within each case, particularly phenomena, of the in-depth, semi-structured interviews are presented according to the IPA discussed in the final two stages of the exploratory cross-case study methodology. Specifically, as the current study followed the interpretivist paradigm, extensive quoting from the primary verbatim interview findings was undertaken to add depth to the qualitative findings (Collis & Hussey, 2014). Thereafter, the findings that occurred across two or more cases are identified and discussed as the study's key themes.

CHAPTER SIX

FINDINGS

6.1   INTRODUCTION

The study had the aim to explore managerial and/or leadership considerations posed by the integration of small innovation acquisitions (with more than one individual) at the team level. In order to arrive at relevant findings pertaining to the research problem, secondary research was proceeded by undertaking primary qualitative research. The primary research methodology was detailed and justified in the previous chapter and culminated in an exploratory cross-case study arrived at by means of a series of qualitative, in-depth, semi-structured interviews, which were transcribed verbatim and underwent interpretative phenomenological analysis by the researcher to uncover key thematic findings across the Egypt, Greece and Rome cases.

Thus, this chapter presents the case studies and the key findings uncovered through the primary research conducted. The outline of the findings chapter is as follows: firstly, the three cases are introduced and described; secondly, the key findings are presented and discussed for each case; thirdly, the common and idiosyncratic thematic findings across two cases or more are isolated and detailed; and the chapter culminates in final remarks.

6.2   CASE STUDIES

The primary research included three ventures, all of which enjoy full confidentiality in the study. Therefore, as previously mentioned in the research methodology chapter, the cases will be referred to as "Egypt", "Greece" and "Rome". To protect the acquiring organisations' identities, they are anonymously referred to as "Nile", "Ilissos" and "Tiber"; in addition, the small innovation acquisitions of the study are respectively referred to as "Sphinx", "Agora" and "Pantheon". The anonymity of the research subjects' and the stakeholders they have mentioned in the interviews have also been extended full anonymity by means of referring to them by pseudonyms as well. Thus, this section introduces and describes the Egypt, Greece and Rome case studies and discusses relevant components thereof by means of sub-sections per case that separately deal with and describe the following: pseudonyms used to refer to anonymous stakeholders and entities; background information regarding the acquirer; background information regarding the acquired; titles and job descriptions of the innovation acquisition champion; and a discussion surrounding the integration itself.

6.2.1   Egypt case

The first case for consideration in this study is referred to anonymously in this study as the Egypt case. As there are many stakeholders and entities of relevance to the first case study, they are all collectively encompassed under the Egypt case title, for ease of reference; the pseudonyms used to

refer to these various entities and stakeholders are dealt with in the following section. Thereafter background information is presented on Nile and Sphinx, as well as a discussion of the title and job description of Ptah; the section closes in a discussion of the Nile-Sphinx integration.

6.2.1.1 Egypt case pseudonyms

While the legal entities and natural person stakeholders in the Egypt case have been respectively presented in Table 5.6 and Table 5.7 and discussed, the relevant pseudonyms are briefly detailed in this section. The Egypt case includes the partial acquirer, Nile, and the partially acquired organisation, Sphinx. The innovation acquisition champion is known as Ptah. His colleagues are indirect stakeholders of the Nile Sphinx initiative; they are the managing director of Nile, Amun, and the commercialisation manager, Osiris. The co-founder and other team members (direct stakeholders) of the Sphinx organisation are Isis, Nun, Hathor and Tawaret. Given the discussion of entities as well as the direct and indirect stakeholders of the Sphinx initiative, the organisation which acquired a 15 per cent stake in Sphinx will be introduced in the next section.

6.2.1.2 Background information regarding Nile

Nile is a market-orientated technology incubator which provides tailored support to the highly-skilled organisations in which it holds stakes throughout their development journeys, from the conceptual early stages to the market launch. In exchange for providing services it offers as an incubator, Nile requires an equity stake in return. The size of the equity stake (percentage) is agreed upon by the innovators and incubator management. This section serves to provide background information of the Nile organisation, including: the Nile organisational model and incubation process; the team development that takes place during this process; the entrepreneur complement programme it uses for best results; and the mentorship component it offers to incubated organisations.

(a)   The Nile organisational model and incubation process

Nile has an incubation process that consists of five phases. Firstly, there is the internal funding phase. This entails signing the organisation on, preparing it for funding, undertaking due diligence and securing early fundraising, which entails presenting its incubated innovator(s) to the Nile fundraising committee. If the committee approves, Nile provides the organisation with seed funding of over half a million Rands.

The second phase is external funding. Amun describes this phase as the "genesis" of the organisation and the partnership of Nile and the incubated organisation, which can be understood in other words as the inception of this partnership. According to Amun, this stage often entails establishing organisations around the technological value offering the innovator has conceptualised or invented. Establishing an organisation around the innovator encompasses ensuring that the technology is appropriately ready so that further development within Nile can lead to a market-ready

technology, even with limited funding. Regarding the phase in which Nile requires and takes an equity stake in its incubated organisations, Amun says the following:

> "Typically, we won't take equity in the [external funding] stage, we will go to them after [external funding] and say, 'Right, if you want us to help you further, we're going to take an equity stake.'"

Thus, at the conclusion of the external funding stage, Nile has a discussion with the organisations it is assisting and stipulates that it will require an equity stake, which is typically between 15 per cent and 25 per cent to continue the organisational relationship. Moreover, the second phase prepares the incubated organisation for the subsequent round of funding, which is essentially the third phase of the Nile process. Securing additional funding signifies the inception of the technology development phase.

The main objective of the third phase, technology development, is to begin forming an organisation that is commercial and market-orientated by reducing the technology risk through product development and consumer validation. At the end of this phase, the incubated organisations emerge with a validated value offering, which Amun refers to as "a commercially relevant product". The final phase of the Nile process involves launching the product in a test market first, which entails phase four, and, subsequently, a foreign market, which is phase five.

According to Ptah, the length of this phased process "depends on what stage [the organisations to be incubated] come in at and it also depends on the industry or the device itself." In other words, the amount of time that it takes an organisation incubated by Nile to get to market is contingent on its maturity, industry and the value offering. Ptah says, "So, it just varies. There's six months all the way through to five years." Therefore, the process detailed above varies in length by organisation but should be complete in a minimum of half a year and a maximum of five years. Given this discussion of the Nile process and its length, the dynamic approach Nile takes towards its integrations with incubated organisations is discussed below.

(b)   The dynamic Nile integration process

The integration process of Nile deviates from that described in the literature, which explicates the integration process post-acquisition as a highly structured and formulaic process and which has been detailed, described and discussed in the literature review in the third chapter of this study (Birkinshaw *et al.*, 2000:395-396; Galpin & Herndon, 2007:77; Gomes *et al.*, 2013:14-28; Haspeslagh & Jemison, 1991:122-135; von Krogh, 2016:307-308; Wuebben, 2007:39-51). Thus, the primary research of this study has found the Nile integration process more dynamic in nature than the more structured processes found in the secondary research. This is evident in the Egypt case, as integration of the organisation into the equity stake acquirer commences prior to Nile taking an

equity stake, whereas the literature describes the integration process as taking place after the acquisition has been contractually finalised (Wuebben, 2007).

Amun provides context to this dynamism by acknowledging that Nile has learned hard lessons from its past experiences of acquiring equity stakes in small organisations where Nile's workforce has not worked well with the people of these organisations. He details this in the statement below:

> "We've been around the block a few times so we realise that there is no point in getting involved in businesses where we can't work with people. We have been down that road, we have burned our fingers... It's unpleasant."

In this statement, it is clear that Nile does not acquire equity stakes in organisations unless the Nile employees are familiar with the organisation's people. To ensure that Nile can gain a level of familiarity with the human resources of its incubated organisations before it considers taking an equity stake in these organisations, it does the following, according to Amun:

> "Look, we don't take equity stakes in our businesses straight up front. We work with them for a while. Typically, we ensure that we integrate with them – we know we can work with them, we build a relationship."

In the above statement, Amun details how Nile builds on its relationship with the incubated organisations during incubation but before taking an equity stake. It is clear that the incubator uses the time during the first two phases of the Nile process, namely the internal and external funding phases, to work with the people of the organisation. By working closely with them during the first two phases, Amun says that a relationship is built between the parties, which allows Nile employees to know whether or not they can productively align with the organisation's employees. Furthermore, Amun states, "we ensure that we integrate with them"; in this statement, it is clear that working closely with the organisation for the duration of the initial Nile process phases allows for a level of integration to occur prior to taking an equity stake in the organisation. Thus, integration between Nile and its incubated organisations takes place in relationship-building prior to the equity stake being taken and the integration continues in the technology development phases during which the parties work together to develop commercialisable value offerings.

The dynamism that is present in the Nile integration process insofar as it deviates from the more formulaic process found in the literature has been detailed in this section in the description of Nile's alternative approach to its equity stake acquisitions, in which it integrates incubated organisations before taking a 15 per cent stake in the organisation, which is preceded by the technology development phase in which product development takes place. In the following section, the team development process and approach that Nile assumes, which takes place after external funding has been secured and Nile has taken an equity stake in the organisation, is discussed.

(c)   Team development

Amun asserts that single innovators are usually referred to Nile or approach the incubator of their own volition. He stresses that the majority of these individuals are technically skilled and driven and have little to no interest in becoming an entrepreneur. Thus, once enough funding has been secured during the first two phases of the process discussed above, Nile says, "Okay, let's go and build ourselves a team," according to Amun. It is at this stage when Nile assumes the challenge of sourcing and hiring suitable professionals to make up the team around the innovator. It is salient to note that the team building Amun is referring to here regards peopling tis group with the relevant individuals and skill-sets, which is different from the concept of team-building discussed in section 2.3.5.2a.

Amun emphasises the importance of building these teams of the right skilled people on board, as he says, "The competitive advantage that you build is within your team so you need to build that team. So, that team becomes a techie team." In other words, Nile views technically skilled teams as critical foundations for building an organisation's strategic advantage that can allow it to compete in the market. At first, this team is focused on developing the product to make it market ready; however, Nile also saw the need for adding a person to the team that has a commercial focus and possesses a broad skill-set across organisational functions. For this reason, Nile created an entrepreneur complement programme, which is detailed in the following section.

(d)   Entrepreneur complement

As Nile saw a need for adding an entrepreneur to the team, the incubator has recently started an internship programme for experienced and entrepreneurially-oriented individuals with broad skill-sets to become team members. The value of these entrepreneurs is in their ability to complement the technical skills already present in the team. According to Amun, these individuals should apply a strategic mindset to the organisation, which will enable them to see the areas and functions which a given organisation is lacking in and work to support those functions. Nile is currently developing an entrepreneur-complement candidate pool, which it can draw on for future organisations. In addition to the entrepreneur complement programme, Amun also emphasises the importance of a mentor to counsel and advise incubated innovators and their team members.

(d)   Mentor

Amun is currently championing a mentorship programme for incubated innovators to be counselled and advised by mentors who have industry experience as well as a moderate degree of entrepreneurial experience and understanding. Therefore, recently, Nile is increasingly introducing a mentor to the team, especially to the innovator, as early on in the Nile process as is possible. In the few cases in which this individual has been present, it has been successful; however, Nile does not currently have a standardised process in place that matches every innovator or leader in the

incubator with a mentor, although this is the vision for the programme. A factor that restrains the maturity of the mentorship programme is that while many people have availed themselves to Nile to be mentors, Amun does not feel that there are many he would formally present to his organisations as he finds the candidates lacking. Given the above description of the role the mentor plays in the Nile ecosystem, the following subsection presents background information on the Sphinx organisation.

6.2.1.3 Background information regarding Sphinx

Sphinx is a medical innovation start-up that has been operating since 2014. However, the organisation is still pre-market as it has not yet received enough funding to go forward with a robust product development process, which would constitute the technology development phase of the Nile process. Thus, Sphinx is currently in the second phase of the Nile process.

6.2.1.4 Title and job description of Ptah

Ptah works as a project and commercialisation manager at Nile. He describes the role as "to make sure that as they're developing – whatever it is that they need – we're developing it towards a goal and making sure that... you don't deviate too much – that you can always bring it back to that goal." He describes his role as ensuring that his team members are constantly keeping the end goal of the venture in mind and acting in the best interests of achieving it. Moreover, Ptah goes on to say, "It's keeping them on track but also sometimes there are a lot of resources gaps. So, I try to support them in that when I can." He manages the ventures he works with in a supportive capacity.

Amun similarly describes Ptah's role as essentially being Sphinx's "commercial support", which refers to Ptah's role in getting Sphinx to market by taking them through the stages of the Nile process. Amun also alludes to the significant involvement Ptah has with the Sphinx initiative, emphasising the "in" in the following statement, "He's… he's *in* that dynamic." Thus, Ptah is intimately involved with the Sphinx innovation initiative and has project management responsibilities in the Egypt case.

6.2.1.5 Nile-Sphinx integration

When asked about the background of the Nile-Sphinx case, Ptah refers to his personal involvement as he had joined Nile as an employee after the initial pre-acquisition conversations had taken place:

> "So, I joined Nile in Feb last year [2017]. They initialised discussions for that the year
> before [2016]. There were four people involved with that company..."

At the time that Sphinx was being introduced into the Nile incubator, before the equity stake was taken, it was 2016. Once Sphinx had joined Nile officially, it was early 2017. Ptah joined the case as the project commercialisation manager in February 2017. At the time, Nun was the only Sphinx team member doing the work of the initiative full-time. Therefore, Nun was at the forefront of the

organisation in conjunction with Ptah for a number of months. Ptah describes this in the following words:

> "No, only one of them was full-time involved and she was doing all the pitching and that kind of thing. She is the one who was at the forefront, certainly of the engagement between Nile and them to get them [Sphinx] on board. "

Nun was driving the engagement between Nile and Sphinx as a part of her dedicated role on the Sphinx case while she was based in Cape Town; the other three co-founders were based in Johannesburg at the time. She had taken on the work of "onboarding" (slang used in Nile that refers to integrating team members) the other Sphinx team members to the Nile process in her liaisons with them. Ptah describes this and how the cooperation was undertaken during the early stages of incorporation:

> "She was in Cape Town. At the time, [the rest of them] were all in Jo'burg. So, they ran the weekly meetings and she would have to sell the [Nile] process there... So, she would then sell us to them and that's how the negotiation went."

Given that the Sphinx team's majority were and still remain part-time contributors to the Sphinx initiative, the team holds weekly meetings in which the Sphinx co-founders discuss their progress. During early 2017, the weekly meetings largely focused on bringing the Johannesburg-based team members round to the Nile process. These meetings served as important times to align the four co-founders' views on Nile and on Ptah. As mentioned, Nun was at the forefront of driving engagement between Nile and Sphinx to gain alignment between all stakeholders.

However, Nun came increasingly under pressure to finish two incomplete Master's degrees. She required an income to do so and so secured a part-time job, which Ptah details in the following:

> "She was under pressure to get her Master's degrees done otherwise they roll over and there are cost implications… She [had]… reached the point where she said, 'I need to go make money.' She managed to get a part-time gig."

Thus, Nun left her dedicated role on the Sphinx initiative to earn an income through part-time employment that would support her while she completed her Master's degrees. Ptah describes how her involvement with the Sphinx initiative changed after she had secured this employment in the following quote:

> "Then, to get cash, she did a part-time gig as well, which took a lot of her attention away… and one of the other partners came down [from Johannesburg]."

In the above, Ptah explains how Nun's attention was diverted by her new part-time job and from the Sphinx initiative. As she was no longer as available to the Sphinx initiative as she once had been in

her dedicated, full-time role as CEO, one of the other Sphinx team members relocated from Johannesburg to Cape Town to take Nun's place. Ptah details this change in the following account:

> "So, [Isis] took over the reins and the project has been running since late last year with [Isis] at the forefront."

Thus, since Nun left her full-time position as Sphinx CEO, Isis, the CTO, has been running the initiative from Sphinx's side and collaborating with Ptah, the Nile project commercialisation manager. In terms of the organisation and product maturity of the Sphinx initiative, Ptah has the following to say:

> "They were sort of in a conceptual phase when we got them. Now, they're in a [external funding] phase [and] we're concluding that and going into a technology development phase."

Therefore, at the start of Sphinx's interaction with Nile, the former was at an ideational stage, in which its value offering had not yet been developed. In other words, Sphinx was an idea stage organisation when it started undergoing the Nile process, beginning at the internal funding stage. At the time the researcher conducted the interview with Ptah, Sphinx was finishing the external funding phase. As previously mentioned, Nile typically takes an equity stake in its incubated organisations at the termination of the external funding stage before the technology development phase commences (please refer to section 6.2.1.2a). However, in the case of Sphinx, despite the fact that the external funding phase has not yet been terminated, an equity stake had already been taken by Nile at the time the interview was conducted.

Thus, an equity stake in Sphinx has been taken by Nile, which Ptah details in the following statement:

> "The agreement [with Sphinx] was 15 per cent. If we don't secure tech dev, then that then drops down to a certain percentage. So, there's a claw-back mechanism if Nile does not perform..."

Therefore, at the time of the interview, Nile had secured a 15 per cent equity stake in Sphinx, which is contractually contingent on Nile's performance as a technology development and commercialisation partner. Ptah goes on to further explain, "They struggled to get funding. They came to us to get funding… So, the five per cent is there to stay." From this statement, it is clear that the Sphinx team approached Nile for initial funding, which Nile granted them in exchange for a five per cent stake. As the relationship between Sphinx and Nile was built over the past two years, an additional agreement has been made, which is that Nile is granted a 15 per cent equity stake. However, in Ptah's previous statement, he mentions that there exists a claw-back mechanism in the Nile-Sphinx agreement. Ptah explains the obligations of the agreement and the eventuality that may occur if Nile does not perform to its contractually agreed upon obligations:

> "We've been awarded 15 [per cent]; however, that is contingent on us... on our getting the technology development funding... Then, we just have to make sure we see them through [technology development], into the market, otherwise that 15 per cent means nothing."

In other words, Ptah explains that Nile is obligated to accomplish two major goals. The first is to secure additional funding, which he refers to as "technology development funding". The second is for Nile to "see [Sphinx] through [technology development], into the market." As has been previously mentioned in section 6.2.1.2a, which serves to details the Nile process, the technology development phase is concerned with forming a market-orientated organisation from the initiative. This encompasses removing the technology risk by means of undertaking product development. Once the value offering has been developed, it undergoes consumer validation. The end of stage three, technology development, is reached when incubated organisations emerge with a validated value offering. As has also been previously mentioned in section 6.2.1.2a, the final phases of the Nile process are test market launch and global launch.

Thus, it is the obligation of Nile to assist Sphinx through commercial support and project management to develop their medical innovation, validate the device with consumers, launch the technology in a test market – such as South Africa – and, finally, launch the innovation on a global scale. If Nile succeeds in these steps, it retains its 15 per cent equity stake in Sphinx; if, however, it does not succeed in completing these steps, its equity stake is reduced by 10 per cent and reverts back to the initial agreement of five per cent, which was given in exchange for initial funding.

At the time of the interview, which took place in August 2018, Ptah says, "we're concluding [the external funding phase] and going into a technology development phase." In other words, Ptah has explained that Sphinx will likely commence with product development in late 2018 or perhaps 2019; however, the future of the Nile-Sphinx initiative lies beyond the parameters this study considers. In conclusion, section 6.2.1 has dealt with introducing the relevant pseudonyms to the Egypt case, providing background information regarding Nile and Sphinx, identifying the title and describing of Ptah and, finally, a discussion of the Nile-Sphinx integration.

6.2.2 Greece case

The Greece case, for the purposes of this study, refers to the entire case regarding the integration of a small innovation acquisition at the team level as well as all the various stakeholders that are involved in this case, the second of the study. For ease of reference, the pseudonyms used to refer to these various entities and stakeholders are dealt with in the following section. Thereafter, background information is presented on Ilissos and Agora, as well as a discussion of the title and job description of Apollo; thereafter, the section closes in a discussion of the Ilissos-Agora integration.

6.2.2.1 Greece case pseudonyms

While the legal entities and natural person stakeholders in the Greece case have been respectively presented in Table 5.6 and Table 5.7 and discussed, the relevant pseudonyms are briefly detailed in this section. The Greece case includes the business incubator, Ilissos, and the organisation, Agora. The innovation acquisition champion and coach is known as Apollo and the project's head strategist is Hera; an indirect stakeholder of the Ilissos-Agora initiative is Demeter, who is also an Ilissos coach and provided the researcher and the study a preliminary interview. The co-founders of the Agora organisation are Athena and Hecate. Given the discussion of entities as well as the direct and indirect stakeholders of the Agora initiative, the following section provides background information on the Ilissos incubator.

6.2.2.2 Background information regarding Ilissos

Ilissos was an incubator that focused on crafting a supportive process and ecosystem in which young entrepreneurs can develop personally and professionally with a view to accelerating their business ideas to profitable businesses.

(a)   The Ilissos incubation and integration process

Regarding the incubation and integration process, Ilissos did not have a formally mapped process to guide its interactions with their incubated organisations. Rather, the organisation opted to first hold an eight-week full-time training course free of charge to entrepreneurs whom Ilissos deemed to have potentially profitable ideas. The training was provided with a view to interview promising candidates at the end of the course. It was during the training course that the integration between the entrepreneurs and Ilissos began, despite no acquisition having yet taken place; as such, the Ilissos integration process might be considered dynamic in nature. This is further discussed in section 6.2.2.2b.

Furthermore, the post-training interviews serve as a selection process to identify entrepreneurs with early idea-stage start-ups to incubate. Ilissos' training revolves around organisational principles, particularly lean start-up principles, and how to assume organisational planning, according to Demeter. In the words of Apollo, he adds the crafting of an organisational model canvas and generating ideas to Demeter's list:

> "We would take them through various things – business model canvases, idea generation, so very early stage, idea-driven businesses is where we were focussed."

Thus, Ilissos offered business incubation to organisations with low maturity levels. In addition, Apollo mentions that the entrepreneurs also underwent personal development:

> "Then, there would be… some self-development support as well, so counselling and therapy."

In other words, Ilissos included components of personal development in the training to support the entrepreneurs as well, which included having a psychologist on staff, as Demeter explained by saying, "We have a life coach – a therapist." This individual's services are made available to the people during the training, according to Apollo's statement above, as well as during the incubation of the organisations. Apollo goes on to explain the introduction of the incubator's counsellor to the entrepreneurs during the training programme:

> "Once they've been introduced to the life coach/therapist, the onus is on them if they want to see them more."

From the above statement, Apollo emphasises that it is the duty of the entrepreneur to schedule time with the therapist and attend sessions with her in order to conduct personal development and ensure that the entrepreneur is coping with the demands on themselves.

After the training has been concluded, Ilissos' manager and coach conduct a series of interviews with the entrepreneurs that have undertaken the training, which Apollo explains:

> "It [starts with] training and then there's a two week break and then we have like seven days' worth of interviews and then we decide. Then, at the interview, we give the MOU and then it's thirty days from there."

Thus, these interviews are carried out with the goal of selecting organisations to incubate. Proceeding the interviews, Ilissos takes two weeks to determine which early-stage ideas will be incubated. Once the organisations have been selected, Ilissos presents the entrepreneur(s) with a memorandum of understanding (MOU) detailing the relationship between the Ilissos entity and the incubated entity, which in this case is Agora. Apollo describes the presentation of the MOU to the entrepreneurs as follows:

> "What happens is they come to us and then they have thirty days to sign an MOU, memorandum of understanding. That's kind of like the Term Sheet..."

The MOU outlines the rights and responsibilities of the stakeholders and entities involved in the agreement and details the acquired equity stake. In exchange for incubating the idea to support the concept's commercialisation, Ilissos requires a 20 per cent stake in the entity, as Demeter explains:

> "With that idea, when they got into the incubator, we got 20 per cent of the company and we put in R150 000 value in cash into the company."

Therefore, the selected idea-stage organisations who are to join the incubator are given R150 000 funding in exchange for a 20 per cent equity stake in the organisation. The organisation's owner who is selected for incubation may review the MOU for a 30-day period, at the end of which the MOU is

either signed or not, with the consequence being an agreement as to whether the incubation is either accepted or not. The entrepreneur is, however, persuaded by Ilissos to gain a legal understanding of the document as Apollo explains:

> "…we say you should take it to a lawyer as well and, yeah, you never know who they
> seek advice from but we always encourage them to seek external advice."

The legal understanding which the entrepreneur is encouraged to attain is that of external legal counsel from a lawyer or organisation not associated with Ilissos. The signing of the MOU signifies the completion of the acquisition. Given the discussion of the Ilissos process, the dynamism present in the process is presented in the following section.

(b)   The dynamic Ilissos integration process

Similarly to Nile, the integration process of Ilissos deviates from that found in the literature, which explains the PAIP as a fixed and rigid process which has been addressed in the literature review in the third chapter of this study (Birkinshaw *et al.*, 2000:395-396; Galpin & Herndon, 2007:77; Gomes *et al.*, 2013:14-28; Haspeslagh & Jemison, 1991:122-135; von Krogh, 2016:307-308; Wuebben, 2007:39-51). Therefore, the primary research of this study has found the Ilissos integration process more dynamic in nature than the more rigid processes described in the literature. This is evident in the Greece case, as integration of the organisation into the equity stake acquirer commences prior to Ilissos taking an equity stake, whereas the literature describes the integration process as taking place after the acquisition has been contractually finalised (Wuebben, 2007). According to Demeter, Ilissos does not follow a formally standardised process. However, the dynamism in Ilissos' integration approach toward their incubated organisations is present at the start of the process, similarly to the Egypt case.

In the Greece case, initial integration before an equity stake is acquired takes place, as was seen in the Egypt case. In the current case, the two-month training that takes place allows Ilissos to transfer some of their knowledge and strategic thinking to the entrepreneurs over the course of the programme. This represents the early stages of Ilissos' integration process as the entrepreneurs are orientated to the incubator during the training. This is evidenced in the account of Demeter who says that this training programme's purpose was two-fold:

> "...we used to do a training for two months... just to give them the mind [for us] and,
> for us, it was almost to get to know the entrepreneur as well because if we're going
> to get them into the incubator [it's a relationship]."

In the above statement, Demeter draws attention to the two most important aspects of the training in her view. Firstly, she submits that the two-month training informs and educates the entrepreneurs according to Ilissos' thinking. This training revolves around organisational principles, particularly lean

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start-up principles, and how to assume organisational planning. Secondly, Demeter puts forth that the training was undertaken so that Ilissos' people would have the opportunity to become familiar with entrepreneurs that the organisation might potentially incubate. When asked whether the training programme Ilissos ran was an immersive experience for entrepreneurs after the researcher had learned from the interviewee that the training required dedicated, full-time attendance, Apollo agreed strongly and went on to explain:

> "Definitely. Especially the training was. I mean, they were here for two months every day. That's as immersive as it gets for an entrepreneur. Working on their own business but spending full days here is quite hectic..."

From Apollo's description of the training, it is clear that it is an immersive time for the entrepreneur to gain insight into Ilissos' ways of working, which furthermore affords them a comprehensive consciousness of the incubator's process after the training is concluded and once the organisation is set up in the incubator. By the end of the training, relationships and trust have been built and fostered between coaches and entrepreneurs, which, once the incubation process begins, allows them to conduct business with each other as familiar acquaintances rather than strangers.

As has been discussed in section 6.2.2.2a, it is at the end of the training that the graduates of the programme are interviewed to determine whether or not their idea-stage organisations will be incubated by Ilissos. If an entrepreneur's idea is selected for the Ilissos incubator, they are presented with a MOU and given thirty days in which to review and sign the agreement, as has been discussed. During this 30-day period, however, whether or not the MOU has been signed, certain steps towards further integration are taken, which Apollo explains as follows:

> "In that process, we don't sit back and wait, we start working on the business."

Thus, during this 30-day period in which no formal, written agreement has yet been reached and signed, Ilissos begins incubating the organisation. During the first meeting Hera and the coach had with the Agora initiative, Apollo describes the main focus of the gathering as follows:

> "We say, 'What are the areas where you feel you guys are lacking?' And then we'll focus on building that. If they highlight that they don't work well together even though they are partners, then we'll address that."

Therefore, during this time, Ilissos' approach constitutes identifying which skills are lacking in the entrepreneurs' combined skill-set. Apollo further explains this in the following verbatim quote:

> "All of our businesses that we partner with, we try our best to get the entrepreneur to lead in terms of, 'What skills can you bring to the table? Where are you lacking?

> Where can we start filling gaps, internally or where do we need to bring someone else in?'"

Consequently, Apollo explains that by isolating what the single entrepreneur or the co-founder team is lacking, Ilissos' employees focus on fulfilling the skills that are lacking, either internally or by adding an additional team member from an external source to Ilissos or the incubated initiative. In this way, the skills that complement those of the entrepreneur(s) are brought into the initiative from Ilissos' side, which works towards creating a team, as Demeter says:

> "…we come in and we merge with this entrepreneur as a three-man team, which is pretty strong."

In the above statement, Demeter is referring to the incubated initiatives that arrived with only one entrepreneur, not a co-founder team. Nevertheless, the same approach was taken with co-founder teams in which there was more than one entrepreneur as Apollo says, regarding his previous quote above:

> "That, I would say, is our policy for starting and we follow that quite to the T."

In the above statement, it is clear that the approach Ilissos has to integrating the team – made up of the coach, the entrepreneur(s) and Hera – is informal as there is no actual written or structured policy and Ilissos does not alter the approach it takes when there is more than one founder. Furthermore, during this 30-day period in which the entrepreneur(s) have occasion to review the MOU, Ilissos arranges meetings in which it identifies the skills that are lacking, provides those skills to the initiative from an Ilissos employee and, thus, establishes a team. In terms of how the team's progress is measured, Demeter explains that:

> "…with the weekly meetings, we'll say, 'Okay, you lead the meetings and you decide what metrics you're going to use in order to measure your progress and let's see how that goes'."

In the above, it is clear that Ilissos places most of the responsibility of the initiative's progress on the entrepreneur, requesting that the entrepreneur set their own metrics to determine progress.

Thus, the Greece case presents an integration process that is more dynamic than those described in the literature, all of which occur post-acquisition (Wuebben, 2007). Ilissos' informal and uncodified integration process begins first with orientating the entrepreneur(s) to the incubator's ways of working during an eight-week training programme. Thereafter, if the graduated entrepreneur's idea is selected during the interviews, Ilissos begins integrating the initiative into a team within the incubator with incubator employees, namely a coach and strategic oversight in the form of Hera.

However, this often takes place without the innovator founder(s) having a signed agreement in the form of the MOU yet, which equates to the acquisition stage found in the literature (Wuebben, 2007). Therefore, it can be said that Ilissos' integration process begins prior to acquisition of the equity stake. Given the discussion of the dynamism present in the Greece case, which is similar to that of the Egypt case, the following section provides some background information about Agora, the organisation in which a stake was acquired.

6.2.2.3 Background information regarding Agora

Agora was an initiative born out of the partnership of two female occupational therapists who had private practice experience from separate organisations; for the purposes of this study, their names are Athena and Hecate. They joined Ilissos with an innovative idea that centred on producing a product line of games that would stimulate, empower and reward children with certain neurological conditions. As previously mentioned, whereas Athena had undergone the two-month Ilissos training programme, Hecate had not.

6.2.2.4 Title and job description of Apollo

Apollo's title at Ilissos is that of manager, although he feels he does not quite understand what that encompasses besides his role of delegating tasks to colleagues and entrepreneurs enrolled in the incubator, when he says:

> "My title says 'manager'. I always laugh because I'm the manager of what? Myself
> and not even so much really, Demeter. But I kind of delegate tasks to myself sort of
> things and to the entrepreneurs [I work with]."

Apollo further describes the team dynamic that is developed during the 30-day period when Ilissos begins to integrate the entrepreneur into the incubator by creating a team made up of Hera, an Ilissos coach and the entrepreneur(s). In the case of Agora, Apollo explains that he functioned as the coach as he says, "I would be the coach in that instance." In his interactions with Athena and Hecate, Apollo would meet with both of them and Hera at a weekly check-in meeting as well as separately working with the entrepreneurs as individuals when he states:

> "Then, there would probably be – like I said – Hecate and I meeting another time.
> And then there would be me meeting with Athena to go to suppliers and stuff like
> that."

Besides the one-on-one interactions Apollo has with the entrepreneurs, he also explains that part of his managerial role is to be what he refers to as the "in-between" person who is responsible for interfacing between Hera, Hecate and Athena and goes on to explain this in the following words:

> "Yes, the interface between it all. There's a lot of reflecting and I would then have
> conversations with Hera… and then I would have to relay some other information,
> some bits and pieces that I pick up here and there..."

In the above quote, Apollo's role of coach extends to performing interface management between the other key stakeholders of the initiative, namely Hera from Ilissos' strategic management perspective and Athena and Hecate from the Agora incubated organisation perspective. Thus, Apollo's role can be described as a manager, a coach and an interface.

6.2.2.5 Ilissos-Agora integration

In the research interview with the Ilissos manager and Agora coach, Apollo, he described the particulars of the integration and cooperation of the Greece case. He started by explaining that the one co-founder entrepreneur, Athena, had participated in the Ilissos training programme while the other, Hecate, had not, which Apollo accounts as follows:

> "One of them joined us... Athena came in and joined us. She seemed to be the driver
> of the business that they had called Agora. She went through the eight-week course
> with us."

In the above statement, Apollo also draws attention to the fact that Athena gave the impression that she was the driving force behind the Agora initiative as well as attending the Ilissos training programme. However, the other co-founder of the Agora initiative had not participated in the training programme but did become involved once the initiative was selected for incubation, as Apollo says:

> "Yes, yes, yes. We had both of them signing up for that."

Furthermore, Apollo recognises that Ilissos foresaw some issues prior to the integration that took place from the point that Hecate joined, which he explains:

> "We knew it was going to be slightly tricky because we had one signing up for the
> course and learned how we were thinking... So, one was on board with that and the
> other not so much."

From the above statement, it is clear that Apollo and his Ilissos colleagues realised that the training programme had onboarded Athena to the Ilissos ways of thinking and working whereas Hecate was not as familiar as she had not had the opportunity to learn the same lessons regarding the incubator's modus operandi. Thus, he implies that Athena was integrated into Ilissos by the start of the incubation while Hecate was not integrated. He further explains this in terms of how it played out:

> "I suppose, to use an analogy... she's got a bit of FOMO [Fear of Missing Out]. Like
> one was part of this club of thinking and the other was getting bit-part, relay
> messaging sort of thing."

In Apollo's words above, he describes how Hecate felt. As she had not had the opportunity to participate in the training programme, she felt isolated from the way of thinking that was shared between Ilissos and her organisational partner, Athena, who had had opportunity to undertake the training programme. The result of this disparity was that the Ilissos way of thinking, which Athena had adopted during the training, was transferred piecemeal to her from the stakeholders of the Ilissos-Agora initiative. Essentially, the integration of Athena into the Ilissos' way of thinking and the non-integration of Hecate led to the feeling of isolation that the latter experienced during the early incubation process.

To create a team dynamic between all of the stakeholders at the very start of the initiative, Apollo mentions that the team consisting of himself, Hera, Athena and Hecate started to have regular meetings, as he says:

> "We started to have regular meetings with the both of them and then what we were finding is [that] they would leave and they would have another meeting without us."

Thus, early on in the incubation, Apollo and Hera who were working on the team from Ilissos' side realised that Athena and Hecate were having private founder meetings, to which Ilissos was not invited. To attempt to lessen these undisclosed interactions that Athena and Hecate were having without Apollo and Hera, the latter pair went about trying to separate the founders by giving them distinctive roles. Apollo explains this as follows:

> "Well, I'd say, by trying to give them roles [we tried to address the dynamic between them]... trying to kind of separate them so that they didn't spend [so much time together]."

Therefore, Apollo tried to define their roles more exhaustively and more clearly to all the stakeholders directly involved in the case. He and Hera realised that the founders had fairly comparable roles, which he states as follows:

> "We also tr[ied] to define [their] roles.... They were both in a way similar. They performed similar functions…"

As a result of the similarity of the roles they played at the start of the incubation process, Apollo and Hera tried to allocate roles to them according to what the organisation needed to grow and potentially thrive with the additional goal of separating them by organisational function so that they would have fewer meetings on their own, without Ilissos representatives. Apollo details the roles he had tried to orientate Athena and Hecate around as follows:

> "…we tried to get the one to focus more on finances and administration and the other
> one to focus more on client relationships and business development... Both of them
> would be involved in the ideation, creating the new product."

Therefore, while both co-founders of the Agora initiative would continue to play equal roles in the product development process of the organisation, the other organisational functions which Agora required were divided between the two. Firstly, Apollo mentions that one co-founder was given the role of performing administrative and financial duties; later, he explains that Hecate was trained in and held responsible for this role by Ilissos. Secondly, the other co-founder was given the role of client relations and organisational development, to which Apollo later added supplier relations as well. Therefore, the focus moved more towards training the co-founders in these roles and completing the relevant tasks that they would have to carry out in their new roles. Apollo states this but also recognises that this increased role- and task-orientation led to an unintended consequence in terms of the human integration:

> "From that respect, that's probably why Hera thought that we're moving forward with
> the tasks "but the people dynamic is probably the biggest stick in the wheel there,
> yeah."

In the above statement, Apollo admits that there was a greater task orientation at play in the early incubation of the Agora initiative, which was partly due to addressing the private meetings Athena and Hecate were having by defining more structured and task-oriented roles of them. In the researcher's preliminary interview with Demeter, she mentioned that the Ilissos integration approach is more task-orientated than human-orientated in the following statement:

> "I think the confusion was that because we are task-based and task-driven was that
> that hampered on the human integration, I feel."

Thus, the approach of Ilissos towards its integration process of incubated organisations is centered around and driven by tasks. Demeter feels that this focus impeded the integration of the people. Apollo goes on to explain how this trade-off of task integration over human integration played out in the Agora initiative:

> "I don't think we focused enough on… team development. I think we assumed that
> focusing here and getting task-based successes would result in a strong team
> dynamic. But then things happen, an entrepreneur fails to deliver a task..."

In this statement, it is clear that Apollo believes that there was not enough attention paid to team development in the Agora initiative. He continues by saying that Ilissos was under the impression that a task-based model would become the basis of a strong team consisting of himself, Athena,

Hecate and Hera. However, this was a misapprehension as this model would likely only have worked, according to Apollo, if the tasks undertaken were mainly successful. He goes on to say:

> "We miss a task or something like that and then things start falling apart because you haven't prepped for failure from a team perspective."

Therefore, it is clear that Apollo feels that the task-oriented integration undertaken in this initiative only prepared the team for successful outcomes and did not make the team a strong and resilient unit to withstand failures. Due to a combination of factors, the Ilissos-Agora integration failed, as Apollo explains:

> "They didn't last in our incubator for long. They were with us for maybe a month. Just as I started to really sink my teeth into it, they decided not to [go ahead with it]. Before they even signed the MOU."

Thus, Athena had been integrated into the Ilissos ways of working and thinking during the training programme and Hecate had not. In addition, the task-based orientation of the integration negatively impacted the integration of the human element. The end result of the Ilissos-Agora initiative was that it did not culminate in a successful acquisition of an equity stake but in a failure of integration. Given the discussion of the Greece case, the third and final case of the study, the Rome case, is introduced and detailed in the following section.

6.2.3   Rome case

The third and final case for consideration in this study is referred to anonymously as the Rome case. As there are many stakeholders and entities in this case of relevance to the study, they are all collectively encompassed under the Rome case title, for ease of reference. The first subsection within this section deals with the pseudonyms given to the anonymous legal entities and stakeholders in the study. Secondly, background information is presented on Tiber and, thirdly, on Pantheon as well. Moreover, a discussion of the title and job description of Romulus is presented, which is followed by a section detailing the failed acquisition attempt of Pantheon by another organisation, known in the study as Colosseum. Finally, the section closes in a discussion of the Tiber-Pantheon integration.

6.2.3.1 Rome case pseudonyms

While the legal entities and natural person stakeholders in the Rome case have been respectively presented in Table 5.6 and Table 5.7 and discussed, the relevant pseudonyms are briefly detailed in this section. The Rome case includes the acquirer, Tiber, and the start-up procured by resource buy-out, Pantheon. The co-founder and innovation acquisition champion is known as Romulus; his partner and co-founder is referred to as Remus in the study. One other entity is of interest to the study, which is that of the failed acquirer, Colosseum. Given the discussion of entities as well as the

direct and indirect stakeholders of the Pantheon initiative, the following section provides background information on the Tiber organisation.

6.2.3.2 Background information regarding Tiber

Tiber is a global software development organisation that supports web developers and designers. It is still a relatively young organisation in that it has not yet been operating for ten years (at the time of thesis submission in January 2019). As this organisation is very singular and distinctive in nature, growing rapidly as an organisation and pioneering in its industry, no more descriptive background information can be offered to this study.

6.2.3.3 Background information regarding Pantheon

Pantheon is an online software tool that connects millions of professionals on a daily basis. It is a start-up that was founded by Romulus and Remus and was majority-owned and managed by themselves until they decided to pursue acquisition. At that stage, they first were considered for acquisition by Colosseum, a rival software development organisation; however, this acquisition proved a failure, which is discussed in section 6.2.3.5. Although the Colosseum acquisition did not eventuate, Pantheon was acquired by resource buy-out by another organisation, called Tiber in this study. As Pantheon is also a very distinctive start-up and now standalone project within Tiber, more information on the innovation and the organisation cannot be given without encroaching on the anonymity extended to research subject Romulus; therefore, the following section will not deal with introducing Romulus' role in the Tiber organisation post-acquisition by resource buy-out.

6.2.3.4 Title and job description of Romulus

Romulus is the co-founder of Pantheon acquired by resource buy-out by Tiber. In his new position at Tiber, Romulus was tasked with running a brand new project with team members unknown to him, which he describes as follows:

> "Yes... I was kind of day one on the job not 'jolling' it up [at the international conference] but, at the keyboard, working. I was basically given a bunch of individuals and… told to build a product."

Thus, Romulus explains that his new role at Tiber was as if he had been hired as a single employee and he went to work with a new team to build a new software product.

Regarding his role vis-à-vis the Pantheon software post-acquisition, Romulus first acted as an informal ad hoc innovation acquisition champion towards the three other human resources acquired by Tiber. The role was informal as the Pantheon software was acquired to run as a separate project that fell under the Tiber organisation's activities. The software was mature enough to operate independently of human intervention, which is further discussed below in section 6.2.3.6. However, despite its maturity, the Pantheon software was not immune to external changes in the online

environment; it was in these instances of change that Romulus was *ipso facto* responsible for attending to the issue. He carried this out by assembling the Pantheon-cum-Tiber employees to respond to changes when they arose and the ad hoc team resolved the issue. Since then, the Tiber organisation has added a dedicated role to maintaining the Pantheon software over the long term. This dedicated human resource was one of the acquired Pantheon employees. This individual reports directly to Romulus, which is now an element of the latter's current role within Tiber.

6.2.3.5 The failed acquisition attempt of Pantheon by Colosseum

The Pantheon start-up reached a stage in its growth where the software and product it had developed had plateaued and acquisition became an attractive option as a next step. It was as a result of this that Pantheon approached a potential acquirer, referred to as Colosseum in this study. Romulus describes the period of time proceeding their approach:

> "Really, we were tending for the acquisition side. We got back in touch with Colosseum and then we went through quite an intensive period of time. There was backwards and forwards."

Thus, to the start-up's co-founders who were interested in Pantheon being acquired, Colosseum seemed interested in undertaking the acquisition, evidenced in their rigorous approach to the negotiation, which is described by Romulus as a back-and-forth process. At this stage, Romulus and Remus were hopeful and somewhat certain that the acquisition would in fact take place, as Romulus describes:

> "That went very far – as far as us thinking, possibly a little bit stupidly that we thought it had been successful. There were handshakes around board tables. It was well down the line."

Romulus gives his account of how those with the authority to do so within Colosseum led him and Remus to believe that the acquisition would be approved and undertaken. Colosseum's behaviour was such that they shook hands with Romulus and Remus, an informal manner of reaching an agreement on a deal in the formal setting of one of Colosseum's boardrooms.

> "We were discussing visas. But there was no Term Sheet, obviously. Nothing was signed – it was a handshake."

In fact, according to Romulus' delineation, it went as far as Colosseum's stakeholders talking about arranging work visas for the Pantheon's employees with its co-founders Romulus and Remus. While Colosseum was giving Pantheon the impression that an acquisition was certain to take place, however, no contracts or documentation had been drawn up and signed by either party, including a

term sheet. The agreement rested on an informal handshake agreement entirely. Very shortly afterwards, the acquisition negotiation came to an abrupt end, in Romulus' words:

> "So, when that did collapse... Financially, it was very late to be going out and looking
> for a Series A. We were in quite a difficult position".

The failure of the acquisition of Pantheon by Colosseum had put the former in an unfavourable financial position, which made it challenging to consider seeking a Series A, which is essentially the pursuit and attainment of significant equity financing from venture capitalists in the first potential round of funding (Tomczak & Brem, 2013). While Pantheon still had a desire to be acquired, there were no other offers on the table from other potential acquirers, despite Romulus and Remus having sent out tentative proposals to other potential acquirers. Romulus and Remus broke the news to their employees, as Romulus recounts:

> "When it fell through... We informed our staff, 'Look, there's this much money in the
> bank. We'll pay you for as long as we have money… If you… have to go
> out... looking for new jobs, we won't hold that against you.'"

Thus, once Romulus and Remus realised that the acquisition would not take place, they resolved to share the news with their employees. At this juncture, the co-founders transparently communicated that there was only a finite amount of liquid money left with which they could remunerate the employees. Furthermore, they encouraged their staff to take paid time out of the working day to secure new positions at other organisations. It was at this stage that one of the tentative proposals for acquisition by alternative acquirers was answered by an organisation similar to Colosseum, which is given the pseudonym Tiber in this study.

6.2.3.6 Tiber-Pantheon integration

Romulus starts explaining the Rome case with Tiber's acquisition by resource buy-out of Pantheon. Due to the failed acquisition attempt of Pantheon by Colosseum, Tiber realised that it could successfully secure the Pantheon resources for a good price, as Romulus says:

> "They correctly assessed the situation and realised they could get Pantheon for a
> fairly good price and then we moved very quick[ly] on that."

As Pantheon, its co-founders and employees were put in an unfavourable position by Colosseum not actually undertaking the acquisition, Romulus and Remus quickly acquiesced to the offer by Tiber, even though it was less than they had anticipated making from the deal. Nevertheless, they decided to go forward with the acquisition by resource buy-out and started working on the details of the acquisition. According to Romulus, the key details for him were reaching agreement on how the

Pantheon employees and technology would be handled in the acquisition, which he explains as follows:

> "The key thing was looking at what was going to happen with the staff – will they have a good place to land? And really all those kind of details – what happens to the technology? …That happened really quickly."

Thus, the negotiations around the Pantheon workforce and technology was undertaken and concluded fairly soon during the acquisition. Romulus states that the acquisition by resource buy-out was the fastest route to acquisition for both entities, Pantheon and Tiber, when Romulus explains:

> "They basically buy out all your staff, buy out your technology but they... leave the company because there's a lot more risk in basically buying a company… They can move fairly quickly because they don't have to worry too much."

Therefore, Romulus suggests that a resource buy-out approach, which he defines as purchasing Pantheon's human resources' contracts by putting them on the acquirer's payroll and purchasing the Pantheon software, Tiber could achieve the same objectives as an acquisition without having to fully undertake an acquisition.

At the time of the acquisition, Pantheon had a personnel consisting of 11 people, as Romulus says:

> "About 11 staff, including the two co-founders."

However, from the 11-strong staff of Pantheon, only four employees moved over to the Tiber organisation by resource buy-out. Two of the Pantheon employees were marketers not offered positions at Tiber. The remaining five Pantheon employees decided not to remain with Pantheon after the acquisition and become staff members of Tiber for individual reasons, which Romulus explains by saying:

> "…quite a few people chose to go on and do separate things."

Thus, the acquisition by resource buy-out of four of the Pantheon staff members took place; among them were the two co-founders, Romulus and Remus, as well as two engineers. These four people represented the Pantheon human resources bought out by Tiber.

Days after the acquisition by resource buy-out was decided upon with certainty, Pantheon's bought-out human resources were invited to an international conference of Tiber's employees. Each Pantheon employee "came on as [an] employee in [Tiber]" and effectively started working as a Tiber staff member some days before or on the day of travelling to the conference. Romulus, for instance,

officially started working as a Tiber employee on the day he was set to travel to the conference by plane; however, this was not his first day actually working. That morning at start of business, as his flight was boarding, he received a phone call from the Tiber human resources department personally welcoming him as a new employee to the organisation. During the conference, Romulus and his employees from Pantheon had the opportunity to meet their co-workers for the first time. Thus, the integration of Pantheon into Tiber started on the first day of the international conference where Pantheon employees spent approximately half of their time with each other, according to Romulus:

> "Some of the time we were together and some of the time we were… hanging out
> with our new colleagues. I'd say it was about fifty-fifty… it was pretty important at
> that time to meet all our new colleagues."

In the above statement, it is clear that the four Pantheon employees divided their time between spending time with one another and spending time with their new Tiber co-workers fairly equally. Romulus describes the earliest post-acquisition by resource buy-out days as follows:

> "…we all were thrown into this new company…"

From this statement and Romulus' lack of any other statements pertaining to integration processes, it is clear that there were very few, if any. Romulus goes on to further explain how the Pantheon team members were placed in the Tiber organisation:

> "What happened with the team, which was a mistake definitely, was that we all got
> split apart to different parts of the company. I started running a new project… and
> then everyone kind of went their own ways…"

Thus, it is clear that the Pantheon team became separated once they integrated into the acquirer, such as Romulus who started in the role of managing a new project. The different employees were integrated as individuals into the team within the acquirer that was relevant to their particular skill-set, which Romulus explains:

> "Yeah, so it was pretty much like people didn't carry on in their Pantheon roles.
> Basically, the guy who had been doing the front-end development joined the front-
> end development team; the guy from infrastructure joined the infrastructure team."

In the Tiber organisation, the employees previously with Pantheon were separated into the various teams of Tiber, such as front-end development and infrastructure. Despite the separation that they faced once they joined Tiber as employees, Romulus says that they were managing the Pantheon technology in their spare time in an unofficial capacity, as he explicates:

> "Pantheon was really something we were managing kind of on the side and now I've
> got like one full-time person working on it. He's one of the original people and he's
> doing a fantastic job."

Therefore, the Pantheon software, which was bought out as a resource by Tiber, was being managed by the Pantheon-cum-Tiber employees as an additional project. A while later, one of the original Pantheon staff members took over working on the software in a dedicated role, which still continues today. The reason that the Pantheon technology did not need to be more officially managed in the early months after the acquisition by Tiber is as Romulus explains:

> "Sure and it still is. It almost runs itself. It doesn't need a huge amount of input. It ran
> pretty much... with a million users a month for a year – with no one touching it. It just
> kind of ticked by because it's been built in a [certain] way..."

Thus, the reason Pantheon's employees did not need to take up dedicated roles on a dedicated Pantheon team was because the confidential software technology which the organisation had developed was mature. According to Romulus in the quote above, this meant that the innovation was designed by Pantheon to run itself. However, there were times when the ad hoc Pantheon team had to reassemble to work on the technology in the following circumstances which Romulus notes:

> "All the issues we had were always related to change. So, you change something
> and then it breaks. But obviously we fix it right away. We would also try to make sure
> that that particular problem would also self-correct next time."

From the above, it is evident that the Pantheon technology was mature enough to run on its own at the start of the acquisition. However, whenever one variable altered in the environment in which it was operating or if the Pantheon team made a change to the software, it would fail and crash. During these periods of change, the Pantheon team would gather, ad hoc, to work together on solving the problem. The way in which they would resolve the issues that came up with the technology would be to sustain the level of maturity of the software in a changing online environment, which is to say that the ad hoc team would fix the problem in such a way that, if the same problem occurred in future, the software would be able to resolve the issue automatically without need of their assistance. Furthermore, Romulus describes his role in the ad hoc team as one of leadership in the following statement:

> "I kind of led on the side, which was pretty much in my own hours, I led... Pantheon
> and we would get together for that…"

Therefore, it was only in Romulus' spare time that he continued leading the Pantheon initiative in cases where issues arose and the ad hoc team would have to gather to solve them. Despite Romulus

working with a person who is dedicated to the Pantheon technology, there are still occasionally times when issues arise that require the team members to come together and solve problems, as Romulus explains:

> "No, it was mostly bringing the team together and it's still the case... On occasion, we have one sort of issue… and then the Pantheon people inside the company hopped on a call and dealt with that."

While the team will gather for that if necessary, the dedicated role that facilitates the Pantheon technology allows Romulus and the full-time person to give the Pantheon innovation direction and goals, according to Romulus:

> "Well, we definitely... the team get together. Well, I have a weekly meeting with the guy who is working on it full-time now… Now there's this one guy working only on Pantheon… I have a weekly meeting with him and I set direction, I set goals and all of that stuff yeah."

Therefore, the mature technology that was acquired by Tiber could sustain itself online and was managed reactively at the start of the post-acquisition period by an ad hoc Pantheon team. While the ad hoc Pantheon team still exists in the Tiber organisational structure today, the management of the Pantheon technology has undergone a more proactive than reactive transformation with the addition of the dedicated role. This concludes the Rome case as this is the most recent information relevant to the case.

Section 6.2 served as an introduction and discussion of the Egypt, Greece and Rome cases, which has encompassed: an introduction of the cases' pseudonyms; background information regarding the acquired and the acquirer; the title and job description of the research interviewee as an innovation acquisition champion in the post-acquisition team; and, lastly, integration case for each of the three cases, namely, the Nile-Sphinx, Ilissos-Agora and Tiber-Pantheon integrations. Table 6.1 below serves to provide a full summary of the entities and stakeholders dealt with in the study, including the overarching case title, context of the case, pseudonyms of its acquirer and acquired as well as both the pseudonyms and roles of the direct and indirect stakeholders in each of the three cases.

TABLE 6.1: Summarising the cases' entities and stakeholders

Cases	Egypt		Greece		Rome	
Context	Incubator partially acquiring a 15 per cent equity stake in a start-up that is developing a new medical device		Incubator partially acquiring a 20 per cent equity stake in an organisation that is developing innovative products for use in occupational therapy		Existing organisation fully acquiring a start-up by resource buy-out that has mature software used by professionals	
Acquirer	Nile		Ilissos		Tiber	
Acquired	Sphinx		Agora		Pantheon	
Stake-holders	Owner and chief executive officer *(Indirect stakeholder in Sphinx)*	Amun	Co-founder, Client and supplier relations	Athena	Previous potential acquirer	Colos-seum
	Senior project commercialisation manager *(Indirect stakeholder in Sphinx)*	Osiris	Co-founder, Finance and administration	Hecate	Co-founder (Research subject)	Romu-lus
	Project commercialisation manager	Ptah	Agora Coach, Ilissos manager	Apollo	Co-founder (Non-research subject)	Remus
	Co-founder CEO	Nun	Managing director of Ilissos	Hera		
	Co-founder CTO	Isis	Coach at Ilissos	Demeter		
	Co-founder COO	Hathor				
	Co-founder CFO	Tawaret				

Given the introduction of the cases, the following section isolates and discusses the key findings of the Egypt case; the two sections that follow section 6.3, which are namely section 6.4 and 6.5, serve to identify and examine the key findings for the Greece and Rome cases, respectively.

6.3   EGYPT CASE FINDINGS

In this section, each of the identified key findings of the Egypt case are discussed, with regards to the responses given in the semi-structured interviews conducted with Ptah and Amun of Nile regarding the acquired equity stake and partnership with Sphinx and its co-founders, Nun, Isis, Hathor and Tawaret.

6.3.1   Egypt case finding 1: The impact of distance

In the semi-structured research interview with Ptah in August 2018, it was uncovered that the Sphinx team is currently mostly based in Johannesburg as its members are employed in full-time roles there

in various organisations. The only team member in Cape Town, the city in which Nile is based as well, is the CTO, Isis. At the start of Ptah's tenure on the project in the first few months of 2017, he was largely dealing with Nun until such a time as she left her full-time involvement with the venture for an income-generating part-time job, which took her from Cape Town to Johannesburg. Since then, the CTO and scientist Isis moved to Cape Town to take over from Nun and she became the Sphinx representative for the team.

The roles and responsibilities of the Sphinx team members have been considered and referred to in Table 6.1 above; these team members are namely Ptah as the innovation acquisition champion as well as the four co-founders, Nun, Isis, Hathor and Tawaret. However, Ptah, who is based in Cape Town and does not attend the after-hours weekly meetings of the Sphinx team, struggles to participate in the Sphinx team dynamic due to the impact that geographical distance has on the project, as he says:

> "I think distance is a big factor here. It's a big factor. If they were all here, it would be great".

From this citation, it may be inferred that Ptah believes that the presence of the team nearer to the incubator would add value to the initiative. As the project commercialisation manager, Ptah struggles to add value to the decision-making of the initiative as a managerial stakeholder to the organisation. He speaks of the challenge of not attending meetings with them in a decision-making capacity with the following statement:

> "I think the challenge is that I haven't actually been in meetings with all of them, making decisions. I think that's the difference."

Thus, it can be surmised that it is Ptah's desire to attend weekly meetings with his fellow team members, Nun, Isis, Hathor and Tawaret.

6.3.2   Egypt case finding 2: Central contact

The original Sphinx team holds weekly meetings in Johannesburg, in both virtual and face-to-face gathering formats; however, the Sphinx team prefers to meet in-person whenever and wherever possible, as Ptah says, "It's… in-person, when they can." These weekly liaisons between the Sphinx team members are what Ptah refers to as the "process on the other side" in the verbatim quote below:

> "Well, it's worked better going through one person for most things. So, having a central contact, because there is a process on the other side so making sure it's up to speed so this process happens as it should."

From this statement by Ptah, the project commercialisation manager of Nile, it is understood that when the team's members are physically separated by geographical location, it is necessary for the

innovation acquisition champion to have a central contact within the team. This individual becomes the point of contact between the acquiring organisation and the small innovation acquisition, particularly in cases where the team is spread out geographically.

6.3.3   Egypt case finding 3: Multidimensional skills

In the preliminary interview with Nile's owner and CEO, Amun, he described the Sphinx team as "multidimensional", drawing attention to their varying professional backgrounds in the following statement:

> "It's a team of four and that was an interesting, multidimensional team…They came on board as a team of four… With an engineer, a scientist, a... CA and somebody else…"

In the above description of the team, Amun describes the team in terms of its diversity of skill-sets, likening members' professional backgrounds with dimensions and viewing the team as a composite of their varying professional dimensions. Amun later goes on to describe the Sphinx teams as consisting of the "right types of people" with the "right backgrounds." He uses the descriptor "right" in terms of asserting that these four women, together, represent an appropriate combination of skills for driving the technological innovation forward to the market.

Ptah, similarly, sees a single innovator as a challenge in itself as a single individual only provides a single skill-set to the hardware organisation he, as a project commercialisation manager, oversees. The following statement by Ptah showcases this:

> "If there is one person involved… [that] has its own challenges because one person brings one particular skill-set and you often need quite a few skill-sets to make these hardware businesses go."

In this assertion, Ptah highlights that hardware organisations which he project manages and provides commercialisation support for require a pool of multiple skill-sets from which to draw to successfully build and develop hardware-driven organisation. The context in which he was speaking in this statement was in reference to the Sphinx initiative he works on as a Nile employee. The medical innovation conceptualised and researched by Sphinx and developed in conjunction with Nile's commercial support, under the management of Ptah, thus requires a pool of multiple skill-sets to draw from for best results in executing technological innovations. For this reason, Amun refers to the multidimensional team of Sphinx as the right grouping of professionals, peopled with a scientist, two engineers and a chartered accountant. Thus, it can be argued that a desirable trait of small innovation acquisitions is having a multidimensional skill-set among the members of the team.

6.3.4   Egypt case finding 4: Providing guidance as leadership

When asked if he is required to demonstrate leadership qualities in his role as project commercialisation manager of the Sphinx initiative, Ptah replied in the affirmative and went on to explain that he is required to consider where all the team members are in both their personal and professional lives, which is to say, the events that are taking place in each person's private life and their work life with the verbatim quote:

> "Yeah, I had to [have leadership qualities] because I think [about] where everybody
> is in their personal lives, in their professional lives."

For instance, Ptah and the Sphinx team have not experienced a high level of involvement from one of the team members, Tawaret, as she recently delivered a premature baby; the child required significant medical care and Tawaret spent nearly six months at the hospital overseeing the health of the new-born. Ptah goes on to say that he considers the junctures of the individual team members' professional lives as well. As their professional lives pertain to the Sphinx initiative and not their own, separate careers and full-time jobs, Ptah says:

> "They haven't been as structured as they could have been so you sort of have to
> say, 'You need to do this to be able to do this and this.' And, 'Have you done it yet?'
> It's more like guiding and not leading..."

Ptah interestingly describes his role as guiding the Sphinx team members to apply more structure and accountability among themselves that will support the end goal of their technological innovation execution. To facilitate and provide great levels of organisation among the team members, Ptah suggests steps forward, emphasises their importance for future successes and growth, and ensures that the actions that need to be taken in order to achieve goals are completed. In these ways, he guides the Sphinx team on their journey to achieving their organisational goals. Ptah further explains the guidance he speaks of in the following words:

> "It's more guiding… showing her or them the logic of this opportunity versus the
> other. Then… saying where it makes the most sense to operate or play…"

In the above statement, Ptah describes the guidance he provides Sphinx through presenting the team with different options and opportunities. When presenting these to his fellow Sphinx team members, he takes the time to explain the options available to them, advising them on which opportunity makes the best strategic sense. This enables the other Sphinx team members, who retain majority shareholding, to make the best possible decisions for the commercialisation of the value offering.

6.3.5   Egypt case finding 5: Goal-oriented project management

Ptah describes his role as mainly involving project management in the commercialisation of the value offerings, particularly to keep teams and members focused on the end goal they are trying to achieve, which will provide them with the best possibility of success. His statement below describes this project management role:

> "[My role has] project management to make sure that as they're developing –
> whatever it is that they need – we're developing it towards a goal and making sure
> that you don't deviate too much – that you can always bring it back to that goal."

In this statement, Ptah emphasises that a key component of his role is keeping project teams on target and focused on the goal. He further explains:

> "So, you've always got to make sure that the guys or the ladies are always working
> towards a goal that is going to ensure the best chance of success."

Thus, according to Ptah, the end goal of a project or venture should be continually brought to mind among the team members working towards it. It seems that a goal-orientation of this nature has the power to ensure that the research, development and other innovation and organisational activities which take place in the commercialisation of an innovative value offering will increase the probability of achieving successful outcomes in the market. This is made evident by Ptah's statement above of ensuring that the people working towards a strategic goal have the "best chance of success."

6.3.6   Egypt case finding 6: Relationship-building as integration

When Ptah started working on the Sphinx project as a manager, he was dealing with the venture's first central contact, Nun. While she was still on the project, her position was chief operations officer and, according to Ptah, her approach was single-minded and she wanted to be in control of the venture. This was ascertained from Ptah's following statement:

> "So, initially she… like her approach was very much, 'I'm COO – I'm running this
> thing.'"

Ptah alludes to the challenge he faced in trying to get Nun, given her single-minded and seemingly controlling approach, to work with him and allow him to add value to the initiative. To overcome this challenge, Ptah took it upon himself to attempt to build a relationship and sense of trust between them, which he describes as follows:

> "So, it started, I guess, with getting her comfortable with me as a person. Getting her
> to start sharing things with me so that I could give her input on things."

From the above, it may be deduced that Ptah wanted to open lines of communication between himself and Nun so that she could share information regarding the project and its furthering with him. It was Ptah's thinking that increased communication between them and Nun sharing news with him

would then allow him to be heard by her and give voice to some of the recommendations he might have to improve the project. Therefore, Ptah undertook to make sure Nun felt at ease around him on a personal level by doing the following:

> "Some of the ways I helped bridge that was sort of just introduce her to opportunities and stuff."

Ptah attempted to overcome this barrier between himself and Nun by suggesting interesting possibilities for the Sphinx venture's development and success. The research subject implied that making opportunities known to Nun demonstrated that he could add to the initiative in valuable strategic ways, which made his opinion both relevant and sought-after by the COO. Ptah continues by saying:

> "And, yeah, that's how I sort of got her to be a little bit more integrated into it. Then she started listening to me a little bit more. Then I was like, 'Yeah! I'm there now.'"

Here, he speaks of how this tactic of introducing opportunities to Nun was successful in building a relationship with her and achieving the level of trust she needed to have in him to allow him to advise her on what steps she should take on behalf of Sphinx going forward.

It is apposite to note in the research subject's account above that he refers to his success in securing and building a relationship with the COO, Nun, as integrating her into the Nile process of working with a project commercialisation manager to the end of achieving mutually beneficial organisational goals. Thus, building interpersonal relationships seems to be a key consideration for the integration of acquired team members at the team level within Nile and into the process of Nile.

6.3.7   Egypt case finding 7: Weekly meetings manage expectations

As mentioned previously in section 6.3.2, Sphinx's team members hold weekly meetings either face-to-face or virtually. When Ptah was asked about how expectations are managed in the initiative, he strongly emphasised the weekly meetings that he and the central contact (see section 6.3.2) would have together; he explains this as follows:

> "I think the weekly meetings helped a lot. A lot, a lot… because we're constantly updating each other on where we are and the implications of doing this versus not doing it. Knowing where this is going..."

Therefore, according to Ptah, a key purpose for the weekly meetings he had with a single central contact from Sphinx, which was first Nun and then Isis, was the ability it had to manage expectations. Thus, the weekly meeting is a tool Ptah and the central contact uses to manage expectations, which is the key issue dealt with in these meetings. Through the project commercialisation manager and the Sphinx central contact consistently apprising each other on a weekly basis on the latest developments, they each had a more robust understanding of where the project stood and how it

would continue to develop in the foreseeable future. Moreover, Ptah also refers to that fact that these weekly meetings gave the two individuals an opportunity to discuss possible consequences of their decisions, which also allowed for expectation management for both Sphinx and Nile.

6.3.8   Egypt case finding 8: Personal professional development

When Isis assumed the role of central contact of the Sphinx initiative, she displayed an inherent understanding of her strengths and weaknesses as well as being open to be advised by Ptah as he says:

> "I mean, she's grown from then – but she knew where her strengths were and where they weren't. So, I think she's happy to step back and take a bit of guidance..."

Isis realised, as a scientist and self-proclaimed "technical person", according to Ptah, that she would require assistance and advice on the commercial part of the initiative as opposed to the scientific and technological side. Therefore, her behaviour towards Ptah was such that she sought his support in organisational roles, according to his account:

> "Yes, she's a scientist… So, she was very much, 'I'm the scientist; please help me on the [business side].'"

Furthermore, Ptah suggested that Isis had developed a great deal as an organisational professional since she started in the role of central contact in terms of thinking more strategically about various elements regarding the Sphinx initiative. Ptah describes this in the following assertion:

> "Yeah and she's changed… grown quite a bit. So, she's thinking more strategically about a lot of things."

During her tenure as central contact and leader in the project, Isis has personally and professionally developed, particularly with regards to her strategic thinking capabilities.

6.3.9   Egypt case finding 9: Acquisition team culture

In the Egypt case, the team made up of Nun, Isis, Hathor and Tawaret had been operating since 2014 and had joined Nile in 2016. Early on in the project, Ptah had joined as the project commercialisation manager and experienced the Sphinx team as patently having its own culture, which was evidenced to him in how the team members portrayed their ways of working or "how we operate". This was made clear to the researcher from his following statement:

> "Yeah, they definitely did have their own sort of vibe like, 'This is the team. This is how we operate. This is what we do.'"

The team had been working together for approximately three years before Ptah became a stakeholder in the Sphinx initiative. From Ptah's statement above, it appears likely that the Sphinx team had built an organisational culture by the time it began its incubation and integration within

Nile. This has seemingly continued relatively unchanged despite Nile taking an equity stake in the Sphinx organisation and working closely with its co-founders to commercialise their medical value offering. However, while working with Ptah, their Sphinx team dynamic did undergo a change, evident from his assertion below:

> "…we have introduced just a little bit more structure with that because we do work
> very closely with the companies we do technology with."

Nile works and collaborates "very closely" or intimately with the technology organisation it incubates and invests in, in exchange for an equity stake. According to Ptah, it is due to this close working relationship between the people in the two entities, the one being Nile and the other the incubated organisation, such as Sphinx, that some changes can take place in the latter. For example, Ptah says that as a result of the close working relationship Nile has with its equity stake organisations, the culture of Sphinx underwent a slight change in that it is more structured than before.

6.3.10 Egypt case finding 10: Team consensus

When asked whether there were any issues that he did not foresee in working with more than one innovator, Ptah was quick to state that there was indeed a particular issue he did not foresee, the issue of reaching consensus, as he describes below:

> "Yeah... Getting them to sign documents! Because they would go deliberate first –
> this, that and the other – reach consensus and, then, yeah [sign]."

From this verbatim quotation, it is seems that Ptah finds the process of the Sphinx team's deliberation on a matter and reaching a consensus a lengthy and difficult one. To illustrate the difference, he compares it to the same process undertaken with a single innovator and not a team, as follows:

> "Rather than if it was one person. One person can look this over and say, 'Well, I'm
> going to take this home and come back tomorrow.'"

In the above statement, it appears evident that changes that need to be documented and signed off on are more easily dealt with when only one innovator needs to agree and sign. It is also a far quicker process as the individual in question can take the document home, make a decision on whether or not it reflects their point of view and return the next day with a decision. However, it is more challenging to reach consensus within a group and transfer that consensus onto paper, which is reflected in Ptah's following statement:

> "But now you have to coordinate with four people and they have to make sure that
> each of their views are reflected in that document being signed."

From Ptah's above answer, it is apparent that coordinating with more than one person, and in the case of Sphinx, four individuals, to ensure that each of their points of view are duly reflected in every agreement is a lengthy process which is also difficult to achieve. However, when it comes to either

urgent or informal decisions, Isis gains consensus by phoning Sphinx's direct stakeholders and gaining verbal consensus. For example, Ptah references an event which required Sphinx to employ new intellectual property counsel, which occurred as follows:

> "If there's anything additional, they do phone calls. For instance, they wanted to change IP [intellectual property] attorneys and they didn't get a chance to meet and they needed to make a decision so Isis picked up the phone and said, 'I think we should do this.' And got the buy-in."

In this event, when the research subject said, "they didn't get a chance to meet and they needed to make a decision", he implied that there was certain urgency in the decision to retain new lawyers. The verbal agreement to change counsel was enough across the members of the team due to the level of urgency, which was communicated by Isis suggesting the course of action of getting a particular organisation and attorney to help.

6.3.11 Egypt case finding 11: Hardware technology readiness level

Ptah asserts that his role in commercially supporting and managing the project is dependent, in part, on the stage of maturity of the technology. The technology readiness level (TRL) is a means of evaluating the maturity of a given technology; a method developed by the United States of America's National Aeronautics and Space Administration (NASA) (Mankins, 1995). In the case where a technology is in its early stages of development, the nature of the commercial support that young organisations need is more towards gaining additional funding, which will go towards developing and refining the technology further and improving its market readiness, which is reflected in Ptah's following statement:

> "Yes, that's there but the companies are still, pretty much, in very early stage technology stages. They still need to find a lot of money to refine their tech…"

He goes on to compare hardware technological development with that of software, which typically matures far faster than hardware as iterative changes to the software can be quickly undertaken and tested in the following statement (which leads on from the previous verbatim quotation above):

> "…unlike software companies with quick iterations to get to market. With these projects, you can't just quickly change a module... You've got to build something, test it, make sure everything works, get it certified, push it out, you know, so..."

In the above verbatim quotation, Ptah again emphasises and illustrates the lengthier nature of hardware technological innovation projects' technological innovation execution as opposed to that of software projects. Over the course of this process, Ptah's role as commercialisation support and manager changes with the changing maturity of the technology; when the technology is more mature, there is less need for funding and the role changes to market launch. As Ptah and the Sphinx co-

founders were working towards securing additional funding to develop the technology for a test market launch, the Sphinx hardware was at TRL three and ready to be further developed into prototypes before being earmarked for commercialisation (Mankins, 1995).

6.3.12 Egypt case finding 12: Founder-only meetings

Ptah isolates one of the main challenges he faces in dealing with the Sphinx team on a continual basis, which is that the team of four women have a weekly meeting. These meetings are only attended by the four founders and they take place after working hours, when the other team members based in Johannesburg with full-time jobs have the chance to meet. It is in these weekly meetings that key decision-making takes place. Ptah describes his exclusion from these meetings as a challenge in the following words:

> "I think the challenge is that I haven't actually been in meetings with all of them,
> making decisions. I think that's the difference."

He continues by explaining that, in lieu of his attendance at the meeting, Ptah endeavours to convince the central contact he has among the Sphinx founders of potential opportunities and decisions for the future; Ptah's central contact was formerly Nun and was, at the time of writing this in late September 2018, Isis. Ptah liaises with Isis to ensure that his voice is heard at the team meeting, albeit through Isis carrying the messages to the other co-founders. This is clear in Ptah's following statement:

> "Still, I'm generally just speaking to one person but [I'm] always just cognisant that
> there are a few other people I need to convince."

However, even though he tries to advocate for his voice in their team dynamic in this way, there is certainly a barrier between him and the rest of the team, evident in the following quotation:

> "They generally decide – in their meetings – they decide on a path and then they
> resolve to follow that path so you kind of know where everybody stands as time
> progresses. So, I might talk to Isis and she might tell me, 'Actually, the team is
> thinking this.' Then, you sort of know..."

The above explains how the founder team arrives at decisions and paths to pursue at their weekly meetings, which is followed by communicating those decisions to Nile's manager, Ptah, through the central contact, Isis.

6.3.13 Egypt case finding 13: Communication and perspective

While Ptah and Nile were able introduce more structure to the Sphinx initiative, this has not yet allowed for Ptah to join the founders' weekly meetings, which they have after-hours. As mentioned above, the central contact, Isis, delivers the decisions made at the meeting to Nile and Ptah.

However, the latter acknowledges and understands that what is submitted to him is done so from a particular point of view, which he refers to as "one perspective" in the quotation below:

> "They usually have their team meetings in the evening so... I know what's presented to me from one perspective [but] I don't know, sort of, the full breadth and depth of the discussions they have."

This exclusion from the weekly founders' meetings therefore also appears to carry additional consequences beyond being excluded from decision-making in these meetings. The first of the additional consequences is that Ptah recognises that the reports of these meetings are delivered from one perspective and contain bias. This issue might be eliminated if Ptah was included in the meetings as the limited and inexhaustive account of what had been discussed during the meeting that is provided subsequent to it, usually by Isis, will not provide the robust understanding of context and subtext that his presence at the meeting would allow.

6.3.14 Egypt case finding 14: Innovative teams need complementary skills

The preliminary interview with Nile's director Amun gave the researcher rich background information regarding the early stages of the Nile process. According to him, innovators and entrepreneurs approach the Nile incubator as they are high-skilled in the area of technical expertise but relatively weaker in terms of commercialising their value offerings, which is why they require a team with other people that have skill-sets that complement their own. Amun explains this in the following statement:

> "The reason they approach us is because they are typically very good at their science but very poor on the commercial side of things... Our goal is to try and build teams around those."

It is during Nile's seed phase that team development takes place, which is commenced with identifying each team member's individual strengths and weaknesses with a view to analysing comprehensively the pool of skills and capabilities in the team already. This analysis of existing team strengths is undertaken by Nile's managers, according to Amun, who describes this as follows:

> "The goal of seed is to start building the team, start to identify the team, get to know [their] strengths and weaknesses… which then tries to look at what they need and when they need it."

Thus, once Nile has analysed the team for existing skills, the analysis continues to ascertain which skills and competencies are necessary in the team, which were not identified in the existing team members. It may be the case that certain skills will be necessary to the team at some future juncture but are not required in the earlier stages. To illustrate this potential eventuality in the seed phase team skills analysis, Amun states:

> "So, often, in the early stages of tech development, you don't need the marketing
> guy. You can say, 'Well, we are going to need one somewhere down the line but...
> we're not there yet.'"

From the above example Ptah gives, it can be inferred that marketing skills are important in selling the product at launch and going forward thereafter. However, marketing is not a necessary skill during the product development stage, during which technical skills and capabilities are relatively more important to research and develop the technology; this was emphasised by Amun when he mentioned, "[In the early stages] it's often more around the technical capabilities that you need." He further describes the approach Nile has to prioritising which skills justify an external hire with the following:

> "So, often we'll outsource a lot of stuff in the early stages so you don't want to bring
> people on board and then, six months later, you kind of say, 'Well, we don't need you
> anymore.'"

Thus, Nile looks for skills that are going to be needed and valued by the initiative for years to come before hiring someone in a permanent position. To prevent this, Nile outsources work to service providers and focuses its energies on hiring new employees based on the complementary skills that entrepreneurs will need for future years, rather than only over the short term.

6.3.15 Egypt case finding 15: Unaltered process approach

Most initiatives that are incubated within Nile are single entrepreneur organisations. In other words, Nile employees are habituated to integrating as well as providing commercial support and project management to one-person organisations. Amun describes the usual situation of how a lone innovator arrives at the Nile incubator as follows:

> "So, typically, what happens is... we typically get approached by an inventor or an
> innovator on their own, largely. So, people who come through the door are largely
> on their own."

When Ptah was asked as to whether Nile has a strategy or policy that deals with how to integrate a technology initiative of two or more entrepreneurs into the incubator, he replied:

> "From what I've seen is it's just take it as it comes."

According to Ptah, who had been working at Nile for 18 months at the time of the interview, Nile has no policy or strategy in places that outlines the considerations for managing initiatives of two or more co-founders; the initiative seems to be largely approached in the same way as those of the others. Ptah continues his explanation of the approach with the following:

> "So, what generally happens is, even if there's a bunch of people that are behind a company, you only really – especially in the start-up phase – you only really are talking to one or two at a time..."

From the above statement, it may be surmised that if there are a number of innovators that have partnered to begin an early idea-stage initiative and are joining the Nile incubator, the project commercialisation manager would generally liaise only with one or two of them in early phases of the Nile process. Thus, it was made evident that Nile does not have a policy or other formal strategy for dealing with initiatives that have more than one person in them and uses the same process and approach to deal with these organisations, which can be called an unaltered process approach.

6.3.16 Egypt case finding 16: Entrepreneurs want autonomy

When Ptah was asked whether he had experienced any resistance from the Sphinx initiative, he answered:

> "I've encountered very little resistance… the only resistance was initially with the equity thing."

From the above quotation it may be deducted that, except for the acquisition of a 15 per cent equity stake in Sphinx by Nile, there has been little other resistance by the Sphinx initiative. The resistance against the 15 per cent equity stake caused Nile to introduce a claw-back mechanism which can reduced the stake to five per cent if Nile is not performing as it is contractually bound to do.

In addition, the four co-founding entrepreneurs, now three (as at August 2018) due to the resignation of Isis, in the Sphinx initiative conduct weekly meetings to which Ptah, the project commercialisation manager, is not invited, as has been previously discussed. Ptah struggles to play a meaningful role in the decision-making of the Sphinx initiative due to his isolation from these alignment and progress meetings. Thus, these meetings represent the autonomy that the Sphinx entrepreneurs desire as they largely exclude Ptah, a representative from Nile, which owns a 15 per cent stake in Sphinx, from partaking in decision-making. Thus, this section has served to present the 16 key findings uncovered through interpretative phenomenological analysis of the verbatim transcriptions of the research interviews. The section that follows will serve the same purpose in its consideration of the Greece case.

6.4   GREECE CASE FINDINGS

In this section, each of the identified key findings of the Greece case are discussed, with regards to the responses given in the semi-structured interviews conducted with Apollo and Demeter of Ilissos regarding the intended acquired equity stake and partnership with Agora and its co-founders, Athena and Hecate.

6.4.1   Greece case finding 1: Unaltered process approach

The majority of the initiatives that are incubated within Ilissos are one-person organisations. This is to say that the Ilissos employees are accustomed to training, interviewing and integrating as well as collaborating with single entrepreneurs. When the researcher asked Demeter, another of the Ilissos coaches, whether there were many cases in which there was more than one entrepreneur joining the incubator and the Ilissos process, she replied:

> "No, we had one team that was a two-member team and that already that didn't go well."

From the above statement, it can be inferred that Demeter recalls only one case of an idea-stage organisation coming in to the incubator. She goes on to say that this integration did not succeed in its aims; it was the observation of the researcher that the latter statement was emphasised by the research subject who was alluding to the challenging nature of this case because there was more than one entrepreneur to manage. It follows that Demeter was implying that organisations with single entrepreneurs are easier to work with in terms of integrating and incubating them into the Ilissos ways of working. As the researcher perceived, Demeter (the Ilissos coach), appeared to differentiate between integrating a single entrepreneur compared to integrating multiple co-founders of a particular initiative. As such, the researcher probed Apollo as to whether Ilissos has a strategy or policy that pertains to more than one founder or if indeed there is an uncodified approach that the incubator takes to these integrations. To this question, Apollo answered:

> "No, I wouldn't say that there is a policy that underlies it. I think we approached it similarly to how we approached the others."

From the above response, it may be reasoned that the Ilissos incubator approaches the organisation incubation and the various activities in initiatives with multiple founders in a similar manner as it approaches those incubations and integrations of single entrepreneurs. Therefore, Ilissos approaches the training, interviewing and integrating as well as entrepreneur collaboration of the former in a comparable way to the latter.

6.4.2   Greece case finding 2: Innovative teams need complementary skills

In the early stages of organisation incubation, it is the approach of the Ilissos incubator to ask the entrepreneurs what their personal strengths and weaknesses are vis-à-vis the organisation's requirements. Asking the entrepreneurs this question takes place within the context of the first team meeting that Ilissos hosts for new organisations entering the incubator, where the team refers to the coach, the managing director Hera and the entrepreneur(s). Apollo explains this approach with the following:

> "All of our businesses that we partner with… [we ask] 'What skills can you bring to the table? Where are you lacking? Where can we start filling gaps, internally, or where do we need to bring someone else in?'"

From the above, it is seems evident that Hera and Ilissos' coaches ask entrepreneurs these questions with a view to isolating which skills make up the entrepreneur's skill-set, which gives them a better understanding of the skills the entrepreneur is lacking. The skills which the entrepreneur lacks and the organisation requires are the complementary skills that the initiative will need to develop and thrive. As these skills are necessary for this reason, Ilissos tries either to provide them to the initiative by drawing on the skill-sets of its existing employees or, if the skills do not exist within Ilissos internally, the incubator sets about finding the right skilled people to join the team. Thus, Ilissos values highly the combination of the right skills for each initiative, which it decides on a case-by-case basis in collaboration with its entrepreneur(s). The fact that Ilissos values the right combination of skills in its teams is evidenced in its prioritisation of this as the identification of the entrepreneur's skills are dealt with in the first meeting of the team, which is followed by the team being chosen and built around the skills they lack by providing complementary skill-sets.

6.4.3   Greece case finding 3: Weekly meetings manage expectations

In the research interview with Demeter, she mentioned that the team holds a weekly meeting with the entrepreneur, which she describes in the following:

> "So, we would have every week meetings for an hour, which would be a status meeting but also a strategic meeting."

Thus, it can be said that these weekly meetings were an opportunity for the team to gather for an hour. The purpose of these meetings was twofold, according to Demeter. Firstly, this meeting is a "status meeting", which means this time is used to update the relevant stakeholders on the recent progress of the initiative on a regular basis. Secondly, Demeter also describes this weekly meeting as being strategic as well. In the Agora initiative, the weekly meetings also took place as Apollo says:

> "And we started to have regular meetings with the both of them."

However, Apollo only describes the intention of the weekly meetings as a progress meeting for all the members of the team, including the entrepreneur(s), the coach and Ilissos' managing director, which he refers to in the following:

> "So, the check-in meetings… would be with Hera, the coach and the entrepreneur."

Later in the interview, Apollo went on to say that, in the case of Agora, it was likely the situation that the team met even more regularly than the usual weekly meetings during the first few weeks:

> "I'd say every week because we met a lot. Like I'm trying to think... we met and did
> a lot for a thirty day period. There might have even been like two meetings in a week
> at the early stage."

The progress updates that these meetings are intended for are used in the Ilissos early integration and continued organisation incubation processes to manage the expectations of the team members by keeping everyone up to date with recent headway and the next steps.

6.4.4   Greece case finding 4: Founder-only meetings

In the case of Agora, Apollo and Hera found that after the team meetings Athena and Hecate would attend with them, the two co-founders would have an additional meeting to which Ilissos would not be invited, which he explains:

> "And then what we were finding is [that] they would leave and they would have
> another meeting without us…"

After the additional meetings Athena and Hecate would have on their own, Athena, who was more integrated than Hecate, would visit Ilissos and speak with Apollo and Hera about the issues Hecate was having, which he describes in the following words:

> "Then, possibly, Athena would come tell us, 'Yeah, Hecate is not happy.' So, Hecate
> never felt comfortable to bring stuff up in the meetings with us."

In the Agora case, these additional meetings took place as Hecate did not feel at ease with the Ilissos team and, therefore, did not share her opinion or contribute to the weekly team meetings if she disagreed or needed to bring something up.

6.4.5   Greece case finding 5: Interface management

Apollo describes the interface management he was responsible for and conducted during the integration as being the "in-between" among Hera and the two co-founding entrepreneurs. Referring to the feedback he received from Athena on the additional meetings she would have with Hecate, Apollo describes the interfacing he performed during the early incubation as follows:

> "…then you have Athena reporting to us about her meetings she's having with
> Hecate and how it's uncomfortable. [And she would ask me] 'Do you mind having a
> chat with her?' And then it's me having a chat with Hecate…"

From the above statement, it appears evident that Apollo was put in the position where he was asked by Athena to have a conversation with Hecate to gain her buy-in. Thereafter, Apollo would report back to Hera, the most senior of the Ilissos workforce, which he describes below:

> "Definitely because you've got me reporting to Hera with what happens when it's me
> on my own with Athena, when I'm on my own with [Hecate]... Oh, it's all starting to
> sound like Days of Our Lives now [laughs]."

Thus, the interface management that was required in the Greece case was of such a nature that the coach and innovation acquisition champion, Apollo, was interfacing on both an individual basis with each member of the team as well as collectively during the weekly team meetings. The one-on-one interfacing that was required of Apollo was often to carry message and persuade the individual team members.

6.4.6   Greece case finding 6: One-on-one interactions

In the Agora case, much of Apollo's role as coach and innovation acquisition champion took place by him interacting with the members of the team in one-on-one interactions. He describes these interactions in the following:

> "Then, there would probably be – like I said – Hecate and I meeting another time.
> And then there would be me meeting with Athena to go to suppliers and stuff like
> that."

Thus, Apollo was meeting with the co-founder of the Agora initiative on individual bases to assist and coach them in their roles; as can be seen above, he would meet with Athena to visit suppliers for the organisation. He would similarly meet with Hecate alone to assist her in her role, as he explains below:

> "...Trying to have a conversation with Hecate in between working on the finances,
> just the two of us, like, 'How do you feel this whole process is going?'"

Therefore, it is seems evident that Apollo and Hecate would meet alone, without the other team members, to work together on the financial control function of the Agora initiative. It was during these occasions when Apollo was alone with Hecate that he would try to have a one-on-one interaction with her to get an understanding of how she felt the Ilissos process was progressing. Thus, the one-on-one interactions Apollo was having with the other team members involved gaining buy-in on the process from each of these stakeholders as well as coaching the co-founders in the skills they would needs in their respective roles: Athena, in developing relationships with suppliers and clients; and Hecate, controlling the financial and administrative functions of the organisation.

6.4.7 Greece case finding 7: Task-based team development

According to Apollo, there was not a strong enough focus on the team development and building a resilient team dynamic in the Agora case. He explicates his view on this as follows:

> "I don't think we focused enough on that team development. I think we assumed that focusing here and getting task-based successes would result in a strong team dynamic."

It is manifest from the above quote that Apollo believes that the initial view was that a task-based integration in the Agora case would result in a resilient team dynamic and cohesion between the members of the team, which would be achieved by creating small wins in what he refers to as "task-based successes." However, Apollo is critical of this stance, describing it as an assumption that was made by Ilissos, in which the researcher observed Apollo's body language showing that this assumption was unfounded and ill-advised by a wave of his hand as he said the word, "assumed." Furthermore, Apollo gives depth to this "strong" team dynamic that he had hoped to achieve in the Agora initiative in the following:

> "But then things happen, an entrepreneur fails to deliver a task... We miss a task or something like that and then things start falling apart because you haven't prepped for failure from a team perspective."

In this statement, it can be deduced that Apollo has experienced times when entrepreneurs have failed in the tasks they set out to achieve, which leads to failures of a more permanent nature in which the team starts to break down. He draws attention to the need for the team to have prepared in some way for failures as a team, which referring to his previous statement, would involve building that collective strength and resilience teams need to succeed beyond failures.

6.4.8   Greece case finding 8: Task-based over human-based integration

In addition to the task-based focus on the Agora team development and dynamic, a task-oriented integration over human-oriented integration also proved a challenging consideration. As it regards the Agora initiative, Apollo says:

> "Yeah, from that respect, that's probably why Hera thought that we're moving forward with the tasks but the people dynamic is probably the biggest stick in the wheel there, yeah."

From this statement, while Ilissos' Hera believed that the tasks Athena, Hecate and Apollo were completing represented successes, it appears that there was not enough of a focus on the human integration. Apollo refers to this as "the people dynamic" and describes it as the "biggest stick in the wheel" of the initiative. In other words, Apollo feels that the task-based orientation towards integration was not sufficient to ensure a successful integration as, despite the fact that progress was being made in terms of tasks completed successfully, the human element of integration posed the biggest barrier to effective integration.

6.4.9   Greece case finding 9: Relationship-building as integration

According to Apollo, Hecate did not feel comfortable bringing up issues in the weekly team meetings with Ilissos in contrast to Athena, who did not have the same problem, which he explains below:

> "…Hecate never felt comfortable to bring stuff up in the meetings with us and Athena obviously didn't have a problem because she… had kind of broken that any-awkwardness-barrier just from a person-to-person perspective."

Therefore, it seems to be apparent in the above quote that Athena had come into the incubator with the relationships she had built during the training programme with the Ilissos coaches, which made her more comfortable raising issues. As such, the relationships that Athena had built during the training had integrated her into the Ilissos ways of thinking and working, which was not the case with Hecate, who was not integrated. Apollo continues with the following statement:

> "...Trying to have a conversation with Hecate… just the two of us, like, 'How do you feel this whole process is going?' I remember trying to address that and just trying to get her to let down her guard a bit…"

It may be reasoned from Apollo's statement above that he was attempting to initiate and develop a relationship with Hecate by asking her in a one-on-one interaction how she felt the process was unfolding. By endeavouring to address her stance on this with her, Apollo was hoping that she would lower her guard to trust him enough to raise issues with him. He further explains:

> "…there seemed to be something that didn't sit well with her and it was a case of how do I get this out. At least, communicate what it is you feel is going on."

From this, it appears evident that Apollo sensed there was something bothering Hecate; as a result, he tried to open channels of communication in the one-on-one interactions he had with her. Apollo did this to uncover what issues she had with the Ilissos integration by persuading her to communicate more openly with him. Thus, according to Apollo, he was trying to establish trust and communication with Hecate, comparable to that of Athena; therefore, Apollo was trying to build a relationship with Hecate which would integrate her into Ilissos by empowering her to contribute to the process through raising issues with the team.

6.4.10 Greece case finding 10: Team consensus

In addition, the Agora initiative was also subject to Ilissos' team consensus culture in which, as a team of the coach, Hera and the entrepreneur(s), any payments for goods and services that the initiative might require needed to be discussed and voted on to be approved, which Apollo explains:

> "Depending on the needs of whatever company there was, we would agree as a
> team that, 'Yes, that's a good thing to pay money for. Let's authorise the payment.'
> So, that's how that relationship worked."

This is how Apollo describes the team consensus that would have to be reached before any purchases were to be approved and paid for. In the case of Agora, Apollo identifies the purchases that were approved by the team during the incubation period in the following words:

> "In their case, we would pay for some samples… of their [products];… we would pay
> for some adverts via Facebook; …we would pay to get their website made up; we
> would pay to get a patent registered…"

The payments authorised and agreed upon by the team in the Agora initiative included: some prototype examples of the products that the children with certain neurological conditions would use; some digital marketing on the Facebook social media platform; the creation of a website for the organisation; and registering a patent for the Agora products. Thus, team consensus seemed to be both necessary and reached in the Ilissos-incubated Agora initiative.

6.4.11 Greece case finding 11: Entrepreneurs want autonomy

In the case of the Sphinx initiative, the two co-founders undertook two courses of action towards the end of their engagement in the Ilissos incubator. The first was a small launch of their products that sold a few items and caused excitement for Athena and Hecate; Apollo describes this small launch in the following:

> "They ended up going ahead with a mini-launch despite our saying they shouldn't.
> So, they went on with the mini-launch, got some sales, got very excited…"

Ilissos advised against this launch of their products as their production was not such that if they received a large order, they could fulfil it. Secondly, the entrepreneurs saw an opportunity to gain some brand awareness by engaging in an impromptu media interview, which culminated in a short public relations clip. These two actions by the co-founders of Agora led to thoughts of:

> "'Why should we give away our twenty per cent?' And 'We're doing this on our own.
> They...?' It became this whole we-and-they situation. They ended up coming through
> and saying, 'Look, we are keen to go at this on our own.'"

In the above statement, it is may be inferred that Apollo felt that these two marketing undertakings by Athena and Hecate led to a dynamic between Agora and Ilissos that might be characterised as us-versus-them. The co-founders did not want to give up their autonomy in the decision-making about promotional activities as well as in the equity stake of the organisation, which they felt like they didn't need to part with. It was for these reasons, all of which amounted to full autonomy that the co-

founding entrepreneurs of Agora wanted, that Athena and Hecate likely left the Nile incubator. Given the identification of the 11 key findings in the Greece case in this section, the following section deals with the Rome case.

6.5   ROME CASE FINDINGS

In this section, each of the identified key findings of the Rome case are discussed, with regards to the responses given in the semi-structured interview conducted with Romulus of Pantheon and Tiber regarding the resource buy-out acquisition of Pantheon and its co-founders, Romulus and Remus.

6.5.1   Rome case finding 1: Software technology readiness level

At the time of the acquisition by resource buy-out of Pantheon by Tiber, the Pantheon software technology was highly mature. Romulus, one of two co-founders of the acquired, describes the maturity of the software as follows:

> "Sure and it still is. It almost runs itself. It doesn't need a huge amount of input. It ran pretty much without anyone touching it… It just kind of ticked by because it's been built in a [certain] way..."

In the above statement, Romulus appears to pronounce the Pantheon software to be mature to the point of running largely without human intervention as it has been designed and developed to be autonomous. The Pantheon software was mature, commercialised and mostly autonomous at the time of acquisition by resource buy-out and, according to NASA's TRLs, it was at TRL nine as it was and continues to be applied commercially (Mankins, 1995). Romulus goes on to further explain:

> "All the issues we had were always related to change. So, you change something and then it breaks. But obviously we fix it right away. We would also try to make sure that that particular problem would… self-correct next time."

From Romulus' quote above, it may be deduced that the human intervention the Pantheon software innovation needed was only required in circumstances where something related to the technology had changed. The changes would then require Pantheon employees to fix it right away, which would entail the following, in Romulus' words:

> "It was mostly bringing the team together and it's still the case... On occasion, we have one sort of issue like an outage that was caused by our cloud provider and the Pantheon people inside the company… dealt with that."

Therefore, to fix an issue that has arisen with the mature and mostly autonomous software, the Pantheon team are gathered from around the Tiber organisation and work together to deal with the problem. Referring to Romulus' previous quote, the Pantheon team fix the problem so that it will self-correct next time.

6.5.2   Rome case finding 2: Growing start-ups have less time to lead integrations

When asked whether Romulus believed that the integration of the Pantheon employees into the Tiber organisation was supported by leadership of the acquirer's top executives, Romulus answered:

> "No, I mean there wasn't much of that. I don't think the company is really set up for that… it's not like an established company here maybe they have a team that deals with this [integration]."

In the above statement, Romulus explains that there was not much leadership that supported the integration of the Pantheon employees as the Tiber organisation was not established enough at the time to have a dedicated team that sees acquisitions through integration within the organisation. The lack of leadership was largely due to the fact that Tiber was in a high-growth phase at the time of acquisition, which has essentially continued until July 2018 when the research interview took place. Romulus describes this growth in the following:

> "Tiber is on the hockey-stick part of the start-up curve. Things are growing very… quickly… All start-ups in this period of growth... It's really a matter of where is the greatest pain and kind of everything else gets left behind."

As Romulus came from a start-up in which he was one of two co-founding entrepreneurs, he is familiar with and sympathetic to the inner workings of a growing start-up, in which the top executives do not have the time to lead integrations.

6.5.3   Rome case finding 3: Entrepreneur wants autonomy

For Romulus, however, the fact that the top executives of the growing Tiber start-up had no time to lead the Pantheon integration was actually seen as a positive by him, as he says:

> "The one thing that was kind of interesting during that phase, which I really actually liked, was that I didn't actually have – just because it's such a fast-growing company – I didn't actually have a boss."

As the Tiber start-up was in a high growth phase, Romulus did not have a boss, which he explains was due to the role he would have reported to being vacant at the time and therefore being held by the CEO, who had a demanding schedule due to the growth phase. In Romulus' words, he describes this below:

> "The role that I was reporting in to was being held in the interim by the CEO, who's obviously very busy. So, really, my communication with him was [limited]…"

Thus, as a result of the CEO's demanding schedule, the communication between he and Romulus was very limited, which Romulus later goes on to elaborate what was in fact communicated:

> "He pointed me in a direction that he wanted me to go, with what he wanted me to
> build with these six or seven guys that I was handed. And then really for four or five
> months, I just got on with that and we hardly spoke…"

Therefore, the CEO briefed Romulus on the project that the latter would be taking over as a new Tiber employee in terms of what software the project was tasked with developing. However, after the briefing, Romulus and the CEO scarcely communicated. Romulus describes his experience of this below:

> "…but actually it was a great way to land because I was used to that from being my
> own boss... I was not used to reporting up... Because there was no one I had to
> manage up to for the past four or five years. That actually suited me."

As he was accustomed to being his own boss in the Pantheon start-up for four to five years prior to the Tiber acquisition, Romulus was unused to reporting to someone more senior than himself and in fact enjoyed the lack of communication from the CEO. He further explicates:

> "[The CEO] was sort of like, 'I'm really sorry that I can't spend more time with you.'
> And I loved it and I think, you know, it was really successful..."

From the above quote, it is apparent that while the CEO was remorseful for his lack of communication and leadership of Romulus, the latter seemed to feel that this was an effective interaction, which he also appeared to value. The autonomy this situation gave Romulus allowed him to have a measure of freedom, which he describes in the following verbatim quotation:

> "I did some things that were really different from the normal Tiber way… I didn't have
> to justify it to anyone. Obviously, the team… but I managed to bring them on board
> and we built a great process…"

It may be inferred from Romulus' statement that the autonomy granted him by the lack of communication from the CEO gave the former the freedom to lead and manage his project team as he saw fit, with only his subordinates to be accountable and substantiate his actions to. The process Romulus instituted differed from the accepted and standard process of the Tiber organisation. However, he succeeded in persuading his team to work according to this process. Romulus continues with the following quote:

> "So, that was great because it was kind of like I was running my own team still, which
> was nice. But, in terms of communication, it wasn't strong, but it just so happened to
> work."

From the above, it is apparently evident that Romulus certainly enjoyed the autonomy of managing his own project team without a superior to report to often. Despite the lack of communication from the CEO, this worked for Romulus' integration into the Tiber organisation. Thus, in this case, the acquired entrepreneur wanted and enjoyed autonomy.

6.5.4   Rome case finding 4: Cultural absorption

As previously mentioned, the acquisition of Pantheon by resource buy-out included the acquisition of four human resources who were brought into the Tiber organisation as employees and integrated as team members in separate teams. Romulus describes the integration as follows:

> "You know, when there are four of you joining a hundred and thirty people, you've just got to jump on board."

In the case of the Pantheon acquisition, the four human resources became part of an organisation at least thirty times larger than they are. In the statement above, Romulus draws attention to the attitude and approach that the acquired employees should be willing to assimilate to the acquiring culture. He goes on to explain the cultural change that the Pantheon employees underwent:

> "…but I think most of it was very positive… So there was a cultural change but it was a very positive cultural change."

While Romulus explains the idiosyncratic cultural differences of Tiber compared to the culture of Pantheon, these cannot be detailed in this study as these would identify the organisation in question and violate the confidentiality and anonymity extended to the research subjects. However, it may be said that the acquisition represented a significant cultural change, which Romulus personally believes to have been a positive change for himself and his team members. As such, Romulus was generally amenable to the cultural change, which allowed him to be absorbed into the Tiber corporate culture without resistance.

6.5.5   Rome case finding 5: Expectation management as transparent communication

When asked whether he had to undertake the management of expectations of his Pantheon team members and new Tiber colleagues, Romulus stated:

> "So, managing the expectations of the employees... I think what worked was just to be like being as open as we could for as long as we could."

In the above statement, Romulus emphasised the importance of being honest and transparent with the employees who are likely to be acquired during the negotiation process. He went on to say:

> "Obviously, when you are transparent, it does get messy but I think that people appreciate the honesty. For the most part, I've never heard someone say, 'This is totally disorganised.'"

Thus, while Romulus recognises that there are drawbacks to maintaining transparency with staff during a negotiation process as organisational activities become disordered, he advocates for transparency with staff as people recognise the full worth of being openly informed about the acquisition's progress and next steps.

6.5.6   Rome case finding 6: Communication with the acquired team members

Lastly, as Romulus, Remus and the other Pantheon employees were integrated as individuals into the Tiber organisation in separate teams, Romulus mentions the communication that the Pantheon team members had after the acquisition:

> "So, there wasn't really a lot of communication... Obviously, I kept up the communication – and I still do – with those guys but there was nothing structured."

Thus, while the levels of communication were not high, Romulus maintained contact with the Pantheon team members and still continued to do so until the time the research interview took place in July 2018. In this section, the key findings of the Rome case have been presented and discussed. Given the previous two sections which have served the same purpose for the Egypt and Greece case respectively, Table 6.2 below tabulates the key findings within each case and the key thematic findings across two or more of the cases presented in the three aforementioned sections.

TABLE 6.2: Summary of the key findings of the cases

Findings	Key findings		
	Egypt case	Greece case	Rome case
1	Unaltered process approach	Unaltered process approach	
2	Relationship-building as integration	Relationship-building as integration	
3	Innovative teams need complementary skills	Innovative teams need complementary skills	
4	Weekly meetings manage expectations	Weekly meetings manage expectations	
5	Founder-only meetings	Founder-only meetings	
6	Entrepreneurs want autonomy	Entrepreneurs want autonomy	Entrepreneur wants autonomy
7	Team consensus	Team consensus	
8	Technology readiness level (hardware)		Technology readiness level (software)
9	The impact of distance		
10	Central contact		
11	Multidimensional skills		
12	Providing guidance as leadership		
13	Goal-orientated project management		
14	Personal professional development		
15	Acquisition team culture		
16	Communication as perspective		
17		Interface management	
18		One-on-one interactions	
19		Task-based over human-based team development	
20		Task-based over human-based team development	
21			Growing start-ups have less time to lead integrations
22			Cultural absorption
23			Expectation management as transparent communication
24			Communication with the acquired team members

Given the isolation and description of key findings in the three cases and the above tabulated summary thereof, the subsequent section serves to discuss the findings across the three cases.

6.6   CROSS-CASE FINDINGS

Across the three case studies' key findings, there exist findings that are common and similar to those of other cases. This section presents the eight key thematic findings uncovered across the cases in the study and discusses them.

6.6.1   Cross-case finding 1: Unaltered process approach

The first cross-case finding is the unaltered process approach, which was found across the Egypt and Greece cases; please refer to section 6.3.15 for the Egypt case finding and section 6.4.1 for the Greece case finding. In summary, the unaltered process approach involves the organisation acquiring an equity stake in the initiative incubating and integrating the team initiative with the same approach as these acquiring organisations would incubate and integrate an individual innovator.

6.6.2   Cross-case finding 2: Relationship-building as integration

The second cross-case finding is relationship-building as a means of integration, which was found in the Egypt and Greece cases; please refer to section 6.3.6 for the Egypt case finding and section 6.4.9 for the Greece case finding. Relationship-building on an individual basis was undertaken by the coaches and project commercialisation managers with a view to integrate the members of the team on individual bases.

6.6.3   Cross-case finding 3: Innovative teams need complementary skills

Moreover, another cross-case finding of the study is that innovative teams need complementary skills, which was found in the Egypt and Greece cases; please refer to section 6.3.14 for the Egypt case finding and section 6.4.2 for the Greece case finding. In both these cases, it was found that the team's combined skill-set is analysed with a view to identifying which skills the team needs and which it possesses and lacks. The latter are then considered complementary skills, which the equity acquirers work to provide internally or, alternatively, externally source the people with the required skills to join the team. This is the case in these innovative teams that are early idea-stage initiatives, which need the right skill-set to develop.

6.6.4   Cross-case finding 4: Weekly meetings manage expectations

Furthermore, an additional cross-case finding is that weekly meetings serve to manage expectations; this finding was uncovered across the Egypt and Greece cases; please refer to section 6.3.7 for the Egypt case finding and section 6.4.3 for the Greece case finding. In these two cases, it was found that team weekly meetings are held where the members of the team are given the opportunity to update their colleagues on their progress in developing the initiatives. These meetings have the intended and desired consequence of managing the expectations of the team members.

6.6.5 Cross-case finding 5: Founder-only meetings

The fourth cross-case finding from the Egypt and Greece cases is that meetings take place in which those in attendance are only the initiative's original founders (the founders of the innovative organisation who were acquired by Nile and Ilissos respectively). These meetings take place without opening the meeting to attendance by a representative of the organisation that has an acquired equity stake in the initiative; please refer to section 6.3.12 for the Egypt case finding and section 6.4.4 for the Greece case finding.

6.6.6 Cross-case finding 6: Entrepreneurs want autonomy

The sixth cross-case finding in the study is that entrepreneurs seek autonomy, which was found across all three cases, which is to say, Egypt, Greece and Rome; please refer to section 6.3.16 for the Egypt case finding, section 6.4.11 for the Greece case finding and section 6.5.3 for the Rome case finding. The finding that entrepreneurs desire autonomy is found in each of the cases. In the Egypt and Greece cases, the entrepreneurs query and resist the size of the equity stake taken by the incubator as well as undertake separate founder meetings in which decisions are made that the incubator does not vote on, despite the fact that both the incubators under consideration in this study own sizeable equity stakes. In the case of Rome, the entrepreneur appreciated the neglect of his reporting manager in managing and communicating with him, namely Romulus; in fact, he revelled in the freedom and autonomy he enjoyed without a reporting manager.

6.6.7 Cross-case finding 7: Team consensus

The seventh cross-case finding from the Egypt and Greece cases is that team consensus needs to be achieved for consequential decisions to be made. The consensus is achieved among the co-founding team members of the partially acquired initiatives in conjunction with the stakeholders of the acquiring entity; please refer to section 6.3.10 for the Egypt case finding and section 6.4.10 for the Greece case finding.

6.6.8 Cross-case finding 8: Technology readiness level

The eighth cross-case finding prominent in both the Egypt and Rome cases is that the level of technological maturity of the acquired value offering generally dictates the nature and frequency of relations between post-acquisition team members on the innovation project (please refer to section 6.3.11 for the Egypt case finding and section 6.5.1 for the Rome case finding). In the Egypt case, the amount of time an organisation is incubated by and integrated into Nile in order to achieve market readiness is dependent on the maturity of its value offering (please see section 6.2.1). While this period varies in length, Ptah puts forth that it can take six months for more mature value offerings and up to five years for those that are less mature. Moreover, Ptah compared the maturing of hardware technology with that of software, asserting that the latter typically matures much faster than hardware as iterative changes to the software can be quickly applied and tested. At the time of

interviewing, Ptah and the Sphinx co-founders were working towards securing additional funding to develop the technology for a test market launch. At that time, the Sphinx hardware was at TRL three and ready to be further developed into prototypes before being earmarked for commercialisation (Mankins, 1995).

In the Rome case, the Pantheon software was mature, commercialised and mostly autonomous at the time of acquisition by resource buy-out. According to NASA's TRLs, the Pantheon software was at TRL nine as it was and continues to be applied commercially (Mankins, 1995). Thus, the Pantheon ad hoc team was assembled from their separate positions and teams in the Tiber organisation to work together on resolving issues the software faced. A recent development in the Tiber organisation is the addition of a dedicated position reporting to Romulus, which deals with any and all issues relating to the Pantheon software. Thus, the maturity of the acquired value offering at the commencement of post-acquisition integration can largely determine the nature and frequency of dealings between post-acquisition team members on the innovation project.

Therefore, in summary, the eight cross-case findings of the three case studies under consideration in this study are: unaltered process approach; relationship-building as integration; innovative teams need complementary skills; weekly meetings manage expectations; founder-only meetings take place; entrepreneurs want autonomy; team consensus; and technology readiness level.

6.7   CONCLUSION

This chapter has firstly served to introduce the three case studies and their contexts, which went into the cross-case study methodology. Moreover, this chapter dealt with identifying the key findings of the cases separately. Thereafter, the themes that emerged across the cases were isolated and discussed. Given the findings presented in this chapter, the following chapter presents the summary, limitations and recommendations of the study.

CHAPTER SEVEN

SUMMARY, RECOMMENDATIONS, LIMITATIONS AND FUTURE RESEARCH

7.1   INTRODUCTION

The study explored managerial and/or leadership considerations for integrating small innovation acquisitions (with more than one individual) at the team level. Thus, research was conducted through secondary and primary means to address the research questions of the exploratory study. The existing literature was reviewed first and presented in chapters two through four. Successively, primary research was undertaken through identifying and studying three cases for cross-case key thematic findings pertaining to the overarching research question.

Given the eight key thematic findings identified and discussed in the previous chapter, the current chapter provides a summary of the thesis as well as its limitations and recommendations. The chapter begins with a synopsis of the study, which addresses the relevant literature pertaining to its subject matter. Subsequently, the key themes found are summarised by reviewing the cross-case findings. Recommendations are presented thereafter. However, the three cases and the study pose limitations, which are addressed. Moreover, suggestions for future research are considered. Lastly, the thesis culminates in final concluding remarks.

7.2   SUMMARY OF THE STUDY

The study began by presenting an introduction and overview of the study, in which salient terms were defined and apposite factors were reviewed; in addition, it served to describe the initial delineation of the research to be undertaken. Thereafter, the existing literature was reviewed and the relevant literature presented in the chapters two, three and four; to the end of synopsising the literature reviewed, the below summarises the main secondary research findings.

There have been waves of heightened mergers and acquisitions activity since the late 1800s (Viviers *et al.*, 2014). In recent decades, M&A have progressively been undertaken for the purposes of procuring innovation as a basis for competitive advantage (Ahuja & Novelli, 2014). These innovation acquisitions are advantageous for acquiring organisations as they source outsiders with different skill-sets and mindsets, allowing them to challenge widely-held assumptions; these acquisitions also allow for the procurement of patents and other intellectual property rights (Govindarajan & Trimble, 2010a; 2010b). Nonetheless, notwithstanding small innovation acquisitions' benefits, they are also likely to pose challenges to acquiring organisations, as is mostly the case when two previously independent organisations merge or are integrated post-acquisition. Typically, the issues leaders struggle with in M&A are associated with culture, change, transformation and teamwork (Galpin & Herndon, 2007).

Successful innovation is largely a matter of managing the process effectively and consistently (Tidd & Bessant, 2013). Organisations planning on commercialising innovations that require higher levels of research and development find that depending on past data alone is insufficient; thus, organisations ought to consider undertaking organisational experiments (Anderson & Simester, 2011). Govindarajan and Trimble (2010a) have advanced a framework for executing innovations, in which organisations research, develop and commercialise innovations in the content of a partnership between a dedicated team and the organisation's ongoing operations, which Govindarajan and Trimble (2010a) refer to as its performance engine. In their model, the DT is an entity focused on commercialising the innovation. The most promising candidates are to be hired for the population of this team and they are to comprise key team positions. All potential sources for these employees should be considered, including internal transfers, external recruitment and acquisitions of smaller organisations (Govindarajan & Trimble, 2010a; 2010b).

The final source of outsiders, acquisitions of smaller organisations, is of importance to this study. However, it seems that little attention has been paid to the particular phenomena surrounding the managerial and/or leadership considerations for integrating small innovation acquisitions (with more than one individual) into teams, such as dedicated teams, as proposed in a framework designed by Govindarajan and Trimble (2010a). In order to analyse the current situation and garner a few early findings in the field, an exploratory cross-case study was used to explore the primary research question and its corresponding secondary questions.

The overarching primary research question of the study was: "What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?" The primary research deployed to explore and start to answer this questions was a series of qualitative, in-depth, semi-structured interviews with innovation acquisition champions. These audio-recorded interviews were transcribed verbatim and underwent interpretative phenomenological analysis by the researcher to uncover key findings. Therefore, the primary research culminated in three cases, which made up the exploratory cross-case study. The findings from the three cases were examined in the previous chapter; the following section serves to summarise the key thematic findings from the cross-case study undertaken.

7.3   RELATING THE CROSS-CASE THEMATIC FINDINGS TO THE LITERATURE

The primary research undertaken in this study has led to the learning of essentially novel material in the literature, as is perceived by the author. Through the interviewing of three key innovation acquisition champions who had integrated small innovation acquisitions at the team level, eight cross-case key thematic findings emerged. In this section, each of these key themes will be synthesised and integrated with the literature.

7.3.1   Cross-case finding 1: Unaltered process approach

The first cross-case finding was that the innovation acquisition champions interviewed did not alter their approach or process towards integrating partially acquired team members and developing the teams for initiatives with two or more co-founders. Their previous experience and their acquirer's modus operandi had only considered integrating single entrepreneurs and innovators. When a team of co-founder entrepreneurs were partially acquired, the innovation acquisition champions did not change the process. This finding emerged from the Egypt and Greece cases.

With regards to the existing literature, this finding addresses a gap within it. This study was initiated to explore what unique managerial and/or leadership considerations exist for the process of integrating small innovation acquisitions (with more than one individual) at the team level. To the knowledge of the author, no prior research has been carried out which seeks to explore, describe or test the causal factors of an innovation acquisition champion assuming the managerial and/or leadership duties of undertaking the post-acquisition integration process, the team development process and the innovation execution process concurrently. As a result, this study has sought to address a gap in the literature and this first key cross-case thematic finding suggests that innovation acquisition champions currently do not alter their process approach for the integration of teams. This appears to be a novel finding of the research which might only be synthesised and integrated with existing literature with difficulty.

7.3.2   Cross-case finding 2: Relationship-building as integration

The second cross-case finding of the primary research undertaken by the researcher is that of relationship-building as a means of integration, which was found in the Egypt and Greece cases. The research subjects Ptah and Apollo told of their efforts to build relationships on individual bases to integrate the members of the team on an individual basis first. The importance of relationship-building in post-M&A integration has been studied and documented in organisation level studies, such as Galpin and Herndon (2007), which can be referred to in section 3.12.2.2(e). These scholars state that key talent within the integration should be re-recruited for the best hopes of success, by which they mean (and go on to further explain) that influential employees should be included in the management of the merger to achieve good interpersonal relationships between integrating groups (Galpin & Herndon, 2007).

In terms of the literature on team development, relationship-building has been identified as important during the forming stage of the team by Tuckman (1965) as well as Tuckman and Jensen (1977), which can be referred to in section 4.2.1.1 of this dissertation. At the first stage of team development, namely that of team forming, group members focus their energies on orienting themselves around both the task behaviours and interpersonal relationships that will be required of them throughout the remainder of the team's existence (Tuckman & Jensen, 1977). The interpersonal relational structure initiated and developed from the forming to norming stages becomes the basis for executing tasks,

which necessitates a strong foundation of internal team relationships (Bonebright, 2010). Relationship building in the team, especially in its early stages, is necessary for effective listening and communicating in later stages. Teams that suffer from ineffectiveness often attribute issues to internal jealousy, hostility and politicking (Isaksen & Tidd, 2006; Tidd & Bessant, 2013)

This relationship-building also resonates with the literature on factors of team climate that can influence innovation by Isaksen and Tidd (2006) as well as Tidd and Bessant (2013), discussed in section 2.3.3.2(a). Innovative team climates are characterised by internal team relationships that extend emotional safety to those directly involved and are underlined by openness and trust; in these contexts, team members feel that an open platform for suggesting ideas without judgement exists (Isaksen & Tidd, 2006; Tidd & Bessant, 2013). Moreover, the duty of integrating members and building the research and development team has been argued as particularly important in the early stages of an R&D project (Kim *et al.*, 1999) to build relationships between team members (Pirola-Merlo *et al.*, 2002).

The building of relationships is considered in the literature as a leadership quality (Maccoby, 2000), which may be referred to in the literature review on management and leadership, particularly in section 4.3.1.4. In the literature related to project leadership, the importance of collaboration is emphasised as a social competence to manage relationships in the project as accentuated by Turner and Müller (2005). Thus, this cross-case finding of the current study, relationship-building as integration, extends to all of the four bodies of literature reviewed in this study: post-M&A integration; innovation; management and leadership; and team development.

7.3.3   Cross-case finding 3: Innovative teams need complementary skills

Furthermore, the third cross-case finding of this study is that innovative teams require complementary skills, which was uncovered in the Egypt and Greece cases. In both these cases, it was found that the team's combined skills were analysed at the outset of simultaneously undertaking the post-acquisition integration process, the team development process and the innovation execution process. This finding inferred from the qualitative data that the team skill-set analysis was conducted with a view to identifying which skills the team requires on a case-by-case basis and, particularly, which it possesses and lacks at the start of the post-acquisition integration and team formation. It was further deduced from the research subjects' statements that skills the team lacks are then regarded as complementary skills, which the equity stake acquirers endeavour to provide internally or, alternatively, externally source complementary skilled individuals to join the team. This seems to be the case particularly in the innovative teams that are early idea-stage initiatives with less mature technologies that require the right skill-sets to mature their innovations towards commercialisation and market launch, which was the event in the Egypt and Greece cases.

Regarding the innovation literature, Govindarajan and Trimble (2010a; 2010b) and Virta (2017) have advanced the importance of having a dedicated team with the right skill-sets. In assembling a DT, Govindarajan and Trimble (2010a; 2010b) prescribe three critical steps: firstly, identify the skills needed; secondly, hire the best people the leader can find; and, thirdly, match the initiative to the project team's organisational model (Govindarajan & Trimble, 2010b). Prior to hiring individuals based on their capabilities, the skills required for the innovation initiative should be identified. This modus operandi will ensure all necessary personal know-how (tacit knowledge), practical previous experience, technical competencies and creativity characterises the DT. Once the skills have been identified, the pool of insiders should be reviewed for potential candidates as well as considering capable outsiders who possess skills that are perhaps not as prevalent in the organisation at the time (Govindarajan & Trimble, 2010a; 2010b).

In this study, the importance of complementary skills to the existing members of the partially acquired Sphinx and Agora start-ups was emphasised in the Egypt and Greece cases, respectively. Therefore, in these cases, skills were identified as necessary to analyse at the start of team development and the integration process, before any steps towards innovation execution had yet taken place. However, these organisations had arrived with innovative ideas and relevant expertise to the technologies that they intended to commercialise. Thus, while these innovation acquisitions were not undertaken for the skills they possessed alone, as Govindarajan and Trimble (2010a; 2010b) suggested, they still required complementary skills within their wider team.

7.3.4   Cross-case finding 4: Weekly meetings manage expectations

Moreover, a fourth cross-case finding was that weekly meetings function as a regular opportunity to manage stakeholders' expectations, which was found in the Egypt and Greece cases. In both of these cases, it was found that team weekly meetings are held where the members of the team are given the opportunity to update their colleagues on their progress in developing the initiatives. These meetings have the intended and desired consequence of managing the expectations of the team members.

In the literature pertaining to the process perspective lens of the M&A literature, it is argued that M&A success over the long term can be realised only by the following means: managing the M&A process; effectively communicating with all employees, existing and acquired; as well as understanding of the expectations and the apprehensions on both the bidder and target's sides (Bastien, 1987; Birkinshaw *et al.*, 2000; Blake & Mouton, 1985; Cartwright & Cooper, 1993). Thus, it may be stated that the management of stakeholder expectations is a necessary and important consideration for successful acquisitions. At the inception of the post-acquisition integration process, varied expectations are at play among the stakeholders of the PAIP, especially the acquiring and acquired employees (Haspeslagh & Jemison, 1991). In acquisitions where learning needs to take place, managers are continually managing the expectations of themselves and their subordinates

as well as maintaining a focus of learning during the integration and achieving the objectives as they were stipulated at the outset (Haspeslagh & Jemison, 1991).

Moreover, in innovation projects where there is some level of uncertainty, the project's stakeholders require an expectation management style, which comprises: recurrently evaluating and reviewing project progress; regularly ascertaining and recording the learning that has taken place; and constantly refining learning further through revising plans (Govindarajan & Trimble, 2010a:113-115; Sheasley, 1999).

Therefore, expectation management has been identified in the literature on post-acquisition integration processes and executing uncertain innovation projects for commercialisation. It can therefore be said that the management of expectations on a weekly basis (in the form of team meetings) was undertaken for the purpose for which it was intended, namely managing stakeholder expectations.

7.3.5   Cross-case finding 5: Founder-only meetings

The fifth cross-case finding emerged from the Egypt and Greece cases. This thematic finding can be explained as founder-only meetings in which the initiative's original founders meet in private. In other words, they are the only team members of the initiative present without opening the meeting up to be attended by a representative of the organisation that has an acquired equity stake in the initiative. Firstly, in one case (Egypt), this was carried out by the co-founders, who conducted their weekly meeting of the partially acquired entity (Sphinx) meetings which the project commercialisation manager (Ptah) had knowledge of but was not included in. Similarly, in the Greece case, the co-founders (Athena and Hecate) also had founder-only meetings, which mainly preceded the weekly expectation-managing team meeting attended by themselves as well as the acquiring organisation's coach and strategic liaison (Apollo and Hera, respectively). However, in the Greece case, the founder-only meetings were more informal as they happened in a casual discussion format during Athena and Hecate's journey home after the formal team meeting. Neither Apollo nor Hera were invited to these informal founder-only meetings.

With regards to the secondary research, this key thematic cross-case finding addresses a gap in the literature with an early finding in the field, to the knowledge of the author. As such, this finding is novel and can only be related to the secondary research with difficulty because it currently does not appear to afford explored findings or quantified results of the managerial and/or leadership considerations in the aforementioned context.

7.3.6   Cross-case finding 6: Entrepreneurs want autonomy

The sixth cross-case finding in the study is that entrepreneurs seek autonomy, which was found across the Egypt, Greece and Rome cases. In two of the cases, the desired autonomy was revealed by the founders in the Egypt case as well as the founders in the Greece case in their querying and

resistance of the size of the acquired equity stake required by the partial acquirers (Nile and Ilissos, respectively). The autonomy entrepreneurs want might also be said to be demonstrated by both cases' occurrences of separate founder-only meetings; in these meetings, decisions are made that the partial acquirer does not vote on, despite both relevant incubators possessing equity stakes in the partially acquired organisations (Sphinx and Agora). Furthermore, in the case of Rome, the entrepreneur apparently appreciated the neglect of his reporting manager in the months after the acquisition by resource buy-out. The inattention displayed by his reporting manager was demonstrated in the latter's lack of communication with the acquired co-founder and management of him. Despite the acquired entrepreneur being largely overlooked by his manager, however, it seems he actually revelled in the freedom and autonomy he enjoyed without reporting to someone higher in the chain of command.

Regarding the secondary research, the issue of organisational autonomy was one that arose in the literature as well (Graebner *et al.*, 2017; Steigenberger, 2016), as has been discussed in section 3.6.2 and in section 3.10. In an acquisition, the managers of an integration are faced with choosing an integration approach, ranging from completely absorbing the acquisition to preserving the acquired organisation's autonomy, which is a significant decision that can affect the PAIP (Haspeslagh & Jemison, 1991; Pablo, 1994; Puranam *et al.*, 2009; Zollo & Singh, 2004). In this study, entrepreneurs desired autonomy, which is consistent with the literature.

7.3.7   Cross-case finding 7: Team consensus

The seventh cross-case finding that emerged from the Egypt and Greece cases is that of the need for team consensus to be reached in order to make consequential decisions. This consensus is achieved by the co-founding team members of the partially acquired initiatives as well as the acquiring entities' stakeholders unanimously agreeing on a choice to be made.

In reference to the secondary research, the key thematic cross-case finding of team consensus addresses a gap in the literature with an early finding in the field, to the knowledge of the author. As such, this finding is considered novel and can only be related to the secondary research with difficulty as it does not currently appear to have been addressed.

7.3.8   Cross-case finding 8: Technology readiness level

From the Egypt and Rome cases, the eighth cross-case finding emerged; this finding is namely that the maturity of the technological value offering, either partially or fully acquired, directs the frequency and nature of liaisons among post-acquisition team members on the innovation project. This finding is consistent with the literature on technology readiness levels (TRLs), which are a means of evaluating the maturity of a given technology, a method developed by the USA's NASA (Mankins, 1995).

In the Egypt case, an organisation is incubated by and integrated into the partial acquirer for the length of the time period it requires to achieve market readiness, which is dependent on the technology's maturity. While this period varies in length, the project commercialisation manager (Ptah) suggested that it ranges from a minimum of six months value offerings that are mature and a maximum of five years for those that are less mature. Additionally, the project commercialisation manager (Ptah) contrasted hardware technology maturity with software technology maturity, emphasising that software archetypally develops faster than hardware because the former can be modified and tested more quickly than the latter.

In the Rome case, the software of the acquired entity (Pantheon) was mature enough to be essentially autonomous at the time of acquisition by resource buy-out, according to one of the co-founders (Romulus). The maturity of this software meant that the acquired ad hoc team assembled from their dispersed positions and teams within the acquiring organisation in order to work together on solving issues the software faced. At the time the research interview was conducted with the research subject (Romulus) in late July 2018, a contemporary development in the bidder organisation was the adding of a full-time position responsible for resolving issues relating to the acquired software and reporting to the research subject. Therefore, it can be said that the technology readiness level at the beginning of the post-acquisition integration may largely determine the frequency and nature of relations between post-acquisition team members in the innovation initiative.

In respect of the literature, the Govindarajan and Trimble (2010a; 2010b) framework was consulted in the secondary research as it bears relevance to the development of a team which executes innovation to the end of arriving at a commercialisable value offering. However, in this piece of literature, echoed by Virta (2017), the maturity of a value offering is null and void; this is because their framework allows for the acquisition of small organisations for the purpose of populating the innovation team with skilled people to create an innovative idea and not for the acquisition of an innovative idea or value offering that already exists (Govindarajan & Trimble, 2010a; 2010b).

Therefore, this study has found that small innovation acquisitions are undertaken on organisations that already have an idea, such as the partially acquired organisations in this study (Sphinx and Agora), or already have an operational and commercialised value offering, such as the mature software developed by the acquired start-up (Pantheon). Therefore, this study has found that the readiness level of the technology plays a key role in the necessary steps that occur in the PAIP. In the partially acquired (Sphinx and Agora) initiatives, teams were established with a view of adding complementary skills to the innovative ideas they already possessed. In the acquired by resource buy-out initiative (Pantheon), the technology was adequately mature at the time of acquisition that it did not require further experimentation; thus, it was integrated into the acquirer and the team assembled when the software had an issue that needed to be resolved.

Given the discussion of the cross-case findings' relationships to the literature in this section, the following section serves to reconcile the findings with the primary and secondary research questions of the study.

7.4   RECONCILING THE RESEARCH QUESTIONS WITH THE FINDINGS

The interpretative phenomenological analysis undertaken on the collected qualitative data allowed the primary and secondary research questions to be answered. In this section, these questions are reconciled to the cross-case findings. Firstly, the secondary research questions are consecutively reconciled. Thereafter, the reconciliation of the primary research question is reconciled.

7.4.1   Reconciliation of secondary research question 1

The first of the secondary research questions was: "Do innovation acquisition champions integrate small innovation acquisitions (with more than one individual), either fully or partially, similarly or differently to how they integrate acquired individuals into the team?" The first cross-case study finding was that innovation acquisition champions do not alter the process of integrating multiple entrepreneurs into their teams; they instead opt for applying the same process for multiple entrepreneurs as they deploy for the integration of individual entrepreneurs. Thus, the first cross-case study finding addressed the first secondary research question as the finding of the unaltered process approach essentially showed that innovation acquisition champions integrated small innovation acquisitions, either fully or partially, similarly to how they integrated individuals into the team.

7.4.2   Reconciliation of secondary research question 2

The final secondary research question was as follows: "What managerial and/or leadership considerations should innovation acquisition champions take into account while integrating small innovation acquisitions (with more than one individual) at the team level?" The remaining cross-case study findings, namely key thematic finding two through eight, address and answer this particular secondary research question as these findings are considerations for innovation acquisition champions to take into account in their management and leadership of these cases. Thus, the unique managerial and/or leadership considerations that emerged from this exploratory research study are as follows: relationship-building as integration; innovative teams need complementary skills; weekly meetings manage expectations; founder-only meetings; entrepreneurs want autonomy; team consensus; and technology readiness level.

7.4.3   Reconciliation of the primary research question

This exploratory research study posed the following primary research question: "What managerial and/or leadership considerations exist for integrating small innovation acquisitions (with more than one individual) at the team level?" The primary research question is similarly answered by the latter eight key thematic findings of the study, which have been listed above in section 7.4.2. Thus, it may

be said that the primary research question of this study has been answered with these early findings in this field. The answering of this exploratory research question has created a basis for scientists to start a meaningful dialogue around the managerial and/or leadership considerations for team level integrations of small innovation acquisitions (with more than one individual), whether in full or in part. Furthermore, it is the contention of this thesis that the intersection between the processes of post-acquisition integration, team development and innovation execution deserve more analysis in future research. This section has reconciled the research questions with the key cross-case thematic findings found in the primary research of this study.

7.5   SYNOPSIS OF MANAGERIAL AND LEADERSHIP CONSIDERATIONS FOR THE PROCESS OF INTEGRATING SMALL INNOVATION ACQUISITIONS AT THE TEAM LEVEL

This section presents the M&A process and the managerial and leadership considerations this study proposes for the process of integrating small innovation acquisitions at the team level; please refer to Figure 7.1 below. As discussed in section 3.11, the M&A process is made up of three phases (Appelbaum *et al.*, 2000a; Salus, 1989; Schertzinger, 2009; von Krogh, 2016; Wuebben, 2007); in this study, the names of the phases submitted by von Krogh (2016:307-308) are referred to, which are: "pre-acquisition", "acquisition" and "post-acquisition". The post-acquisition integration process detailed in the literature is a structured and formulaic process as discussed in the literature review in the third chapter of this study (Birkinshaw *et al.*, 2000:395-396; Galpin & Herndon, 2007:77; Gomes *et al.*, 2013:14-28; Haspeslagh & Jemison, 1991:122-135; von Krogh, 2016:307-308; Wuebben, 2007:39-51). However, in the first two cases of this study (Egypt and Rome), the post-acquisition integration process undertaken was dynamic in nature relative to the more structured processes found in the secondary research as discussed above. The dynamism refers to the obscuring of the distinct phases, which became evident in integration activities taking place prior to concluding a contract or auctioning a corporate transaction, for example. As such, the managerial and leadership considerations put forth in this study should span more than just the post-acquisition phase of the M&A process to reflect the dynamism observed in the real implementation of the PAIPs. As a result, many of the considerations proposed are not isolated to a single phase of the M&A process but are relevant across the phases.

Pre-acquisition	Acquisition	Post-acquisition

Considered process approach

Relationship-building as integration

Innovative teams need complementary skills

Weekly meetings manage expectations

Founder-only meetings

Entrepreneurs want autonomy

Team consensus

Technology Readiness Level
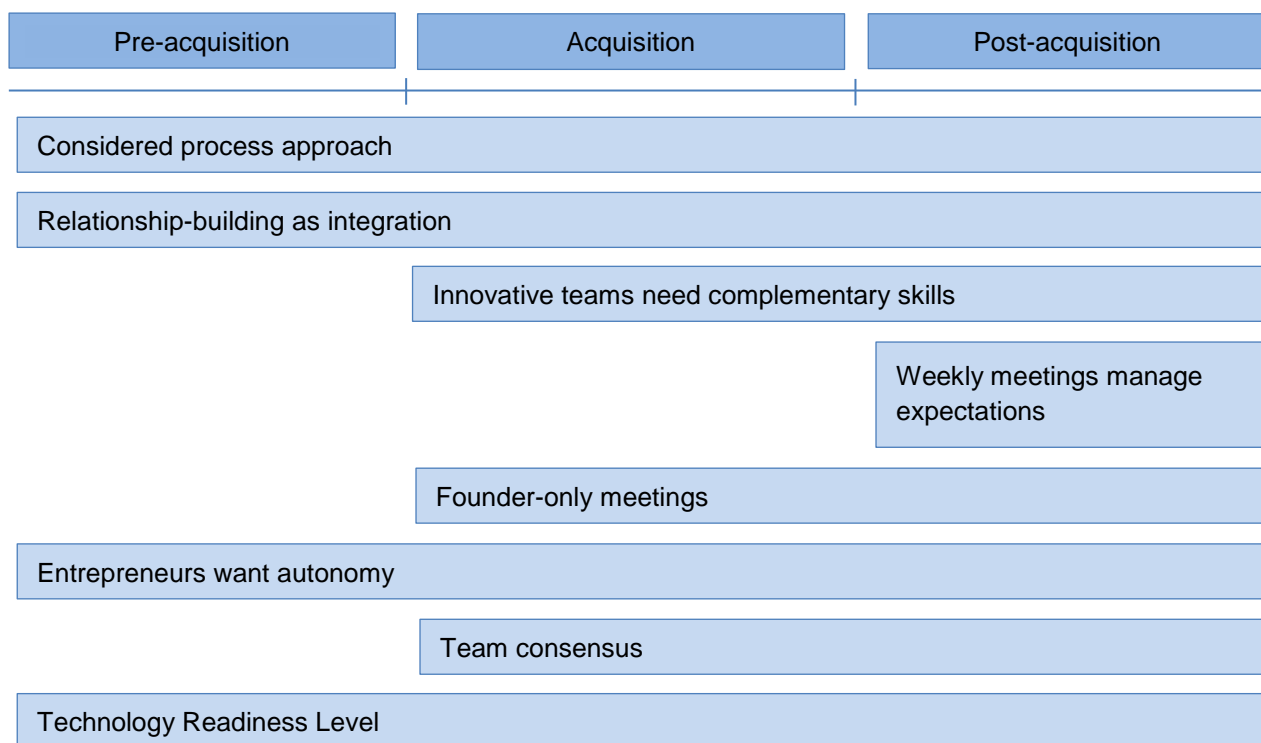
FIGURE 7.1: Synopsis of managerial and leadership considerations for the process of integrating small innovation acquisitions at the team level

To illustrate this, the three phases – pre-acquisition, acquisition and post-acquisition – are presented in Figure 7.1 above as headings. Below these headings are the considerations advanced in this work for the attention of innovation acquisition champions charged with small innovation acquisitions' integrations into teams. These are as follows: considered process approach; relationship-building as integration; innovative teams need complementary skills; weekly meetings manage expectations; founder-only meetings take place; entrepreneurs want autonomy; team consensus; and technology readiness level.

7.5.1 Consideration 1: Considered process approach

Firstly, the unaltered process approach finding is relevant to the considered process approach consideration in the figure above. It is proposed that this consideration is relevant throughout the M&A process. As the pre-acquisition stage should see attention given to contemplating the target's employees (Christensen *et al.*, 2011) as well as thinking about how to instil the values of the purchaser in each new acquisition (Kuratko *et al.*, 2011), the acquirer should reflect on how to integrate an acquisition with more than one individual to impart the former's values and culture. If the acquisition is actioned in the second phase, the considered process approach should be further devised in this second phase and implemented in the post-acquisition phase as scholars suggest

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that integration measures should be implemented which are suited to the specific circumstances at play in each new acquisition (Bach, 2014; Wuebben, 2007).

7.5.2   Consideration 2: Relationship-building as integration

Secondly, relationship-building as integration is a consideration for innovation acquisition champions involved in the M&A process from pre-acquisition through to post-acquisition. Building a relationship with the target organisation's employees can begin as early as the first meetings when targets are considered for procurement in the pre-acquisition phase; it is during this time that the target organisation is profiled and inspected (Bach, 2014; Wuebben, 2007). If innovation acquisition champions are involved in these occasions, they are provided with opportunities to become acquainted.

7.5.3   Consideration 3: Innovative teams need complementary skills

Thirdly, the innovative teams need complementary skills finding poses a consideration for innovation acquisition champions. The required skills should be identified when the acquisition is being undertaken, from as early as when the parties are signing the letter of intent if desired (Bach, 2014; Wuebben, 2007), to ensure that the team has the combined skill-set it needs in the post-acquisition phase. Alternatively, if there are uncertainties about whether the acquisition will be finalised, this consideration could be post-phoned until the final offer is accepted (Bach, 2014; Wuebben, 2007) or could be left for consideration during the post-acquisition phase (von Krogh, 2016).

7.5.4   Consideration 4: Weekly meetings manage expectations

Additionally, it was found that weekly meetings are used as opportunities to exercise expectation management within the team post-acquisition. As such, these regular meetings are a consideration for innovation acquisition champions to implement as an integration measure which is suited to the specific circumstances at play (Bach, 2014; Wuebben, 2007). Scholars emphasise the importance of the post-acquisition integration implementation (Haleblian *et al.*, 2009; Steigenberger, 2016). This consideration provides a means of implementing expectation management as put forth by Haspeslagh and Jemison (1991) as these scholars recognise that at the inception of the PAIP, varied expectations are at play among the acquiring and acquired organisation's employees, which need to be managed.

7.5.5   Consideration 5: Founder-only meetings

Furthermore, founder-only meetings were found to take place, which the acquiring organisation's members were not invited. As all parties with a vested interest (Bach, 2014; Wuebben, 2007) should be represented in decision-making and communications regarding the team post-acquisition, it is a consideration for innovation acquisition champions that it should be decided that all meetings should be open to all team members to attend. In addition, this consideration can be reflected on as early as the second phase of the M&A process, namely during the acquisition proceedings, as the decision

to open all meetings up to all team members could form part of the contractual agreements made in this phase to protect the interests of all parties.

7.5.6   Consideration 6: Entrepreneurs want autonomy

Moreover, the entrepreneurs that are acquired were found to desire autonomy. This should be considered in the pre-acquisition phase when profiling and inspecting the potential acquisition to be made as well as at the outset of combining the two organisations post-acquisition, their integration potential should be analysed and planned (Bach, 2014; Wuebben, 2007). A decision must be made regarding the level of integration, which has been referred to as the integration-autonomy dilemma (Aghasi *et al.*, 2017; Pablo, 1994; Puranam *et al.*, 2009). This consideration should also be reflected on during the acquisition phase in the case that the degree of autonomy needs to be agreed upon contractually. This is thus an important consideration for innovation acquisition champions throughout the M&A process from pre-acquisition, through acquisition, to post-acquisition.

7.5.7   Consideration 7: Team consensus

In addition, it was found that teams reached consensus when making consequential decisions, which was achieved by the co-founding team members of the partially acquired initiatives as well as the acquiring entities' stakeholders unanimously agreeing on a choice to be made. The issue of team consensus needs to be addressed in the acquisition agreement (the acquisition phase) as well as during the PAIP (the post-acquisition phase). It is thus a managerial and leadership consideration to bear in mind how decisions will be reached after the acquisition, which should be clearly written and agreed upon contractually in advance of the PAIP.

7.5.8   Consideration 8: Technology readiness level

Finally, the maturity of the innovation, known as technology readiness level (Mankins, 1995), is also an important consideration for innovation acquisition champions. It can be said that the technology readiness level at the beginning of the post-acquisition integration may largely determine the frequency and nature of relations between post-acquisition team members in the innovation initiative. The less mature a technology or innovation is, the more innovation execution and resources will be necessary to research, experiment and develop the value offering. This is an important managerial and leadership consideration for the activities the team will be charged with and held accountable for (Govindarajan & Trimble, 2010a). It can be said that the TRL at the beginning of the post-acquisition integration may largely determine the frequency and nature of relations between post-acquisition team members in the innovation initiative.

Given the managerial and leadership considerations for the process of integrating small innovation acquisitions at the team level that have been presented and discussed in this section, the following section presents and discusses study recommendations.

7.6   RECOMMENDATIONS

Firstly, this study has found that the managers and leaders interviewed do not alter their approach towards the integration, team development and innovation execution processes when undertaking these processes with more than one individual, which was the context of the acquisitions most commonly undertaken by the acquirers. Therefore, the study recommends that innovation acquisition champions integrate either partially or fully acquired organisations using an approach that might be altered to address the differences that exist in integrating a team over integrating an individual, which are further addressed below.

Secondly, it was found that innovation acquisition champions employed by the acquiring entity undertake relationship-building on individual bases with their either partially or fully acquired team members with a view to aid integration of the acquired team into the post-acquisition project team. Consequently, it is the recommendation of the study that innovation acquisition champions place emphasis on fostering and sustaining relationships with the new team members to engender potentially more successful integration outcomes.

Thirdly, teams that are charged with innovation execution require multiple skill-sets. When the teams of the acquired organisations are first assembled post-acquisition, the existing skill-set should be analysed. This analysis is undertaken with a view to identifying which additional skills and skill-sets the team will require to accomplish its goals over the long term. Thus, it may be said that the innovative teams are analysed to see which complementary skills they require.

Moreover, it is also a finding of the study that expectation management for the direct stakeholders of the initiatives is conducted by the vehicle of weekly meetings. In these meetings, the post-acquisition team uses this as an opportunity to inform all direct stakeholders of the recent progress made towards commercialising the innovation, in whichever stage of innovation execution the team is. Through reporting on progress in these weekly meetings, the team members actively and regularly manage one another's expectations. Thus, the study recommends that the post-acquisition team holds weekly meetings with a view to report on progress and manage stakeholder expectations.

Furthermore, this exploratory study found that founder-only meetings occurred in isolation from the aqcuirer team. These meetings are attended and open to only the founding entrepreneurs of the initiative and in the examined cases were undertaken both in secret and with full knowledge by all other direct stakeholder parties. However, even when the innovation acquisition champions, who were not co-founders in these cases, knew of these meetings, these still hampered the former's ability to manage and lead the project. Accordingly, it is the recommendation of the study that founder-only meetings are discouraged by the innovation acquisition champion and the acquiring entity.

Additionally, another key finding across the cases considered in this study was that entrepreneurs desire autonomy. The study thus recommends that autonomy is granted to acquired entrepreneurs but that the degree extended to them is determined on a case-by-case basis under the discretion of the direct and indirect stakeholders of the initiative that are employed by the acquiring entity.

The seventh main thematic finding of the current study was that of the necessity of reaching team consensus on major decisions made regarding the initiative. It is a recommendation of the study that the modes of achieving team consensus is contractually agreed upon during the acquisition negotiation.

Finally, the readiness level of the technology acquired either partially or fully has a significant bearing on the regularity and nature of the relations between the previously sovereign entities' team members. Therefore, the study recommends that innovation acquisition champions undertake an evaluation of the technology's maturity. This evaluation might include an analysis of the foreseeable development stages of the technology to inform the agreement insofar as it relates to the delineation of relations between the entities' stakeholders for the purposes of innovation execution.

In conclusion, this study has afforded the literature a few early findings on the subject matter of managerial and/or leadership considerations for the process of integrating small innovation acquisitions (with more than one individual) at the team level. It is the overarching recommendation of this study that these findings be considered in the management and leadership context – on the team level, rather than the overarching organisational level – both in practice as well as in future studies. Thus, the previous eight recommendations might be considered in the alteration of the approach to integrating an acquired organisation at the team level rather than integrating single employees. Table 7.1 below relates each of the study's key findings and recommendations to the level of consistency with the literature.

TABLE 7.1: Relating the recommendations to the literature

Relevant thematic finding	Recommendation	Level of consistency with the literature
Unaltered process approach	Innovation acquisition champions consider the differences that exist in integrating a team over integrating an individual and approach the integration process accordingly.	As this finding appears to be novel, it might only be synthesised and integrated with existing literature with difficulty. Thus, there is little literature on this finding and recommendation for the purposes of its level of consistency with the literature.
Relationship-building as integration	Innovation acquisition champions place emphasis on fostering and sustaining relationships with the new team members to engender potentially more successful integration outcomes.	The literature on the acquisition process at the organisational level of analysis (Galpin & Herndon, 2007) as well as on team development (Tuckman, 1965; Tuckman & Jensen, 1977), team climate (Isaksen & Tidd, 2006; Tidd & Bessant, 2013) and leadership (Maccoby, 2000; Turner & Müller, 2005) all regard relationship-building as important for various reasons, demonstrating the high consistency of relationship-building with the literature.
Innovative teams need complementary skills	Innovative teams are analysed to see which complementary skills they require.	The literature on innovative teams emphasises the importance of having the right skill-sets among the individuals within the team (Govindarajan & Trimble, 2010a; 2010b).
Weekly meetings manage expectations	The post-acquisition team holds weekly meetings with a view to report on progress and manage stakeholder expectations.	This finding regarding expectation management is consistent with the literature on the post-acquisition integration process (Haspeslagh & Jemison, 1991) and leading innovation projects (Govindarajan & Trimble, 2010a; Sheasley, 1999).
Founder-only meetings	Founder-only meetings are discouraged by the innovation acquisition champion and the acquiring entity.	As this finding appears to be novel, it might only be synthesised and integrated with existing literature with difficulty. Thus, there is little literature on this finding and recommendation for the purposes of its level of consistency with the literature.
Entrepreneurs want autonomy	While autonomy may be granted to acquired entrepreneurs, the degree of autonomy extended to them is determined by the discretion of initiative stake-holders of the acquiring entity.	The desire many entrepreneurs have for autonomy is consistent with the post-acquisition integration process literature (Graebner *et al.*, 2017; Steigenberger, 2016).
Team consensus	The modes of achieving team consensus is contractually agreed upon during the acquisition negotiation.	As this finding appears to be novel, it might only be synthesised and integrated with existing literature with difficulty. Thus, there is little literature on this finding and recommendation for the purposes of its level of consistency with the literature.
Technology readiness level	Innovation acquisition champions undertake an evaluation of the technology's maturity.	As this finding appears to be novel, it might only be synthesised and integrated with existing literature with difficulty. Thus, there is little literature on this finding and recommendation for the purposes of its level of consistency with the literature.

Given the recommendations presented and discussed in the section, the following provides the study's limitations.

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7.7   LIMITATIONS OF THE STUDY

The research strategy and purpose of this study was exploratory in nature (see section 5.4.2.1). Therefore, it was not the study's aim to deliver conclusive evidence on the research problem. Indeed, the purpose of the study was to initiate a dialogue surrounding unique considerations for innovation acquisition champions in their endeavour to execute successfully and simultaneously the processes of innovation execution, post-acquisition integration and team development. This exploratory research has been conducted to provide innovation acquisition champions with a few early considerations to add value to their management and leadership approaches in dealing with the context discussed in the study. However, as this study was exploratory, it is apposite to note that quantifiable and irrefutable evidence did not emerge.

Secondly, the study included three acquiring entities that were all medium-sized organisations around the time of acquiring an equity stake in an innovative organisation (in two of the cases) and acquiring the start-up by resource buy-out (in the last case). In other words, the three acquiring entities considered in the study were not large organisations, which may be able to undertake full acquisitions due to their probably more extensive resources, relative to those available to mid-sized organisations. Large acquirers and their integration managers were contacted over a three-month period dedicated to sampling and securing interviews with research subjects that fulfilled the criteria for the study; however, none of these individuals availed themselves to the study. Therefore, it is a limitation of the study that one or more full acquisitions in larger organisations were not included in the cross-case study.

In addition, of the acquiring entities whose innovation acquisition champions avail themselves to the primary research, two were incubators. These fulfilled the contextual criteria of the study, which were namely: a full or partial acquisition; of an innovative organisation; and an integration at the team level. However, the study was also somewhat limited due to its relative dependence on information gained from partial acquirers that perceive themselves as business incubators. The objectives of incubators may vary from those of non-incubator organisations; in the case of the latter, it is possible that the aim of the acquisition may well be that the initial equity stake will be rapidly or, from the early stages post-acquisition, be scaled to full ownership. Such cases may yield different findings in terms of the integration and team development processes followed as well as the level and nature of the outcomes they seek. The subsequent section aims to suggest future avenues for research in the field.

7.8   SUGGESTIONS FOR FUTURE RESEARCH

While the integration process has been studied by researchers for years at the individual and organisational levels of analysis, the team level has largely been neglected. Therefore, it may be said that this study benefits the literature in initiating a dialogue surrounding post-acquisition

integrations of small organisations at the team level. As such, future research can build on the subject matter in various ways.

One such future research undertaking might include a larger number of research participants that number greater than the sample size of five individuals considered in this study, namely three innovation acquisition champions and two preliminary interviewees (Collis & Hussey, 2014:69). A small sample size poses a limitation only insofar as the qualitative exploratory primary research conducted could not be quantified; this, however, was not an objective of the study. Therefore, conclusive evidence might possibly be realised through future studies conducting a quantitative survey across innovation acquisition champions. Thus, this proposition for future research could result in a title such as: "A quantitative analysis of managerial and/or leadership considerations for the post-acquisition integration of small innovation acquisitions at the team level."

Additionally, a future study might consider gaining the perspectives of all the different direct and indirect stakeholders of the post-acquisition integration of a small innovation acquisition at the team level. Per this study, it may be expected that the stakeholders extend to the following roles beyond the innovation acquisition champion: acquired organisation founder or co-founder; acquired employees of the start-up; acquirer integration leadership; acquirer innovation acquisition champion; and acquirer management and leadership. Therefore, this proposition for future research might be entitled: "Stakeholder perspectives of the post-acquisition integration of small innovation acquisitions at the team level."

Lastly, a further opportunity for future research is an exploratory study on full acquisitions of organisations that are integrated at the team level post-acquisition. Such a study might provide further early findings in the field, which can then be quantifiably tested in later quantitative studies. A possible future study that could be initiated from this research opportunity might be called: "Managerial and/or leadership considerations for the post-acquisition integration small innovation acquisitions at the team level as regards full acquisitions."

7.9   CONCLUSION

The main contribution of this study is in its exploration of an area that has been chiefly underrepresented thus far. This area regards the managerial and/or leadership considerations for integrating small innovation acquisitions (with more than one individual) into teams within the acquirer, especially relating to innovation acquisition champions. As mergers and acquisitions have been shown to often fall prey to failure as a result of unsuccessful post-acquisition integration processes, this study was undertaken to endeavour to further the collective knowledge of researchers and practitioners undertaking the post-acquisition integration process, with a focus on integration at the team level. It identified how three cases of small innovation acquisitions, partial or full, can provide some starting point for enlightenment for other organisations. Recommendations

were made to advance a dialogue for M&A integrations at the team level to benefit future integrations. Innovation provides a lucrative and exciting means of continually engaging consumers as well as forming a desirable basis for a modern competitive advantage. In some cases, the acquisition of innovations and innovative human resources might be more attractive than creating these value offerings and capabilities in-house. However, a failed innovation acquisition may lead to an erosion of the value of the investment and strained relationships with acquired human resources. To honour the innovation that consumers will purchase and the people who made that possible with an exciting idea they built their organisation around, these acquisitions should be given more attention in future studies and practice.

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ADDENDUM A

Ethical clearance

NOTICE OF APPROVAL

REC Humanities New Application Form

6 May 2018

Project number: 6702

Project Title: MANAGERIAL AND LEADERSHIP CONSIDERATIONS FOR THE PROCESS OF INTEGRATING ACQUIRED INNOVATION START-UPS AT THE DEDICATED TEAM LEVEL

Dear Miss Katelyn Anderson

Your REC Humanities New Application Form submitted on 6 April 2018 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
6 May 2018	5 May 2021

GENERAL COMMENTS:

Title	Comment
5. Please upload the informed consent template that will be used to confirm consent from participants	The researcher should check the informed consent form for editorial mistakes i.e. incorrect punctuation used in the section addressing the procedures of the study.

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

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If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (6702) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Research Protocol/Proposal	MCom proposal - Katelyn Anderson (16952278)	04/04/2018	2
Data collection tool	Discussion Guide - Katelyn Anderson (16952278)	05/04/2018	1
Default	Methodology chapter - Katelyn Anderson (16952278)	05/04/2018	1
Informed Consent Form	KAnderson 16952278 - SU HUMANITIES Consent form	06/04/2018	1

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides
by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research:
Principles Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.

Investigator Responsibilities
Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use.

3. Informed Consent. You are responsible for obtaining and documenting effective informed consent using only the REC-approved consent documents/process, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is no grace period. Prior to the date on which the REC approval of the research expires, it is your responsibility to submit the progress report in a timely fashion to ensure a lapse in REC approval does not occur. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You may not initiate any amendments or changes to your research without first obtaining written REC review and approval. The only exception is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouche within five (5) days of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC.

8. Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9. Final reports. When you have completed (no further participant enrollment, interactions or interventions) or stopped work on your research, you must submit a Final Report to the REC.

10. On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

NOTICE OF APPROVAL

REC Humanities Amendment Form

21 June 2018

Project number: 6702

Project Title: MANAGERIAL AND LEADERSHIP CONSIDERATIONS FOR THE PROCESS OF INTEGRATING ACQUIRED INNOVATION START-UPS AT THE DEDICATED TEAM LEVEL

Dear Miss Katelyn Anderson

Your REC Humanities Amendment Form submitted on 12 June 2018 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
6 May 2018	5 May 2021

GENERAL COMMENTS:

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (6702) on any documents or correspondence with the REC concerning your project.

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Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Research Protocol/Proposal	KAnderson 16952278 - SU HUMANITIES Consent form (Updated)	25/05/2018	2

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides
by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research:
Principles Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

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ADDENDUM B

Management and leadership variables

Refer to section:	Prescription:	General management	Effective business leadership	Strategic management	Strategic leadership	Innovation management	Innovation leadership	Learning management	Project management	Uncertain project management	Project leadership	Innovation project management	Change management	Expectation management	Institutional leadership	Interface management	Transformational leadership	Team leadership
4.3.1.1 4.6.2.1 4.8.1 4.8.2 2.7.1	Plan (and adapt) strategically	x		x		x	x	x	x	x		x	x	x				
4.3.1.2 4.6.2	Organise	x		x		x		x	x	x		x	x			x		x
4.3.1.3 4.8.1	Control	x		x		x		x	x	x		x	x	x		x		
4.3.1.4	Command	x	x	x	x	x		x	x	x	x				x		x	x
4.3.1.4 4.6.1.1c 4.10.1.2	Coordinate	x	x	x	x	x		x	x	x	x	x	x		x		x	x
4.3.2.1 4.6.1.1b 4.6.2.1 4.6.1 4.8.3.2a 4.9.2 4.12.2.1	Create a strategic vision (or goal) that all involved share		x		x		x					x			x		x	x
4.3.2.2 4.6.1.2b	People skills		x															
4.3.2.2 4.6.1.2d 4.6.2.3 4.8.1 4.6.1 4.6.2 4.9.2 4.10.1.2 2.6.1.3c	Communicate		x			x	x	x		x					x			
4.3.2.2 4.8.2 4.10.1	Communicate face-to-face		x												x			
4.3.2.3	Character/ integrity		x												x			
4.3.2.4	Ambition/ drive		x															
4.3.2.5 4.6.1.2a	Competence and technical expertise		x															
4.6.2.1 4.8.1	Strategic thinking			x														
4.5.2.1 4.8.1 4.8.2 2.6.1.3h	Anticipate and analyse trends and changes					x				x		x						

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Refer to section:	Prescription:	General management	Effective business leadership	Strategic management	Strategic leadership	Innovation management	Innovation leadership	Learning management	Project management	Uncertain project management	Project leadership	Innovation project management	Change management	Expectation management	Institutional leadership	Interface management	Transformational leadership	Team leadership
4.5.2.2 4.6.1.1a 4.4.2 4.8.2 2.7.7	Challenge Assumptions/ norms/ complacency/ status quo					x						x						
4.5.2.3 4.8.1 4.8.2 4.10.1.2 2.7.6 2.7.8	Interpret facts for sound judgement					x						x						
4.5.2.4 2.7.4 2.7.6	Decisiveness in decision-making					x	x					x						
4.5.2.5 4.6.1.2c 4.10.3 2.4.3	Align interests of stake-holders					x						x				x		
4.5.2.6 4.6.2.2 4.8.1 2.6.1.2 2.6.1.3 2.7.2 2.7.4 2.7.7	Further and record all organi-sational learning					x	x			x	x	x						
4.6.1.1c 2.6.1.3a 2.6.1.3i	Lobby for and access resources for innovation purposes					x						x						
4.6.1.1d 4.6.2.2	Create innovation systems and networks					x	x											
4.6.1.1e 4.6.1.2d 4.6.2.1 4.10.1.8	Lead by example and values					x	x											
4.6.1.1f 4.2.1	Establish a sense of command	x				x												
4.6.1.1g 4.6.2 4.6.2.2	Foster a receptive culture for ideas and innovative-ness					x	x											

Refer to section:	Prescription:	General management	Effective business leadership	Strategic management	Strategic leadership	Innovation management	Innovation leadership	Learning management	Project management	Uncertain project management	Project leadership	Innovation project management	Change management	Expectation management	Institutional leadership	Interface management	Transformational leadership	Team leadership
4.6.2.1	Critical thinking about innovation						x											
4.6.2.1	Shape collective thinking						x											
4.6.2.2	Gatekeep along the value chain						x											
4.6.2.2	Manage knowledge						x											
4.6.2.2	Form high-performance teams						x											
4.6.2.3	Understand the context of the initiative						x											
4.6.2.3	Entrepreneurial thinking about innovation						x											
4.6.2.3	Be recognised as an influencer externally						x											
4.6.2.4 4.8.3.2c	Develop high performance culture by promoting performance						x				x							
4.6.2.4	Manage performance on individual and team levels						x											
4.7 2.7	Create, communicate and store new learning in organisation knowledge management system							x				x						
4.8.1 4.8.2 2.7.5	Embrace uncertainty					x				x	x	x						
4.8.1 2.7.9	Reduce uncertainty (by bettering predictions)					x				x								

Refer to section:	Prescription:	General management	Effective business leadership	Strategic management	Strategic leadership	Innovation management	Innovation leadership	Learning management	Project management	Uncertain project management	Project leadership	Innovation project management	Change management	Expectation management	Institutional leadership	Interface management	Transformational leadership	Team leadership
4.8.1 4.8.2	Understand and adapt practices to context						x			x								
4.8.1 4.8.2, 4.10.1.3	Recruit the best members									x	x							x
4.8.2, 4.10.1.2	Action-orientated for results										x							x
4.8.2 4.6.2	Lead to manage										x							
4.8.3.2b	Nurture collaboration										x							
4.8.3.2d 2.7.7 2.7.9	Cultivate project learning									x	x							
4.5.2 4.6.2 4.8.2 4.8.3.1b	Demonstrate flexibility				x	x				x								
4.9.1	Create urgency												x					
4.9.1	Establish guiding coalition												x					
4.9.1	Empower employees to act on vision												x					
4.9.1	Create and promulgate short-term wins												x					
4.9.1	Turn out more wins and change												x					
4.9.1	Link changes to culture												x					
4.9.2	Work within policies and procedures												x					
4.9.2	Employee onboarding												x					
4.9.2	Incentivise employees												x					
4.10.1	Don't rely on early outlooks													x				
4.10.1	Not overly cautious													x				
4.10.1	Not overly laissez faire													x				

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Refer to section:	Prescription:	General management	Effective business leadership	Strategic management	Strategic leadership	Innovation management	Innovation leadership	Learning management	Project management	Uncertain project management	Project leadership	Innovation project management	Change management	Expectation management	Institutional leadership	Interface management	Transformational leadership	Team leadership
4.10.2	TMT participation															x		
4.10.3	Atmosphere support capability transfer															x		
4.10.3	Remove integration obstacles															x		
4.10.3	Gatekeep at the interface															x		
4.11.1	Stimulate employee intellect																x	
4.6.1.2d 4.11.2	Consider individual employees					x							x				x	
4.11.3	Influence with ideal scenarios																x	
4.6.2.4 4.11.4	Inspire and motivate						x										x	
4.12.2.2	Clear roles and responsibilities																	x
4.12.2.2	Seek out results																	x
4.12.2.2	Monitor performance																	x
4.12.2.2	Give feedback																	x
4.12.2.4	Gain team members' commitment																	x
4.12.2.5	Foster a team climate of collaboration																	x
4.12.2.6	Merit promoting standards																	x
4.12.2.7	External support, recognition																	x
4.12.2.10	Allowing members to partake in making decisions																	x
4.12.2.11	Foster team spirit																	x
4.12.2.12 4.8.2	Embrace suitable change									x								x

(Source: Adapted from the literature review presented in chapters 2-4; please refer to Column 1 for reference)

ADDENDUM C

Informed consent form

**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

To whom it may concern

Katelyn Anderson, a researcher from the Department of Business Management at Stellenbosch University, has approached you to assist in either being a research participant or facilitating the introduction of the researcher and a possible research subject. Possible participants for the study include people who have had experience as a leader or manager charged with innovation-related activities in a project team.

1. PURPOSE OF THE STUDY

This study aims to understand if there are any unique factors to consider – whether they are challenges or any other factors – that arise when a team leader/manager of a project has to integrate a small acquisition within a team.

2. WHAT WILL BE ASKED OF ME?

Those who participate in the study are required to avail a one-hour time slot in which an interview can take place at a location of your choice in the Cape Town, RSA area, which is sufficiently quiet or via an online telecommunications platform, such as Skype.

3. POSSIBLE RISKS AND DISCOMFORTS

Besides the one-hour allotment of time by participants, there are very few, if any, foreseeable and possible risks or discomforts they might expect.

4. POSSIBLE BENEFITS TO PARTICIPANTS AND/OR TO THE SOCIETY

This research question has not, to the knowledge of the researcher, been posed before; as a result, this study is expected to be beneficial to society in its enrichment of knowledge.

5. PAYMENT FOR PARTICIPATION

This is a study that is undertaken voluntarily by research subjects without expectation of payment as a result of the lack of funding for the study.

6. PROTECTION OF YOUR INFORMATION, CONFIDENTIALITY AND IDENTITY

Any information you share with the researcher, Katelyn Anderson, during this study which could possibly identify the participants will be protected. This will be done by ensuring your anonymity and others' by not mentioning you, your colleagues or your organisation by name.

Instead, any thesis or publications that happen as a result of your involvement will use a pseudonym, such as if your name is Jane/John/Jay Smith, you will be referred to as "Apollo", "Venus" or "Janus" as examples; similarly, if your organisation's name is Smith (Pty) Ltd, it will be referred to as "Agora" as an example. The only people who will have access to your information will be the researcher and her supervisors, mainly for the purpose of you giving your consent to participate in the study's interviews.

At this point, it is not known whether the study will be submitted to, qualify for or appear in any publications or for any other purpose in the future; if so, your, your colleagues and your organisation's anonymity and confidentiality will be upheld as described above.

As the interview will be audio-recorded by the interviewer on an electronic device, you as the participant will have the opportunity to have access to the audio clip upon your instruction. The tape(s) will only be used for educational purposes and then they will be erased.

7. PARTICIPATION AND WITHDRAWAL

Research subjects may choose whether to participate in this study or not. If you agree to take part in this study, you may withdraw at any time without any consequence. You may also refuse to answer any questions you do not want to answer and still remain in the study. The researcher may withdraw you from this study if any exceptional circumstances arise that make that action necessary.

8. RESEARCHER'S CONTACT INFORMATION

If you have any questions or concerns about this study, please feel free to contact **Katelyn Anderson** at (**+27) 083 391 1031** or e-mail her at **katelyna@live.co.uk,** and/or the supervisors, **Prof Gert Human** at ghuman@sun.ac.za or **Dr Awie Vlok** at avlok@sun.ac.za.

9. RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

Please see the declaration below that will serve as informed consent by research subjects.

DECLARATION OF CONSENT BY THE PARTICIPANT

As the participant, I confirm that:

- I have read the above information and it is written in a language that I am comfortable with.
- I have had a chance to ask questions and all my questions have been answered.
- All issues related to privacy, and the confidentiality and use of the information I provide, have been explained.

By signing below, I _____ agree to take part in this research study, as conducted by Katelyn Anderson.

_____   _____

Signature of Participant   **Date**

DECLARATION BY THE PRINCIPAL INVESTIGATOR

As the **principal investigator,** I hereby declare that the information contained in this document has been thoroughly explained to the participant. I also declare that the participant has been encouraged (and has been given ample time) to ask any questions. In addition, I would like to select the following option:

	The conversation with the participant was conducted in a language in which the participant is fluent.
	The conversation with the participant was conducted with the assistance of a translator (who has signed a non-disclosure agreement), and this "Consent Form" is available to the participant in a language in which the participant is fluent.

_____   _____

Signature of Principal Investigator,   **Date**
Katelyn Anderson

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ADDENDUM D

Measurement instrument: Semi-structured interview guide

SEMI-STRUCTURED INTERVIEW GUIDE		
PHASE 1	**Welcome, rapport-building and basic information about the interview**	**Expected duration: 05:00**
Item no.	**Item**	**Source: Adapted from**
1.1	Welcome. Thank you for making the time to meet with me. I really appreciate it.	Emory, 1976; Moustakas, 1994
1.2	I would like to take this opportunity to reassure you of your anonymity in this study; nowhere on any document or publication will your name be mentioned at all.	Okanagan College Research Ethics Board, 2011
1.3	I also want to assure you that confidentiality and ethics are both important to the study. You have the right to stop participating in the study at any time.	Corti, Day & Backhouse, 2000
1.4	Regarding the objectives of the study, I would like to give you an overview of the reason the study is being undertaken. Through the interviews I'm conducting, I hope to gain insights into the integration of start-ups into teams of larger businesses while experimenting on and creating marketable products and/or services.	Fox, 2009
1.5	Given all of this, do you consent to participate in the study? If so, please sign this waiver.	Corti *et al.*, 2000
1.6	Are you comfortable with your statements being audio recorded? ● *If "yes": Thank you.* ● *If "no": In that case, I will transcribe by hand.*	Moustakas, 1994
1.7	Do you have any questions or concerns before we begin?	Emory, 1976; Moustakas, 1994
1.8	The questions have no right or wrong answers; their aim is simply to gain a better understanding.	Moustakas, 1994
PHASE 2	**Opening questions, content questions and probes**	**Expected duration: 30:00**
PART 2.1	**Opening questions and probes regarding the innovation acquisition champion**	**Expected duration: 04:00**
Item no.	**Item**	**Source: Adapted from**
2.1.1	I understand that you are currently or have previously been involved in a team which was made up – at least in part – of an acquired start-up's employees, is that correct?	Govindarajan & Trimble, 2010a

2.1.2	What is *(was)* your title? ● *'Innovation leader'* (Govindarajan & Trimble, 2010a:10); ● *'Innovation project manager'* (Beaume, Maniak & Midler, 2009:10; Tomala & Sénéchal, 2004:337)	In-text references in item alongside

2.1.3	Did you have a managerial and/or leadership role?
	
	● *If so, how would you describe it?*
	● *How did you come to occupy this position?*
	   o *Recruited/headhunted externally?*
	   o *Transferred internally?*
	   o *In team, emerged as the leader organically?*
	   o *Other?*
	● Were there other leaders in the team?
	   o *If "yes":*
	      ▪ *What were the other positions and did they assist you in leading and/or managing the team and the newcomers (of the acquisition)?*
		Govindarajan & Trimble, 2010a

2.1.4	Have you ever lead and managed the integration of an acquisition into a team before? ● If "yes": Do you find that the acquisition's integration into the team is different from bringing others in? o *For example: "others" such as externally recruiting a new employee or transferring an employee from a different department or division?*	Knowledge gap for exploration (No reference)
PART 2.2	**Content questions and probes regarding the team and the acquisition**	**Expected duration: 08:00**
Item no.	**Item**	**Source: Adapted from**
2.2.1	Is (*was*) there a business strategy/policy for integration within the acquiring firm? ● Does it apply to teams? o *If "yes": Can you describe it?*	Yu, Engleman & van de Ven, 2005

2.2.2	What did the acquiring company call the team?
	   o *If clarification is needed, the following examples may be given:*
	      ▪ *'Dedicated team'* (Magnusson & Berggen, 2001:106);
	      ▪ *'Innovation initiative'* (Govindarajan & Trimble, 2010a:5);
	      ▪ *'Project team'* (Govindarajan & Trimble, 2010a:27; O'Connor, 1998:151);
	      ▪ *Or other?*
		In-text references in item alongside

2.2.3	At this point, I'd like to ask you about the team. ● How do (*did*) you understand the team's purpose? ● When was the team formed and how long for?	Paré & Dubé, 1999; Wolcott & Lippitz, 2007
2.2.4	Let us talk more about the members of the team. ● How many people were in your team altogether?	Govindarajan & Trimble, 2010a

	- Was the team comprised of team members that were dedicated to the innovation initiative/project (team)/_____? *In other words: did they work on only this project full-time?* - And how many made up the following sub-groupings: - Existing employees *(of the acquiring firm)* - Acquired employees of the start-up *Did all of the start-ups employees join the acquiring firm? Did some leave?* - Recruited outsiders - Outside of the team, were there other staff members involved in the pursuit of the team's purpose? *Such as a sponsor or other role?*	
2.2.5	How were the existing, acquired and externally recruited employees first introduced to each other? - Did you oversee the introductions alone or were you working with someone else? - What kind of social context was created for the first few meetings? *Was it successful?* *If "yes": How so?* *If "no": What went wrong?*	Bonebright, 2010; Tuckman, 1965; Tuckman & Jensen, 1977
2.2.6	Did the team undertake team-building activities? - What were they? Can you describe them? - Were they once-off or continuously undertaken? - If the latter, were they continuously undertaken over the length of the initiative/project? - In your opinion, did the team develop together effectively?	Bonebright, 2010; Tuckman, 1965; Tuckman & Jensen, 1977
2.2.7	- Did you find an approach(es) in your management and leadership of the team that assisted the development of the team given the added activity of integrating newcomers? - In your opinion, would you say that the integration of the acquisition into the team was different to developing the team minus an acquisition? *Only with internally transferred and externally recruited individuals?* - Did you find that the acquisition's integration influenced the project's activities? *In the sense that it either facilitated or impeded the progress of these activities?*	Knowledge gap for exploration (No reference)
PART 2.3	**Content questions and probes regarding the integration within the team**	**Expected duration: 20:00**
Item no.	**Item**	**Source: Adapted from**
2.3.1	On the subject of integrating newcomers, did you foresee any integration-related issues in the initiative? - Were there issues you did not foresee? - Can you identify them? - Can you describe them? - Was it the integration of humans or tasks more problematic or taxing? Why?	Birkinshaw, Bresman & Håkanson, 2000; Haspeslagh & Jemison, 1991

2.3.2	Do you feel employees resisted the integration?
	● *If "yes":*
	    ○ *How so? (If clarification is needed ask whether employees:)*
	        ▪ *Worked against the integration?*
	        ▪ *Resigned or otherwise left the firm?*
	        ▪ *Responded adversely?*
	        ▪ *Or unimaginatively?*
	        ▪ *Reduced their commitment?*
	        ▪ *Acted to change unfavourably?*
	        ▪ *Sabotaged operations?*
		Gomes, Angwin, Weber & Tarba, 2013

2.3.3	If there was employee resistance, do you feel it erodes(d) the value of the acquisition?
	● *If "yes": probe given answers.*
	● *If "no": ask next question.*
	Have you found an approach(es) in your management and leadership of employees that results in lessened resistance?
	    ○ *(If clarification is needed, probe:)*
	        ▪ *Such as prioritising spending time with them, being empathetic or other behaviours?*
	    ○ *If something did manage to lessen resistance:*
	        ▪ *Do you feel that this additional approach took away from the integration of tasks and achieving the strategic objectives of the acquisition?*
	        ▪ *For example: slowed down the activities associated with developing the innovation?*
		Haspeslagh & Jemison, 1991

2.3.4	On the subject of integration leadership:
	● Did the integration receive enough proactive, hands-on leadership from senior managers who have the authority to lead credibly?
	    ○ *That is to say, those external to the team?*
	● If not, did you find that you had to fill this vacuum?
	    ○ *If so, how did you operationalise this?*
	    ○ *Did these behaviours take time away from creating value from the integration?*
		Govindarajan & Gupta, 2001

2.3.5	KSFs for PAIP questions (address these topics if they have not yet been touched on with the subject): ● *integration strategy and approach;* ● *post-acquisition leadership;* ● *speed of integration implementation;* ● *post-acquisition-leadership team and disregard of daily activities;* ● *communication during implementation;* ● *managing corporate and cultural differences;* ● *human resource management.*	Gomes *et al.*, 2013

2.3.6	Did you find:
	● That you had to manage your own expectations and those of others within the initiative?
	    ○ *If "yes": Which expectations and how?*
	● That authority-invested people within the acquiring organisation were actively involved in the realisation of the initiative's objectives?
	    ○ *If "yes": How?*
	    ○ *Was it enough?*
	    ○ *Were these people the ones you would expect to be actively involved?*
	● That you had to manage the interfaces, also known as boundaries, between the initiative and its external stakeholders?
	    ○ *Such as: senior managers, sponsors, ongoing operations, etc.*
	    ○ How did you execute this?
	    ○ Did this allow for the transfer of strategic capabilities?
		Haspeslagh & Jemison, 1991

2.3.7	In your opinion, do you think that your management and leadership of following the processes of innovating, integrating and developing the team simultaneously cause you to manage and lead differently in this context? ● *If "yes": How so?* ● *Do certain problems arise from this or are there other considerations?*	Knowledge gap for exploration (No reference)
PHASE 3	**Concluding items and thanks**	**Expected duration: 05:00**
Item no.	**Item**	**Source: Adapted from**
3.1	Is there perhaps anything else you wish to add on: ● The post-acquisition integration process within the team ● The innovation experiments and the innovation acquisition champion's role ● Any final insights about integrating small acquisitions within the team while developing their innovation ● Is there perhaps anything else you wish to add in general?	Govindarajan & Trimble, 2010a; Haspeslagh & Jemison, 1991
3.2	Do you have any questions at this point?	Taffel, 1955
3.3	Moreover, I would like to confirm your anonymity once again.	Okanagan College Research Ethics Board, 2011
3.4	May I contact you after this interview if there is some clarification or follow-up?	Richards, 1996
3.5	Thank you for your participation in this study. I really appreciate the contribution you have made.	Bolderston, 2012