

Belief Driven Sensemaking and Strategy:

arguing to identify and amplify Weak Signals

by

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The crest of Stellenbosch University is centered behind the text. It features a shield with a red and white design, topped with a crown and a banner. The Latin motto "Pectora coluunt cultus recti" is inscribed on a scroll at the bottom of the crest.

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March 2016

DECLARATION:

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OPSOMMING

Die tesis handel oor argumentasie as synde 'n 'belief driven' proses van sinmaking in organisasies.

Dit is 'n konseptuele analise wat poog om lig te werp op strategiese prosesse in organisasies veral ten opsigte van swak seine.

Die resultate dui daarop dat 'requisite variety' met betrekking tot die identiteit van deelnemers aan strategiese denke belangrik is, sowel as die vaardigheid van 'mindfulness'

SUMMARY

This thesis is about arguing as a belief driven sensemaking process within a strategy making environment.

It is a conceptual analysis which attempts to shed light on ways to improve the modern strategy making process, through investigating the belief driven aspects of sensemaking, and in particular arguing as a means of identifying and amplifying weak signals.

The findings suggest that requisite variety in the identities of the stakeholders in a strategy making team is important; that mindful sensegiving by stakeholders and the leader not only ensures awareness but also a focus on the intuitive application of tacit knowledge to identify weak signals and communicate these to a strategy making team as narratives.

Narratives are stories or scenarios which are then debated by the participants in the strategy making, through a sensemaking process of rational debate or arguing which causes participants to set aside previously held beliefs and expectations and create new knowledge, or strengthens existing expectations and knowledge.

Although the study has found promising information which may add to the body of knowledge, this will need to be tested through empirical studies.

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Chapter 1

Introduction

‘the future belongs to the unreasonable ones, the ones who look forward and not backward, who are certain only of uncertainty and who have the ability and confidence to think completely differently’

GB Shaw

1.1 Introduction

The sentence, “How can I know what I think until I see what I say¹” has been used by Karl Weick as a ‘recipe’ for sensemaking. Weick himself admits that it is incomplete, and too neat and tidy for organizational settings in which: “we are always arguing at particular moments in specific places to certain audiences”². Arguing in an organizational setting is the ‘...means by which we rationally resolve questions, issues and disputes and solve problems.’³

This thesis is about the use of arguing as a means of surfacing strategic opportunities from weak signals in modern organisations. It is a conceptual analysis which attempts to shed light on the modern strategy making process through investigating the belief driven sensemaking

¹ From E.M. Forster, *Aspects of the Novel*, (1927), p 101. According to Weick, this sentence is about justification, choice, retrospective sensemaking, discrepancies, social construction of justification, and action as the occasion for sensemaking.

² Mailloux, 1990, p 134, as quoted in Weick (1995)

³ D.H Jonassen, B Kim, (2010)

aspects, and in particular arguing as a belief driven aspect of the sensemaking theory of Karl Weick as a means of surfacing weak signals in a strategy making process. There is a lot of sensemaking research, however little that attempts to combine arguing as belief driven sensemaking with weak signal identification in a strategy making process. Sensemaking and strategy share many similarities: both attempt to make sense of events by the understanding of cues which are fitted into frames of reference, both are influenced by their ‘makers’, both are social processes taking place in organisations, and both look to retrospective moments to make the sense that is required. Strategy is challenging as a research area as there is no generally accepted theory of strategy. The interesting question is whether these similarities can be exploited to create a method of strategy making which fits today’s complex and rapid paced business environment.

1.2 Sensemaking and Strategy

Sensemaking is particularly relevant in organisational studies as it provides insight into how individuals in organisations give meaning to events which are experienced as surprises or shocks, in the form of weak signals that could lead to a competitive advantage. Strategy making has traditionally been treated as the responsibility of leaders, who ‘bring together and interpret information for the system as a whole’⁴, but these individuals collectively experience the greatest information load in an organisation and are most likely to manage this load in such a way that tolerates error and thus miss weak signals.

1.3 Turbulence

There is an impermanence to life today which was not experienced by previous generations. The rate of global change and the turbulence⁵ the world is experiencing has been accelerating exponentially⁶. Many of the tools and practices which we apply or use in our daily lives

⁴ Daft and Weick. (1984)

⁵ For Brown and Eisenhardt (1998) this kind of environment is defined as “a situation that is subject to continuous and substantial changes which are uncertain and unpredictable“.

⁶ Many scholars have referred to the increasing rate of change, including Alvin Toffler in Future Shock, but limited research has been conducted to measure the rate of increase. Ray Kurzweil (2008) theorizes that Moore’s Law can be applied to the exponential change in other areas of technology. He believes that as a technology matures, it becomes exponentially more effective, causing greater resources to become deployed towards further progress of that technology, in turn generating further exponential growth. He cites technological progress as currently doubling every decade, implying that the technological progress made during the twenty-first century is equal to the progress made in the

become obsolete, often within our own lifetime. The relevance of this is that: 1) we are more likely to experience information load than were our ancestors and leaders will experience similar growth in information load, exacerbating the challenge of noticing weak signals at this level; and 2) business experiences a level of product change and obsolescence not experienced before. For business the value of a process to identify weak signals which can lead to new products, or services which will contribute to growth and profitability, before the competition identifies the potential, is more important than ever before.

Societal frames of reference have changed considerably during the past forty years⁷. These changed frames of reference have shifted the expectations which society has of the value to be delivered by business⁸, and the shift is ongoing: shareholder value which was the major business driver for forty years is now seen by some as the cause of the financial woes facing the world; increasingly more stringent governance, corporate social investment and sustainability requirements as well as changing role of the Board have altered the way strategy is created and business is managed. Boards increasingly delegate much of the responsibility for strategy making to the CEO and executives. That said: being able to stay ahead of the competitors remains a key driver for business today.

Business systems today are very complex systems operating in turbulent environments, in which there is a myriad of possibility. Predicting trends by extrapolating data and assuming linear feedback is dangerous and fraught with error and risk. Dealing with complexity and being prepared to manage unpredictable events and the associated vulnerabilities which arise from complexity and on-going turbulence is the challenge facing the strategy makers of today and tomorrow⁹. Forecasters must deliberately look for those weak signals which have the

previous 200 centuries. Ansoff (1965) believed that rapid and discontinuous change post World War II would create turbulence and that new ways of strategizing would be necessary.

- ⁷ Increased democratisation, emancipation of women, and other previously repressed classes and races, family dis-integration, improved access to education and literacy levels, immigration, urbanisation, the reduction in the power of some large religions, reduced nuptiality, and other changes within societies have impacted on the western world in ways that have not yet been fully quantified, but which have fundamentally changed the way in which society is constructed. .
- ⁸ K Jensen, (2013), questioned the importance of shareholder value as a driver of business for the future in the wake of the 2008 recession;
- ⁹ Black swan events such as the Tsunami of 2004 could have been predicted had analysts been paying attention to outliers in patterns. The concept of Black Swans is an enterprise risk management concept first documented by NN Taleb. For an event to be called a Black Swan, the event must be unpredictable, must carry a massive impact, and after the fact, observers will concoct an explanation

potential to make a big difference. Ignoring complexity can lead to misplaced over-confidence and decision-making based on expectations which are no longer linked to reality.

We are living the unprecedented times of which Drucker warned: times in which we are more interconnected but further apart¹⁰ with the danger of more conflict as a result. Times in which discontinuous change is part of everyday life and ‘success stories of yesterday have little relevance to the problems of tomorrow...the end of certainty¹¹.’ Leaders need an improved perspective of the future in which they replace naïve determinism with a social sophistication in which they pay mindful attention to their environment in order to more effectively notice the cues of weak signals.

The turbulence caused by rapid discontinuous change and unpredictable environments which have been particularly evident in global economies over the past forty years, have made the traditional linear approach to strategy-making impractical and high-risk. Many countries in the world have become mixed economies¹², struggling to create public services amid the shifting sands of regulation and de-regulation, while looking to business to build the economies. Businesses are struggling with economic challenges, global competition and an increasingly regulated environment.

Global interconnectedness has accelerated the speed of information exchange, while the commoditisation of many services has created a global society demanding instant gratification as well as access to global markets. The access this society has via digital networks to knowledge and information implies a knowledge society: “..genuinely borderless. Information, capital and innovation flow all over the world at top speed, enabled by technology, and fuelled by consumers’ desires for access to the best and least expensive

that makes it appear less random and more predictable, than it was. Although Black Swans are typically negative events, similar responses apply to positive events.

¹⁰ Drucker (1998). “As we advance deeper into the knowledge economy, the basic assumptions underlying much of what is taught and practised in the name of management are hopelessly out of date... Most of the assumptions about business, technology and organisation are at least 50 years old, they have outlived their time”

¹¹ C Handy (1996)

¹² A mixed economy is one in which the private sector, profit seeking enterprises and the accumulation of capital drive the economy, although the state exerts considerable indirect influence over the economy through fiscal and monetary policies, often providing welfare benefits and environmental protection.

products.”¹³ The competition is no longer a local trader or even a national trader, but an often an unknown entity from another continent. Trade barriers have lifted through political changes, finally enabling truly global businesses to exist, with the attendant risks and opportunities which these bring. Focusing on strategy is increasingly difficult in such times¹⁴ but more important than ever before¹⁵.

The global financial crisis which began in 2008, has already begun a revolution in enterprise financial control, with sustainability requirements, and effective corporate governance becoming critical factors in strategic planning. While these factors do not have a direct impact on the ability of a business to identify strategic opportunities, they add to the organisational ‘noise’, and contribute to information overload, which does have an impact on what it is that people focus on when making sense of strategy. As the world moves through the recession and depression into a new growth cycle, further opportunities to redesign the way we think about the future of organisations will arise, necessitated by technological and managerial complexity and ambiguity, the need for business to take an innovative view of their value adding activities and the rapid rate of change anticipated in a new economic cycle. Although some scholars have predicted a return to simplicity¹⁶, the indications are that complexity will continue to increase, as multi-stakeholder approaches, environmental sustainability, financial regulation and corporate social responsibility gain importance amidst ever increasing competition, and shifting global trade patterns. The interconnectedness of the global economy has made real the implications of the butterfly effect¹⁷ of chaos theory; that sensitive dependence on the initial conditions, where a small change to a non-linear system can result in novel patterns of behaviour or trigger an unconnected state.

The components within business and connections between the components have increased in number and complexity, characterised by uncertainty, ambiguity and discontinuous change. The webs of interdependent interactions in organisations: the causal connections which bind people together are both more fragile and more complicated. Changes and shifts of emphasis

¹³ Ohmae, (1995)a.

¹⁴ Gordon Brown (former British Prime Minister) referred to this in acknowledging that he found it hard to focus on strategy: as you have to deal with immediate events, like it a bank’s going to go under” (Viner, based on an interview for the Guardian, 20 June 2009)

¹⁵ Mintzberg 1998 also noted the that strategy is of more importance in turbulent times.

¹⁶ Grant (2008)

¹⁷ Lorenz, EN. (March 1963). .

occur constantly during the streaming of organisational events. The webs of interdependent connections are also open to external environments, where external events can sometimes profoundly affect the organisations. Order is created through self organising processes which take place within the organisation itself. The edge of chaos is found at the periphery of organisations, where they connect to the external world, and where time and space become one reality. Attaining the competitive edge in the future will be greatly enhanced by an improved ability to make sense of weak signals through a strategy making process which avoids the arousal caused by information overload and dissonance, assists in pushing aside the organisational noise, to reach the patterns hidden in the flows of information. Increasing turbulence¹⁸ increases the need for insightful strategy making which can enable organisations to take advantage of market opportunities¹⁹.

The economic environment post the economic downturn of 2008 is one in which competitive advantage is ephemeral. Being able to exploit and move in and out of states of advantage will contribute greatly to future success. A new way of looking at strategy and strategy making²⁰, seeing strategic advantage as a temporary, sometimes more permanent, driver of business will therefore add value to the business world.

1.4 The Evolution of Strategy

The development of strategy into a self-conscious method of planning or directing the future in a competitive manner began in the late 1950's as many organisations began to factor

¹⁸ Turbulence is not new, but we are living in a time when the turbulence is unprecedented: the global financial crisis which began in 2008 is one of the worst on record. The rate and pace of change is increasing with globalisation; increasing complexity and accelerating information exchanges as well as huge market volatility.

¹⁹ Strategic planning is more important, but also less structured in turbulent economic times or when businesses undergo a period of uncertainty or instability: compared to organisations in a state of stability, or operating in an environment of stability, where strategies or plans are articulated in detail and followed, without the need for adjustment. Mintzberg believes (2005) that strategic planning rises in importance in turbulent or uncertain times. Gyskiewicz notes that this turbulence is the resonance that stimulates innovation and renewal.

²⁰ Prahalad and Hamel (1994) saw the competitive space as having changed dramatically from that of previous decades, due to both regulation and deregulation; less protectionism; structural changes brought about by technology, and technological discontinuities; excess capacity, mergers and acquisitions, environmental concerns, the emergence of trading blocks, globalisation. In their view the '...thoughtful members of the academic community are increasingly recognizing that the concepts and tools of analysis that formed the backbone of the strategy literature during its period of major growth (1965-85) may need a basic re-evaluation in order to pave the way for new ideas.'

global competition into their planning. Alfred Chandler²¹ linked organisational structure to strategy, thrusting strategy into mainstream organisational research. His description of strategy²² increased the scope of business planning to include all aspects of a business, and the external environment.

A strategy is most often assumed to mean a direction or plan of action; what lies behind the plan of action is strategy making. Strategy making is part science, based on analysis and research and part art, based on intuition and deep knowledge. Strategy today is the fluid, shifting means by which the impermanent organisation should be kept focused on an uncertain future. It is therefore a constantly evolving process, growing and developing with business, management styles, the state of the economy, and societal and technological change. High information load, ambiguity and high levels of complexity have increased the importance of sensemaking as an element of the organisational understanding needed to craft organisational strategies.

1.5 Organisations and People

Organisations are cultural phenomenon or ‘organisational societies’²³. We experience these as the places where people come together in order to achieve collective goals. As Heraclites reminded us two thousand years ago, you cannot step into the same river twice, because it is forever changing, and so it is with organisations. The act or process of organising creates transient structures, which reside between the smoke and crystal²⁴: talked into existence and crystallised through texts, yet existing on the edge of chaos.

People are the social and cultural beings²⁵ who create social routines, norms and practices in order to organise themselves and others to achieve goals²⁶. Our human experience is

²¹ Chandler, A.D. Jr. (1962), defined strategy as “..the determination of the basic long-term goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources for carrying out these goals.

²² The determination of the basic long-term goals and the objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.

²³ Morgan, (2006)

²⁴ Taylor and Van Every, (2000), quoted in Weick (2009)

²⁵ Weber (1949) “We are ‘cultural beings’, endowed with the capacity and the will to take a deliberate attitude towards the world and to lend it significance..’

²⁶ Durkheim *The Rules of Sociological Method* (1895) proposed that ideas become socially causative or social facts and these drive subsequent behaviour. “The determining cause of a social fact must be

wrapped in organising: from early childhood, people are associated with organisations such as schools, religious bodies and clubs²⁷. Being associated with organisations becomes a way of life for the majority of people. They contribute to our beliefs, our self-concepts and our personal identities²⁸, which in turn influence how we make sense of the world we inhabit.

Organising originated with early man, who discovered the advantages to be gained from allocating or sharing tasks for the achievement of collective goals. Early societies organised themselves to take advantage of the specialised skills of certain individuals for the betterment of all, and enhanced the identity of the skilled individuals in the process, keeping in the process the social elements or organising²⁹. Trading grew from organising and the acts of directing or controlling these activities became known as management. Over time, as business evolved so did the art of management³⁰ becoming complex and messy as managers took on more tasks in an increasingly uncertain world to meet the changing demands and needs of business. Management actions include planning for an uncertain future and taking actions to attain organisational success. This planning and action taking is more important during uncertain times than in stable and predictable environments, as during stable and predictable times organisational routines and scripts drive the organisation along prescribed paths. Chia's (2005) description of managing describes it clearly: "Managing is firstly and fundamentally the task of becoming aware, attending to, sorting out, and prioritising an inherently messy, fluxing, chaotic world of competing demands that are placed on a manager's attention. It is creating order out of chaos. It is an art, not a science. Active perceptual organization and the astute allocation of attention is a central feature of the managerial task." Management has changed substantially since the industrial age. Direction giving was always a key activity of management, but the scope of this direction giving has expanded to encompass finding a path through the turbulent complexity of business life as we

sought among the antecedent social facts and not among the states of the individual consciousness." He believed that humans when in a group will inevitably act in such a way that a society is formed

²⁷ Pugh (2007) refers to the world we live in as an organisational world, where all people are members of formal organisations from early childhood onwards. Weick and Sutcliffe (2001) make a similar comment: "... organising wraps around the flow of human experience.."

²⁸ Weick (1995)

²⁹ M Parker Follet (1918) saw organizations as " A large organization is a collection of local communities..."

³⁰ M Parker Follet (1918) on management: "The art of getting things done through people"

know it. Direction creates a vision of the future: a strategy³¹ or strategies, to focus and mobilise the people within the organisation, and to which all activities of the organisation can be aligned. Organisations today may have routines and scripts which keep the internal organisation relatively stable but have to contend with the transition zone between fairly stable organisational routines and the turbulence outside: the edge of chaos. This is also the zone where novel patterns emerge and innovation can be found or created. The turbulence experienced today is evidenced in rapid and continuous change, a bewildering array of variables, and unexpected surprises. In uncertain times, being able to recognise and make sense of the opportunity in weak signals and rapidly adapt the direction or strategy to capitalise on the opportunities identified, means a better chance of survival for the business.³² Organisational systems today are both structured and unstructured, have sub-systems and are often non-linear open systems continuously interacting with their environment, and consequently, are complex systems. Full of interruptions, ambiguity, and shifts in activities, organisations create multiple opportunities for sensemaking.

Strategy for the purposes of this thesis is defined as: “a direction or approach which uses new or newly designed products or services to create a competitive advantage for the organisation”. Strategy making is concerned with creating the direction or approach for the envisioned tomorrow based on the knowledge we have today, or living life forwards while understanding backwards³³. Understanding backwards does not mean that there is a focus only on the past, but refers to retrospective understanding: we can only know what we know, once we have known it. Knowledge resides not only at an individual but collectively, at an organisational level, forming part of the mental frames which the specialists and leaders of an organisation use to make sense of discontinuities in the flow of information. Hedland

³¹ Strategy is variously defined as: ‘ a course of action aimed at ensuring that the organisation will achieve it’s objectives..’ (Certo & Peters, 1990) ; the overall plan for deploying resources to establish a favourable position’ (Grant, 2008) ; the pattern of decisions in a company that determines and reveals it’s objectives purposes, or goals...’ (Andrews, 1971); ‘the creation of a unique and valued position, involving a different set of activities (Porter); ‘working hard to understand a customer’s inherent needs and then rethinking what a category of product is all about’ (Ohmae, 1995); ‘a deliberate search for a plan of action that will develop a business’ competitive advantage and compound it’. (Porter, 1998); ‘the determination of the long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out those goals’ (Chandler, 1962).

³² Gryskiewics (1999): “.. in the 1950’s the typical business organization .. valued nothing so much as predictability and repeatability.. competition was non-existent..”

³³ Kierkegaard (1835)

suggests that one of the reasons that large western firms have innovation challenges is the inflexibility of their tightly codified and articulated knowledge systems, which force compliance to the organisational plan. Ideologies associated with tightly codified knowledge systems create strong expectations of what should be found, in turn reducing the likelihood that weak signals will be noticed. Tacit knowledge transfer is inhibited as a result, restricting the exploitation of knowledge resources.

1.6 Weak Signals

It is in making sense of the past, no matter how recent that past that the weak signals which can create competitive advantage are identified. Failures of foresight in strategy: missing weak signals, mean lost opportunities at best, or at worst, lost competitive advantage. Such failures are caused by bias, information load, expectation or seeing what is believed. Beliefs play a substantial role in determining what is seen as beliefs are ingrained into people as expectations; which guide what is seen and understood. Information load is a symptom of the turbulent world we inhabit, symptomized by complexity, ambiguity and the volume of information generated. The volumes of information which the world is creating and storing are increasing exponentially³⁴, creating a corresponding increase in the information that reaches every person. Extracting meaningful information from the volumes of data is an increasingly complex task³⁵. Weak signals are often overlooked, as the abnormalities confronting people in organisations tend to be rationalised into existing frames.³⁶

³⁴ Every day the world generates 2.5 quintillion bytes of data. This is so much data that 90% of the data in the world today has been created in the last two years alone. This data comes from everywhere: sensors used to gather climate information, posts to social media sites, digital pictures and videos, purchase transaction records, and cell phone GPS signals among others. <http://www-01.ibm.com/software/in/data/bigdata/>

³⁵ J Gantz, D Reinsel. (2011). “ While 75% of the information in the digital universe is generated by individuals, enterprises have some liability for 80% of information in the digital universe at some point in its digital life....What are the forces behind the explosive growth of the digital universe? Certainly technology has helped by driving the cost of creating, capturing, managing, and storing information down to one-sixth of what it was in 2005. But the prime mover is financial....The trick is to generate value by extracting the right information from the digital universe — which, at the microcosmic level familiar to the average CIO, can seem as turbulent and unpredictable as the physical universe.

³⁶ Weick and Sutcliffe (2001) describe the concept of “normalization of abnormalities”, which describes the tendency to note a discontinuity but explain it away as normal, rather than focusing on the potential for disorder which the abnormality may create.

Being able to influence the manner in which people in organisations identify and amplify weak signals through the use of a structured approach to belief driven arguing should improve the ability of an organisation to exploit weak signals, adding value to the strategy making process. The word strategy is derived from the ancient greek: στρατηγία: *stratēgia*, meaning “office of general, command, generalship”, στρατηγός: *stratēgos*, “the leader or commander of an army, a general”; στρατός *stratos*: “army” and ἄγω: *ago*, “I lead, I conduct”. Strategy making was originally directed at achieving superiority or advantage over opponents in military engagements or exercises. Today business is a form of combat, but one in which the enemy or competitor is not necessarily known, making planning strategies difficult. The business and economic world post the recovery from the global financial crisis has brought about changes which requires of business new approaches to strategy making³⁷. Strategy making takes place in the broader context of the world and the organisation, which is influenced by the turbulence external to the organisation. It is the collective output of the leaders of the organisation; the social sensemakers and sensegivers, who filter the sense which is made through the lenses of their identities and beliefs.

1.7 Language

Organisations are “networks of intersubjectively shared meanings³⁸” which are maintained by the common language and social activities of the organisation. The language of organisations, expressed as conversations, routines, texts and interdependent activities link people to one another in the execution of their organisational activities. Conversation is only possible because as a species we have words which allow us to make sense of the world. It is language and word-work³⁹ which have set the human race apart from any other species, because these allow us to explain and structure our world. Organisations have their own vocabularies, language structures and ideologies which become sensemaking resources for the people of that organisation. People thus talk their organisations into existence, and talk changes into being. The organisational culture is reflected in the language and thinking of the

³⁷ R. Grant, (2008) and P Dicken (2011) both refer to the shareholder value approach as a catalyst for business failure. Dicken cites the approach as a key cause of the global economic crisis which began in 2008.

³⁸ Walsh and Ungson quoted in Weick (1995).

³⁹ Toni Morrison. Nobel Prize address 7 December 1993: “Word-work is sublime, she thinks, because it is generative; it makes meaning that secures our difference, our human difference - the way in which we are like no other life”, quoted in Weick (1995)

organisation. The richer the language of the organisation, the richer the reflective thought that is applied by the people within the organisation⁴⁰, and the deeper and more meaningful the sense which can be made. Interlocking routines are constructed from conversations and the language of an organisation, bundled together loosely as organising processes and habituated action patterns, enacted by aggregations of people “..who share many beliefs, values and assumptions that encourage them to make mutually-reinforcing interpretations of their own acts and the acts of others”⁴¹.

1.8 Strategy as Sensemaking

Strategy as a social process is a sensemaking process and therefore a subjective interpretive process whose outcome is dependent on the strategy makers, their identities, their beliefs and expectations, their personal frames of reference, the inter-relationships between them and the cues which are presented to them.

Traditionally, strategy planning sessions have used linear methods to create understanding and set direction. Participants in these strategy sessions often fail to notice or make sense of weak signals and a lack of consensus leads to misaligned or inappropriate strategies. Sensemaking starts with a sense maker, who because of his or her identity and beliefs, notices a surprise or event in the flow of events after it has happened, fitting it into his or her existing frames of reference to make sense. A sensemaker is a complex composition of multiple identities based on experience, roles, learnings, perceptions and views, correct or not, of how others perceive the sensemaker. These multiple identities of the sensemaker form the foundation of and influence the sense that is made. Beliefs form the anchor for first noticing, then making sense of anything unknown or unexpected. Reference points are created from the mental models or frames, vocabularies, ideologies, stories and knowledge assimilated over time; which then become beliefs colouring the sense that is made. When unexpected cues are encountered, the stimuli of the unknown cues are placed into the existing frames of reference of the sensemaker to extract meaning.

⁴⁰ Weick (1995) “...organizations with access to more varied images will engage in sensemaking that is more adaptive than will organizations with more limited vocabularies” Thus requisite variety applies to language.

⁴¹ Smirich and Stubbart (1985)

1.9 Belief Driven Sensemaking

Belief driven sensemaking is manifested in expecting and arguing in organisations. Strategic expectations or anticipation and articulation of outcomes are common-place and deliberate tools used by leaders to focus the minds of the people on the future, but their individual expectations colour the sense that is made. Language forms part of the frames of reference, along with knowledge structures, rules, values, personal experiences and personal and organisational stories. Expectations create self-fulfilling prophecies, and limit what is noticed. Thus in order to believe what is seen, the strategy makers must not only be mindful of their own and the collectives, expectations, but also have sufficient trust in their fellow strategy makers to feel safe voicing contradictory or potentially disruptive ideas.

Arguing in the sensemaking context is a belief driven process which can be directed to focus thinking, surface weak signals from the data presented to strategy makers, and provide a platform for reasoned discourse to reinforce or change existing beliefs and expectations. This thesis specifically considers arguing as a belief driven process of sensemaking, within the strategy making process. If we define arguing in organisations as a social learning process which uses reasoned discourse to reinforce or change existing beliefs, and the process of arguing during strategy making as a method of identification of minority beliefs or weak signals within the strategy making process of the organisation, then we can expect to find the following:

- That the successful arguers and noticers of weak signals will have a large number of identities on which they can draw to make sense.
- That the process of arguing can be used to identify or highlight minority beliefs or weak signals which may be strategic opportunities.
- That the process of arguing will align the thinking of the participants in the strategic process.
- That a structured arguing process will result in clearer strategic goals
- That the process of arguing will improve the modern strategy making process.

The research contained within this thesis is conceptual. No study exists which has undertaken such a conceptual analysis. A literature review cannot provide sufficient depth to satisfy the research puzzle and therefore an interpretive conceptual analysis will be done.

The contribution that this research will make to the body of knowledge will be to provide insight into strategy making suited to organisations operating in dynamic, information rich, complex and ambiguous environments. It will add the following value to the body of knowledge:

- An understanding of how to better surface weak signals which could create strategic opportunity through arguing:
- Guidance as to how to select those strategy makers who are most likely to notice potential value adding patterns, from within the organisation.
- A methodology to structure arguing which meets the challenges of modern strategy making and which will provide a means to facilitate the identification of weak signals during the strategy making process.

1.10 Purpose

This thesis intends to provide a different approach to the identification of weak signals in the strategy making process. Strategy is challenging as a research area as there is no generally accepted theory of strategy. Scholars disagree regarding virtually all areas of strategy: there is no common definition of strategy; no definitive agreement regarding what strategy seeks to achieve; no agreement regarding where strategy making begins and ends; no consensus on who is responsible for strategy making; and limited agreement about the importance of having a strategy. There is consensus however, that organisations which have developed strategies, particularly in turbulent environments, benefit from having and implementing the strategies.

The extent of the turbulence which the business world is experiencing currently is greater than any previously experienced. The volumes of information stored, access and analysed are increasing exponentially as more and more devices and people connect to the World Wide Web. New information, new products, and new technologies are shared, sold and exchanged across the globe constantly. Remaining competitive in this environment requires new ways to find new opportunity and new services. Although strategic planning processes have been evolving along with the development of the business environment, there is a need for a more perceptive way to make strategy that will extract the weak signals that will enable business to keep a competitive edge.

Strategy making is a sensemaking process: a social cognitive process, heavily reliant on the knowledge and insight of individuals and teams, to create new knowledge which can become a competitive edge. In the strategy making process, sensemaking is both retrospective⁴²; and prospective⁴³. Retrospective as patterns are seen and understood in retrospect, and prospective as the knowledge and intuition of the sensemaker projects the sense that is made into a future world.

A variety of viewpoints and approaches to strategy have been examined by scholars, and these will be considered briefly during the analysis. The research will consider the strategic context: the conditions under which the strategy makers make strategy, centralised vs distributed strategy making, and strategic ‘planning’ sessions as meetings. Meetings are the organisation ‘writ small’ and it is in meetings that leaders ‘give sense’ to others. This sensegiving and the manner in which it is managed influences the manner of thinking that is applied and consequently, the sense that is made.

Particular emphasis will be placed on the role of weak signals in the strategy making process, as leading indicators of disruptors or innovation for change: these are critical in strategy making, particularly in turbulent times but often overlooked precisely because the strategy makers are overloaded and the signals are weak.

Arguing as a belief driven sensemaking process enables people to make sense of minority views, and exposes weak signals which would otherwise be unnoticed.

1.11 Design / Methodology

This thesis conducts a conceptual analysis of the intersection between two areas of theory, namely the belief driven process of arguing within organisational sensemaking, and weak signal identification in strategy making. In particular this thesis explores aspects of the belief driven sensemaking process of arguing as a means to identify and amplify the weak signals in the strategy making process. Belief driven sensemaking is very applicable to the process of strategy making as it takes into account the identity of the sensemaker, and the impact of the quantity, variety, ambiguity and complexity of the information facing those who make strategy.

⁴² Weick (1995)

⁴³ Gioia and Mehra (1996).

The role of the multiple identities of sensemakers and the impact this has on expectations and arguing; leader and stakeholder sensegiving in meetings; trust relationships among strategy makers, and are examined in some detail as these are critical influences of the sense that is made.

Chapter 1 summarises the context, purpose and design methodology of the thesis, and contextualises the research in organisational studies, and current global economic environment, which is relevant as the economic and business environments are interrelated and interdependent. This chapter places in context the need for a new means to identify strategic opportunities in an evolving world of business.

Chapter 2 examines the theory of Sensemaking in organisations. The seven properties of sensemaking are explored, with particular emphasis on identity of the sensemaker as without a sensemaker there can be no sense made. Belief driven approaches, and the use of arguing in organisations to create new knowledge, are considered in relation to the strategy making process. The critical cognitive activities are the mindful identification of cues in the stream of information, without undue arousal. Making sense of the weak signal information can then take place and potentially indicate challenges or opportunities: from this, all other strategy making activities follow. Sensemaking is an individual cognitive activity, but sensemaking also takes place at multiple levels above the individual: at the levels of intersubjective; generic subjective and extrasubjective and the tensions that are created by interplays between these levels allow for the creation of new knowledge. In organisations it is an activity which is driven by action: “how can I know what I think until I see what I say⁴⁴”.

Uncertainty is part of modern organisations, operating as they do between stability and chaos. At times of uncertainty the interplay between intersubjective and generic subjective allows for new paradigms⁴⁵ to be emerge.

The volume of information which strategists or managers should review or understand before developing a strategy is overwhelming.⁴⁶ In order to deal with the information load,

⁴⁴ Weick’s sensemaking ‘recipe’

⁴⁵ Paradigms are ways of doing. New paradigms then are created when tensions arise between innovation and controls: people make sense and in so doing create new opportunities or new ways of doing.

⁴⁶ Ulwick (1999) estimated this volume to be in excess of 40 million potential solutions to any strategic problem.

important information contained in patterns of information which have weak signal information may be overlooked, ignored, or missed completely. The mental steps which people take to deal with information load, pre-structures what they notice. Finding ways to alleviate stress or create conditions in which it becomes as positive influence would therefore add value.

Chapter 3 will investigate the use of arguing as a belief driven process of sensemaking within the strategy making context. Belief driven sensemaking is characterised by two context specific processes: Expecting and Arguing. Beliefs in the form of expectation can influence what is noticed or the sense that is made from what is noticed. The information which is noticed are the unexpected events, surprises or strange cues in the normal flow of information⁴⁷. When belief in the form of expectation is at play, what is noticed is often what was expected (believing is seeing), and can push aside weak signals. Arguing is a way of making sense of what is noticed, as the process of arguing causes a reasoned debate. Arguing is a cognitive and social process which naturally forms part of organisations⁴⁸. The usefulness of arguing within the organisational context lies in using a pre-existing social process to shift expectations or to rationalise intuitive thoughts, creating new knowledge.

In particular this chapter explores intuition, emotion, and rationality, creative identities and meetings which are opportunities for arguing⁴⁹. Meetings are ‘the organization of the community *writ small*’, within which reality can be interrogated and expectations managed. The chapter will also explore the situations and social aspects which facilitate productive arguing, and the way in which people make sense during arguing in an organisational context. Identities in the arguing and sensegiving process will be explored to understand the dynamics created by sensegiving activities in a strategy making context. Team members as stakeholders of the strategy making process, and trust as a factor in productive meetings will also be explored.

⁴⁷ Weick believes that in the efforts which people make to deal with information load, that the way in which the flow is interrupted is predictable, which implies that it also has the potential to be changed to focus their attention or create a cognitive moment.

⁴⁸ Weick (1995): “meetings and arguments go together .. “meetings are sensemakers”

⁴⁹ Scott (2002) in noting the importance of conversations states that the world is changed one conversation at a time, and we should have the courage to have fierce conversations. Fierce conversations according to Scott are those conversations in which we “.. come out from behind ourselves into the conversation and make it real..”

Chapter 4 explores strategy and weak signal identification. The evolution of strategy as management discipline is investigated in order to understand why strategy evolves. The context in which strategy takes place and the people whom make strategy are investigated to draw parallels to sensemaking. Emergent strategy and strategic intent are then examined against a backdrop of strategic planning to understand applicability for modern organisations. The evolution of Weak signal identification and amplification will be explored in the context of minority and majority viewpoints of organisational arguing, to create new cognitions by shifting sensemaking frames. Weak signals identifiable in the edge of chaos of complex adaptive systems, can be amplified through lifting reliance on the generic subjectivity that structures organisations and within the context of organisational arguing, creating temporary instability and dissonance within the safety of the arguing context. The cognitions⁵⁰ most likely to produce dissonance are those that provide information useful for action⁵¹, in a decision situation. Decision situations are those where individuals have committed to an action and events occur or information is received that is inconsistent with the chosen course of action.

Chapter 4 examines weak signal identification within the strategy making context. It touches briefly on the schools of thought around strategy. It considers the evolution of strategy making through global economic cycles in order to understand how strategy making has progressed in alignment with economic cycles, from a linear process, to a more dynamic and less structured approach. This is relevant as business and management are in a process of constant evolution and constantly require new planning approaches.

No generally accepted theory of strategy exists, therefore this chapter considers the context and content of strategy, the strategy makers, and takes particular cognisance of the people element of strategy: for it is the people in the organisation who create strategy, making sense through their words and language. Team members are stakeholders to the strategy making process, and therefore are referred to as stakeholders throughout this document, rather than team members.

⁵⁰ Cognition is any piece of knowledge a person may have. These can include knowledge of behaviours, attitudes, states of the world, or more. The more discrepant two cognitions are, the greater the magnitude of dissonance experienced.

⁵¹ Cacioppo and Berntson (1994)

In particular this chapter will investigate emergent strategies and weak signals, probing how conditions for noticing weak signals within the edge of chaos of a complex adaptive system⁵² may be optimised and incorporated into strategy making.

Chapter 5 considers the research conducted and draws some conclusions. The findings note the impact of constant change and turbulence has had on organisations which face a constraint need to redefine themselves and discover new strategic opportunities. Although the outcomes of the research are theoretical, some promising pointers are found for future empirical studies in this field. Chapter 5 summarises the key findings and proposes a theoretical model for intuitive-rationalising in a strategy making environment.

Key pointers found are a need for mindfulness and sensegiving as attributes needed for both the leader of a strategy making team and for the individual team members; requisite variety in terms of multiple identities within stakeholders, when creating a strategy making team as a mix of those with broad experience with multiple identities, those with deep experience and limited identities as well as those who with creative identities who operate on the periphery of the organisation are needed; the need for freedom to apply intuitive and creative thinking in an environment of trust is highlighted as important for without freedom to be intuitive and a platform in which the stakeholders feel safe, weak signals will not be articulated. The findings note that the identification of weak signals is an intuitive process which uses tacit knowledge to notice subtle patterns but this by itself is insufficient, as it only identifies and does not amplify the weak signals. A narrative process of story-telling within the team is proposed to articulate the weak signals identified, which is followed by rational debate among the team to amplify these weak signals, and change or create new expectations, thus locating structured arguing, within the strategy making process and developing a theoretical model of strategy sensemaking.

⁵² Dyer-Harris. Zeisler (2002)

Chapter 2

Sensemaking

'be where you are with all your mind'

(A sign on the wall of a machine shop run by the New York Central Railroad)

2.1 Introduction

We live in a socially created world, a world in which people constrain and structure their actions and viewpoints in order to organise their world. Making sense of what happens in this world is a process which is, as Weick notes: 'grounded in both individual and social activity..' where it is used to cope with the surprises in a flow of events. Sensemaking is, quite literally the making of sense, or the organising of thoughts and reactions about a particular event, based on the individual and his or her past experiences, identities and expectations.

Making sense is an ongoing and completely natural activity which individuals use to understand the unexpected. It is about being aware, taking notice and attaching meaning to events, and structuring a view of the unknowns in organisational reality that is plausible and intelligible to the individual. By fitting observed events or unknown cues into existing frames of reference or belief systems: people make sense.

As Langer noted, "we experience the world by creating categories and making distinctions between them". Without the categories and subsequent distinction finding we may miss much of what goes on in the world.

Organisational sensemaking⁵³ refers to the way in which people collectively make plausible sense of the unknown events which they experience during the flow of organisational life. It is concerned with extracting important information from the streams of information flowing past; structuring the unknown, and fitting the new information into existing frames or mental models in a plausible way or story⁵⁴, in many ways similar to the strategy making process, as strategy can be seen as multi-contextual sensemaking under conditions of high ambiguity and uncertainty. Individuals who work in teams, make and hold collective knowledge, but the application of intersubjective meaning and understanding is continuously co-created in a sensemaking system which changes I into We. In a strategy making context, ‘we’ can become group think⁵⁵ and should be carefully excluded. The ability to make sense of a constantly changing and complex environment has become an important activity for leaders today.

The most fully developed of the categories we use to make sense, are ideologies: the systems of ideas that we use to rationalise and justify decisions. In organizational sensemaking ideologies, third order controls, paradigms, theories of action, traditions or stories create vocabularies of meaning for the organisation. Ideology or shared belief systems are important sensemaking resources as they have powerful emotional undertones that bind people. Particularly relevant to this research is the concept⁵⁶ that making strategy is like creating ideology although only if the strategy is powerfully shared throughout the organisation in an ideological manner, with tight control over core values. Ideologies can create harmony, self-control and co-operation. People select from a variety of these vocabularies of meaning or frames when they make sense. The frames they select are used to

⁵³ "It is not interpretation as it encompasses more than how cues, information is inter-preted, but is concerned with how the cues were internalized in the first instance and how individuals decide to focus on specific cues. (Weick 1995) "Identity construction is seen by many to be one of the two basic properties that differentiate sensemaking from basic cognitive psychology [...]. The other property is the use of plausibility as the fundamental criterion of sensemaking." (Weick et al. 2001, p. 416)

⁵⁴ Weick (1995): If accuracy is nice but not necessary in sensemaking, then what is necessary? The answer is something that preserves plausibility and coherence, something that is reasonable and memorable that embodies past experience and expectations, something that resonates with other people, something that can be constructed retrospectively but also can be used prospectively, something that captures both feeling and thought, something that allows for embellishment to fit current oddities, something that is fun to construct. In short what is necessary in sensemaking is a good story”

⁵⁵ A tendency in groups in which the desire for conformity or harmony results in poor decision making.

⁵⁶ Westley (1990), quoted in Weick (1995)

categorise, show or hide data, and colour the sense that is made.

Cues are present moments of experience taken from the flows of life. When a cue or surprise event occurs, a fit for the cue is searched for among the frames to which the sensemaker has access. Recognition takes place when a cue is fitted to a frame to create a meaningful definition of the event. Where the sensemakers' frames are lacking in suitable experiences, finding meaning can take time, increasing the autonomic arousal or emotional reaction until a match is found.

Third order controls, or premise controls are those shadow systems in organisations which give structure and create order through assumptions, and definitions that are taken as a 'given'. Premise controls come into play early in the sensemaking process and influence the sense that is made through all subsequent steps. Particularly near the top of an organisation, where work is non-routine, non-standardised, nor regulated, premise controls are more prevalent. This occurs as leaders are more likely to work under conditions of information load, high ambiguity and high arousal, and fall back onto premises from their experience when making sense.

Paradigms in organisations are those standard operating procedures, or shared definitions of the environment; the agreed upon systems of power and authority, and how these inter-operate. The more developed the paradigm, the stronger the consensus regarding connections and technological certainty. Paradigms are transmitted in discrete artefacts rather than in coherent formulations and therefore are subject to interpretation. The importance for strategy making is that when paradigm changes takes place, these produce weak signals initially which should be the trigger for a strategic sensemaking process.

Theories of action are filtering and interpretation systems within organisations, used to supervise the identification of cues and crafting of responses to the cues. Theories of action are behavioural coping mechanisms, building on stimulus-responses learned in organisations. They are important for strategy making as they appear in statements about implications, if-then assertions, and means-ends thoughts, and can potentially filter what is noticed.

Organisational traditions are the vocabularies of repeated actions recorded and handed down from one organisational generation to the next. Traditions determine what will be retained, and become encultured in organisations as patterns that guide action taking, ends to be achieved and the associated structures. Traditions are transmitted in stories by story-tellers, and importantly: new traditions are also created by story-telling.

Organisations are built around models of argumentation, yet organisational communication takes place in narrative form. People are constrained and handicapped by this dichotomy. Stories are the way people make the unexpected expectable, guiding future conduct. The interesting thing about stories is that they create a retrospective filtered and linear coherence from occurrences which at the time they took place, took place in a dynamic and chaotic form⁵⁷.

2.2 The Role of Identity in Sensemaking

Although Weick initially allocated equal importance to the seven properties of sensemaking which he identified, he has since noted that identity is central⁵⁸ and is the lens through which the other 6 properties are interpreted, for without the sensemaker, there can be no sensemaking. “The trap is that the sensemaker is singular and no individual ever acts like a single sensemaker.”⁵⁹ Although this may seem to lead to schizophrenia, the “more selves I have access to, the more meanings I should be able to extract and impose in any situation,” and “the less the likelihood that I will every find myself surprised”⁶⁰

Sensemaking begins with the identity of the sense-maker, whose sense of self is continuously redefined, during retrospective internal narratives and processes of interaction⁶¹ with others. The more selves the sensemaker has access to, the more meanings can be extracted and imposed onto a situation⁶².

⁵⁷ Stories provide a sequence to events that was not clear at the time the events took place. The sequencing becomes a heuristic for sensemaking and even sensegiving – providing a means to understand what occurred, and to link these events to the current situation.

⁵⁸ Weick, Sutcliffe, Obstfeldt (1999): “Viewed as a significant process of organizing, sensemaking unfolds as a sequence in which people concerned with identity in the social context of other actors engage ongoing circumstances from which they extract cues and make plausible sense retrospectively, while enacting more or less order into those ongoing circumstances.”

⁵⁹ Weick (1995)

⁶⁰ Weick (1995)

⁶¹ Erez and Earley quoted in Weick (1995) refer to three self-derived needs which drive the development and maintenance of a person’s changing sense of self: ..” 1) the need for self-enhancement, as reflected in seeking and maintaining a positive cognitive and affective state about the self; 2) the self-efficacy motive, which is the desire to perceive oneself as competent and efficacious; and 3) the need fo self-consistency, which is the desire to sense and experience coherence and continuity.

⁶² Sluss and Ashforth (2007) have provided a view of three levels of identity: The individual identity in which the individual has a self identity, in which the individuals own skills, goals, traits and performance are operational. At this level motivation is self-interest. At an interpersonal level, relational identity becomes important : how the individual interacts with supervisors or subordinates,

Identities, frames of reference or multiple selves do not exist at birth but are constructed and reconstructed over a lifetime, based on our upbringing, experiences and relationships. Identity is thus in a state of constant redefinition, as we adapt our learnings to new roles, new people, or new organisational states, giving rise to a shifting concept of self⁶³, which derives from our needs for self-enhancement, self-efficacy and self-consistency. The individual uses cues presented by the situation in which s/he finds him or herself, to determine which identity suits the situation. Identity or self operates at three different levels: the individual level which is primarily focused on oneself as a unique person, the interpersonal level which is focused on role related issues and the collective self which focuses on membership of teams or groups.⁶⁴

Work context is an important source of identities, through the meaning of work⁶⁵, which includes the job title, content, the views others hold of the job, relationships and the significance of the work performed. Weick (1995), in his description of the strategy making environment at Hawick refers to identity development as a root act of sensemaking. In the process of understanding themselves the dominant questions for the strategists at Hawick were: ‘who am I,’ ‘who are they,’ and ‘who are we.’ Identity is “a person’s sense of distinctiveness about who he or she is in a setting; the relationships he or she has in that setting; the collective and what threat to this sense of self the setting contains; what is available to enhance, continue, and render efficacious that sense of who one is: all providing a centre from which judgements of relevance and sense fan out”⁶⁶. A source of meaning⁶⁷ is

and co-workers. Self esteem is derived from the interactions with others, and motivation is provided by fulfilling ones obligations to the relationship. At the collective level, individuals have a collective identity which is on oneself as a member of a group, team or organisation. Self esteem in the collective is derived from intergroup comparatives. Motivation is the welfare of the collective.

64 “typified discursive construction” Knorr-Cetina, (1981) as quoted in Weick (1995)

65 Sluss & Ashforth (2007): “.. the individual level focuses on oneself as a unique being, and self-esteem derives from interpersonal comparisons of traits, abilities, goals, performance, and the like. The basic motivation is self-interest, and the individual is essentially independent and autonomous. The interpersonal level focuses on one’s role related relationships (henceforth “role-relationships”), such as supervisor-subordinate and co-worker-coworker. Individuals are therefore interdependent... The basic motivation is the dyad’s welfare, and selfesteem derives from fulfilling one’s role-relationship obligations. Finally, the collective level is the province of social identity theory... the focus is on oneself as a prototypical member of a group, such as an organization, or a social category, such as gender. Selfesteem derives from intergroup comparisons, and the basic motivation is the welfare of the collective, placing a premium on common fate, cohesion, and group norms..”

65 C.G. Jung “You are what you do”

66 Weick (2001)

provided by identity which is reflective of the person's experiences, values, thoughts, emotions and the context of work and social roles. The self is relational: relational identities are formed based on inter-personal relationships with others. Collective identities are those identities linked to achievement in a joint goal setting environment – such as a team environment⁶⁸.

The sensemaker is an individual, but also a collective, the parliament of selves, making sense of events that take place in that social setting: the organisation, based on his or her personal selves. Clues for identity are sourced from the conduct of others, and the perceived view which others have of the self. The self which is perceived by individuals is a shifting concept⁶⁹, derived from the need for self-enhancement, self-efficacy and self-consistency. The individual is constantly shaped and altered by his/her belief of the views of others of the organisation, and by new learnings. Individuals act as representatives of the organisation they serve, projecting the identities which they believe to be important onto the organisation and observing the consequences⁷⁰. Narratives of identity are told and retold to themselves through silent dialogue, and to others through story-telling. These reflexive autobiographical stories are used by people in organisations to develop their identities and to test these against the views of others in the organisation, learning about themselves and others in the process.

Identity is used to reduce anxiety, as it provides a structure to which to attach mental models for framing against cues or surprise and becomes a source of meaning to individuals. The development of personal identity can support or undermine performance and motivation in an organisation. Identity is thus in a state of constant redefinition, as people adapt learnings to new roles, new people, or new organisational states. Individuals constantly seek occasions to compose and confirm the meaning of their job, their roles and their selves⁷¹, expanding the

67 Sommer and Baumeister as quoted in Reissner (2010) distinguish four different needs for meaning, which affect a person's identities: purpose of their current actions in relation to the future; efficacy and control over the outcomes of their actions; value and justification of their self; self worth, i.e. establishing a picture that they are worthy individuals.

68 Van der Zee et al (2009): "A collective identity orientation refers to a conception of the self in terms of being a group member and in terms of characteristics that are connected to the group. On the basis of social identity theory and the similarity-attraction hypothesis, it can be predicted that a collective orientation goes along with assimilation of the self to the ingroup and differentiation to outgroups".

69 "typified discursive construction" Knorr-Cetina, (1981) as quoted in Weick (1995)

70 Ring & Van de Ven, (1989) as quoted in Weick, (1995)

71 Wrzesniewski, Dutton, and Debebe, (2003)

identities which they can access. Creative people in the work environment, are responsible for the innovation that takes place. Their profession more than their organisation, as well as the work itself and their achievements in that work, are important sources of identity for creative people⁷².

Creative personal identity⁷³ is a further development of the self-definition, formed from past experience and formative opportunities to engage in creativity. Individuals with a creative self-identity will undertake everything creatively as creativity is a fundamental part of his or her self-definition. Creativity and problem solving are closely linked, with analogical problem solving playing an important role in divergent thinking. The linking of seemingly unrelated information during problem solving has been found to cause a deeper review of underlying schema of the problem structure, which resulted in higher quality problem solutions.

The broader the experience base of the individual, the more selves the individual can access, and the less affected the individual is by surprises. Diverse work experience not only broadens the experience base of the individual, but adds more selves which the individual can access. The greater the number of selves the individual has access to, the better the individual can deal with surprises, and the less affected he or she is by surprises. Ashby's Law⁷⁴ applied to identities in sensemaking implies that where multiple identities or selves exist based on personal experience, history, fears, aspirations, roles and group memberships (particularly when these do not overlap), the sensemaker has a greater degree of control of the sensemaking in that he or she has access to more selves to use to cope with the sensemaking event. This requisite variety can disappear under conditions of stress⁷⁵ when first interruption in the form of stress, and then arousal occurs, interfering with cognitive activity.

At a strategic level, making sense is a critical activity, as missing a weak signal or cue, can lead to missed opportunities, and loss of competitive advantage. Change and disruption

73 Jaussi et al (2007) note that: "creative personal identity is comprised of the overall importance a person places on creativity in general as part of his or her self-definition... an individual with a high creative personality will be driven to do everything creatively, not just the job, because creativity is fundamental to his or her self-definition.."

73 Jaussi, et al 2007

74 Or the Law of Requisite Variety: "the variety in the control system must be equal to or larger than the variety of the perturbations in order to achieve control"

75 Weick (1990)

happen regularly in organisations, and are experienced as surprises to the expected flow of events. In reaction, people use the seven related properties of sensemaking⁷⁶ to make sense within their environment.

Sensemaking in an organizational sense is a critical activity as the social constructs of an organisation are created through shared meanings. Managers or leaders are more able to cope with surprises when they have a broader experience base, supporting Weick's view that generalists are better able to cope with information load. At the level at which strategic thinking takes place, the non-routine-ness, incomprehensible and complex information load that is the nature of work at this level, increases the demand for sensemaking. This also implies that leaders who have broad experience are more likely to be able to cope with surprises as they have access to more selves, have a greater variety of beliefs and thus would be better able to see situations more fully, match cues to their internal frames and determine a greater variety of solutions. "Thus, identities specify relationships that are central to the social nature of sensemaking among diverse actors⁷⁷".

The relationship between stress and performance in an individual is curvilinear, but in a group the relationship is more linear in that increases in stress lead to performance increases not decreases⁷⁸.

The determination of who we are as individuals and as organisations, is a decision process⁷⁹ because the value which we deduce is extracted from decisions we see and make. Individuals who make no decisions therefore have very poorly constructed selves. People can only know what they have done, after they have done it, and they only know who they are after they have received feedback. Thus identities and meaning are constructed in retrospect.

Personal success plays a role in what leaders notice as it can lead to complacency: 'success

⁷⁶ Weick (1995): 1. Grounded in identity construction, 2. Retrospective, 3. Enactive of sensible environments, 4. Social, 5. Ongoing, 6. Focused on and by extracted cues, 7. Driven by plausibility rather than accuracy.

⁷⁷ Weber & Glynn (2006)

⁷⁸ Lowe and McGrath quoted in Weick (1990). Weick goes on to note that this increase in performance is dependent on the individuals coalescing as a team which displays distinctive functional relationships.

⁷⁹ Brickman, (1987) as quoted in Weick, (1995)

narrows perceptions⁸⁰, changes attitudes, feeds confidence in a single way of doing business, breeds over-confidence in the efficacy of current abilities and practices and makes leaders intolerant of opposing points of view⁸¹. This in turn increases the likelihood that unexpected events will be undetected leading to bigger problems.

2.3 Retrospective Versus Prospective Sensemaking

The retrospective nature of sensemaking means that sense is not made until the event or surprise has occurred.

“People make sense of things by seeing a world on which they already imposed what they believe. In other words, people discover their own inventions. This is why sensemaking can be understood as invention and interpretations understood as discovery. These are complementary ideas. If sensemaking is viewed as an act of invention, then it is also possible to argue that the artefacts it produces include language games and texts⁸²”.

Any object perceived is history from the moment we perceive it, making retrospection or history an integral part of our daily lives. Our memories whether of a year, or years past, or even that of a split second, are the realities with which we live. Even a conceptualisation, dealing with a future reality, becomes a memory, the moment we conceive or conceptualise it. Memory is subject to bias, and particularly to the effects of dissonance which can create biased misrecall⁸³. Hindsight bias can be at play when we make sense as we are subject to our belief system, that which we ‘know’ and apply to sensemaking events in the form of a conversation with our selves.

Finding meaning is a process of attention to that which has already taken place with all of the bias and hindsight that memory brings. Individual sensemakers within an organisation use multiple vocabularies to filter their sensemaking but as Weick notes: “words approximate the territory; they never map it perfectly. That is why sensemaking never stops.”

People do not know that there is a surprise event until they have noticed it in the expected flow and by the time they notice, it is in the past. When no match to existing frames can be found, arousal occurs and continues to increase until a suitable frame is found or learnings are

⁸⁰ Westrum (1982): The fallacy of centrality in which people believe “If something was happening I would know about it. I do not know about it therefore it cannot be happening”

⁸¹ Weick, Sutcliffe, Obstfeld (1999).

⁸² Weick, (1995)

⁸³ Harmon-Jones & Mills (1999)

assimilated, which will allow the making of sense.

Sensemaking is also a prospective process as the sense made retrospectively is applied to future sensemaking. When counterfactual reasoning is at play: finding a different outcome for the past, prospective sensemaking is taking place. Prospective sensemaking involves acts of exploration and interpretation with a forward looking view, as it cultivates strategic foresight through scenarios. It is both an attitudinal and a task response. Gioia's (2002) view of strategy making as prospective sensemaking is that it is an activity which requires an ability to envision the future as if it had already occurred.

Strategic foresight as the deep insight found in vagueness; was seen by Henry Fayol as an important function of the executive.

2.4 Ongoing

Sensemaking is ongoing: it has no beginning and there is no end as people are always in the middle of something. It takes place constantly as people extract cues from the flows of organisational life, where they are always in the midst of flows of projects, problems, solutions, other people and choices. Everyday life puts people into situations of "thrownness"⁸⁴ where they are thrown into ongoing situations; situations in which they need to make do in order to make sense. Cues or interruptions to the expected flows of events induce an emotional response in the autonomic nervous system, and arousal occurs which in turn triggers an act of sensemaking. Arousal develops slowly and often 2 - 3 seconds after the interruption has occurred. Once noticed, people try to link the noticed cue to their established frameworks of reference. Until such time as the flow of events is restored or a substitute response found which allows the sequence to be completed, the autonomic arousal will continue to increase. If there are many ways in which the sequence can be completed,

⁸⁴ Thrownness is described as having six properties: Winograd and Flores in Weick (1986): 1. You cannot avoid acting: your actions affect the situation and yourself, often against your will. 2. You cannot step back and reflect on your actions: You are thrown on your intuitions and you have to deal with whatever comes up as it comes up. 3. The effects of action cannot be predicted: The dynamic nature of social conduct precludes accurate prediction. 4. You do not have a stable representation of the situation: Patterns may be evident after the fact, but at the time the flow unfolds there is nothing but arbitrary fragments capable of being organized into a host of different patterns or possibly no pattern whatsoever. 5. Every representation is an interpretation: There is no way to settle that any interpretation is right or wrong, which means an "Objective analysis" of that into which one was thrown, is impossible. 6. Language is action: Whenever people say something, they create rather than describe a situation, which means it is impossible to stay detached from whatever emerges unless you say nothing, which is such a strange way to react that the situation is deflected anyway..

then arousal does not build very much, suggesting that generalists or those with many identities, and people who are able to improvise, are less likely to experience an emotional response to an interruption. At an executive management level, this is important to note in terms of the composition of strategy making teams.

The emotional response which takes place is very often a negative emotion because interruptions to an expected flow in an organisation are generally perceived as a detrimental event. Tight coupled organisational structures are more ‘interruptible’ than those which are loosely coupled, as expectations are higher. Positive emotional responses occur when there is a removal of a interrupting stimulus or events which accelerate completion of a plan or the achievement of a goal.

Individual sensemakers within an organisation use multiple vocabularies to filter their sensemaking but as Weick notes: “words approximate the territory; they never map it perfectly. That is why sensemaking never stops.” Sensemaking in an organizational sense is a critical activity as the social constructs of an organisation are created through shared meanings.

2.5 Enactive of Sensible Environments

Organisations are not stable, but rather seek to create stability through the perceived order: the sensibility of operating rules, routines, policies, and other habituated practices. Sense is created when people use words to crystallise the smoke of organisational life into temporary meaning which is believed when it is seen. Stability makes systems less responsive to change and is therefore dangerous as systems in a state of equilibrium can face extinction.

“Organisation is a set of procedures for argumentation and interpretation as well as for solving problems and making decisions”⁸⁵. People talk organisations into being by preserving portions of smoke-like conversations into crystal-like⁸⁶ texts to organise their everyday lives. Thus people create their environments, by their actions, and the environments in turn create the people they contain: autopoiesis is at play in organisations. More than that, this is an ongoing creative process of ‘relatings’, which means that people’s activities are caused by the stimulus of the situation but also the activity itself helped to produce the situation. Managers are very much part of the organisational environment, and

⁸⁵ Cohen, March and Olsen (1972), quoted in Weick, (1995)

⁸⁶ Taylor and Van Every, (2000) as quoted in Weick (1995)

managers take action when they manage, creating the environment. Actions are anchored in individual belief systems, and found in the ideologies, cultures, scripts and traditions of the organisation. Therefore the manager will find what he or she expected to find, or believe what he or she is seeing, and in order to change what is seen, one must first change his or her beliefs. Social forces of organisations are therefore created by the people within the organisation because they act in a manner that implies that the social forces exist. By taking such actions they create both the social problems and the solutions which face them in an organisational environment.

Language crystallises the actions which are taken, into conversations, or texts. In Weick's terms 'believing is seeing' or what is seen is interpreted through the lens of the belief system of the self whom we have selected to deal with the sensemaking event. Each manager in an organisation makes sense of an organisational event and assigns meaning to it from his or own viewpoint, which will oscillate over time. Although each manager makes his or her own sense of events, these are influenced by the identity which the manager uses to frame the sense that is made.

2.6 Social

Human activities and thinking are social cognitive activities which are made possible by language: as "...our days in organizations are days of communicating..."⁸⁷ Language uses words in a structured way to communicate the sense that is made. Thus, words matter as they are used to delineate and describe the sense that is being made. Words are the vehicles which, when combined into coherent sentences, enable people to make sense. The words which people choose are reflective and selective of their reality, their beliefs, their past, their judgement systems and their present. Words are expressive of reality, but also constrain that reality, or fail to express it fully, rather creating a plausible view of the reality⁸⁸: "How can we know what we think until we see what we say".

Conversations between individuals, composed of sentences and words create the connections through which information is shared and people find direction. The vocabularies used embody the organisation they belong to, their profession and long established traditions. Managers or leaders are the authors and sensegivers in organisations, initiating and driving

⁸⁷ Mills (2002)

⁸⁸ Weick calls it slippage; the gap between words and what they refer to.

conversations held in organisations about decisions. Decisions in organisations are made either with others or with the knowledge that others will need to approve, understand or apply the decision⁸⁹. Strategic leaders share their decisions by communicating powerful visions. Sensegiving is the abstracting process which they use to simplify and present this information, thereby influencing the sense that is made by their followers.

The need for sensemaking increases when information load, which is a mixture of the quantity of information, level of ambiguity and variety; or complexity increases⁹⁰. As Boisot notes: “The major transformation in the strategic environment which strategy must deal with ... can be summed up in a single word: turbulence.⁹¹” Strategic leaders select coping mechanisms to deal with information load and these mechanisms lead executives to select solutions which match their belief systems, making them the authors of conversations, of texts and of visions and the designer of roadmaps to the visions. As the load increases, the steps which people take to manage it increases in strength. Strategic leaders therefore seldom produce accuracy, as the high levels of non-routine-ness, incomprehensibility and complexity of the information load which strategic leaders face, increases the coping mechanisms which they apply to cope with the information load.

When we become aware of the process of making sense we become mindful: paying more attention to context and to variability. Noticing what is important means improved attention: being more mindful of what is taking place in the stream of events. Noticing patterns or opportunities relies on the sensemaking abilities among the leaders or their stakeholders. Although Weick comments that accuracy is not important and that plausibility is what is acceptable in business, plausibility may not bring the next competitive advantage. Mindful attention: noticing what is important, brings a different level of sensemaking to business.

2.7 Focused on and by Extracted Cues

Sensemaking takes place when an interruption to the organisational flow is noticed, and the

⁸⁹ Weick (1985): “Organisational environments consist of nothing more than talk, symbols, promises, lies, interest, attention, threats, agreements, expectations, memories, rumours, indicators, supporters, detractors, faith, suspicion, trust, appearance,,... induce stable connections, bind people, signify important information..”

⁹⁰ Mintzberg et al (2005).. “strategic planning rises in importance in turbulent/uncertain times..”

⁹¹ Boisot, in Garratt (2003), *Preparing for Turbulence: the changing relationship between strategy and management development in the learning organization*, in *Developing strategic thought: A collection of the best thinking on business strategy*, edited by Bob Garratt, Profile Books Ltd, London

cue or interruption that is noticed is applied against the frame of reference of the sensemaker to interpret the cue. Noticing is the process of filtering, classifying and comparing the cue against what was expected. Sensemaking is the subtler process of interpreting the interdependencies against the belief system. The indexicality⁹² of a cue matters as the context of the cue is meaningful. Past experiences which form the frames against which the cue is measured, colour the sense that is made. In any organisation, the social context of the sense that is made is important as the social nature of sensemaking ties people to intended action, creates shared expectations and norms and affects the prominence of information. The concept of the collective mind, developed to explain the performance of organisations in those situations requiring high reliability, explains heedful thinking and actions in these situations

2.8 Plausibility

Decision makers are sensemakers, particularly those who are at a senior level. Leaders are most often tasked with strategy making, yet these same decision makers are subject to information load. Their attempts to make sense occur under conditions of high arousal and high ambiguity because of the application of first and second order controls at the lower levels, and their focus is applied to wrong signals (novel indicators are ignored), making sensemaking relevant in the strategy making process; as surprises in this context are those patterns or differences which could constitute weak signals. Actions and beliefs both regularise sensemaking. People take action to make sense and make sense because of their beliefs⁹³. Any sensemaking that takes place does so because of what people have done. In an organisational setting it is about people interacting to share beliefs and make sense that is acceptable to all.

What is necessary when we make sense is a good story. Faith in the extracted cues, and their sustained use as a reference point, or the plausibility of the explanation that is made when an interruption is found are what make the sensemaking real. Enactment follows faith, as “..leadership lies in large part in generating a point of reference against which a feeling of organization and direction can emerge.”⁹⁴ Language is the medium of sensemaking. It is

⁹² Indexicality refers to the context or circumstances in which the cue is located.

⁹³ Taking action is similar to shining a flashlight on a field in the dark: it illuminates but only in the circle of light.

⁹⁴ Smircich and Morgan (1982) as quoted in Weick (1995)

used to identify, categorise and structure memories into plausible stories. These stories use vocabularies as a lens to sharpen the view of the sense that is made.

2.9 High Reliability Organisations

Research performed on sensemaking in high reliability organisations has shown higher levels of mindfulness in these organisations. Mindfulness⁹⁵ is an enhanced attention to context as well as variability⁹⁶ a state where people have a rich awareness of detail, an openness to novelty, and are better able to notice that which is unexpected. Mindfulness is important as it determines the way in which we take in and use information to make sense.

In his analysis of the Mann Gulch fires and the Tenerife Plane crash, Weick has shown that small separate failures of sensemaking can lead to a major disaster, which in a business context can lead to financial or reputational failures. When an organisation makes constant sense of what is taking place, such as the high reliability organisations investigated by Weick and Sutcliffe⁹⁷, then sensemaking leads to mindfulness and a better ability to sense the unexpected.

In an organisational strategy making context, a better ability to sense the unexpected, and an open-minded approach to discomfiting information will enable the identification of new opportunities or strategies. Heedful interrelating in which people create mindful action is the process

2.10 Leaders as Sensegivers

A strong connection can be made between narrative analysis⁹⁸ and sensemaking in the social construction of meaning. The stories generated by sensemaking can cause the social structures in organisations to form and reform, leading to shifts in relationships and social

⁹⁵ According to Weick, mindfulness is when we realize our current expectations, continuously improve those expectations based on new experiences, and implement those expectations to improve the current situation into a better one

⁹⁶ Langer, (1989): “Mindfulness is a state of conscious awareness in which the individual is implicitly aware of the context and content of information. It is a state of openness to novelty in which the individual actively constructs categories and distinctions. In contrast, mindlessness is a state of mind characterized by an overreliance on categories and distinctions drawn in the past and in which the individual is context-dependent and, as such, is oblivious to novel (or simply alternative) aspects of the situation.”

⁹⁷ Weick, Sutcliffe,(2007)

⁹⁸ Narratives attempt to explain through words the personal experiences and relationships which exist between the experiences of the individual and their social framework.

roles in organisations.

Senior managers or leaders, who are responsible for strategy making are both sensemakers and sensegivers. The manner in which leaders approach sensegiving is important: high levels of formal leadership sensegiving without participative stakeholder sensegiving leads to very controlled processes which restrict flows of information.⁹⁹ When high levels of leader sensegiving is combined with participative stakeholder sensegiving, the result is intense and emergent actions, rich information flows and ongoing sensemaking.

A central function of leadership is giving meaning to followers, particularly under conditions of uncertainty, or where the environment is complex with divergent stakeholder interests. Maitlis and Lawrence (2007) support Weick's (1995) view that found that triggers for leader sensegiving, were complex sensemaking environments which contained issues perceived as ambiguous, unpredictable and involving numerous stakeholders. This supports the view of strategy as a multi-contextual sensemaking opportunity.

Stakeholder sensegiving is associated with perceptions of importance of the issue, or with perceptions of lack of leader expertise related to the issue. Where stakeholders have high levels of relevant expertise and legitimacy in terms of formal authority or responsibility, they are more likely to engage in sensegiving¹⁰⁰.

2.11 Mindfulness

Mindfulness is both an eastern and a western concept, implying a cognitive awareness of discriminatory detail, which is coupled with wise action. Weick and Sutcliffe's work in high reliability organisations has identified mindfulness¹⁰¹: "...the combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it, and identification of new dimensions of context that improve foresight and current functioning" as an important means to improve attention. Mindfulness in Buddhist culture

⁹⁹ Maitlis, (2005), defined stakeholders as participants in the strategy sessions. Very controlled leader sensegiving in these sessions restricted the sense that was made

¹⁰⁰ Maitlis and Lawrence. (2007). The researchers list a third condition that enables stakeholder sensegiving: opportunity to engage in such behavior. While relevant, this has not been further considered in this research as strategy sessions do provide an opportunity for stakeholders to engage.

¹⁰¹ Weick and Sutcliffe (2001)

means ‘not wobbling’ or wavering from the object, or ensuring focus on the discrepancy.

Mindfulness is about deliberate focused attention; about remembering objects in the present, and not losing sight of them in spite of complexity; it is about the content of mind, including past associations, understanding and refining categorisations; it is a nuanced awareness of context and of alternative ways to cope; it is understanding the mechanisms of how stories get created at the same time as understanding the story. People are less mindful when they are on ‘auto-pilot’, using past categories and fixating on a viewpoint rather than examining multiple perspectives. Being mindful means changing the quality of consciousness, through a cognitive process of de-centering – moving outwards from oneself and one’s identities, with a focused awareness of what is taking place around one.

Weick (2009) notes that attempts to increase mindfulness in an organisational context are difficult because of the concept driven nature of organisations: using generalisation to organise behaviour. People who practice mindfulness in organisations are described as people who blur conceptual skills with mindful practice: those people who see patterns in situations without decomposing them into their component features; who act without conscious analytical decomposition and recombination. They place some reliance on intuition, previous decisions and learnings from things that did not work out.

At the periphery of the organisation, on the edge of chaos, the noticing activities at the periphery are more intuitive than planned, make use of inductive reasoning, through mindful interactions with external sources, experimenting, and noticing. The leaders who operate on the periphery of the organisation: those leaders who are open to new experiences in all their aspects¹⁰² engage in inductive reasoning, notice the patterns as weak signals, and transform their raw experience into a narrative form of new knowledge¹⁰³. Deliberation in a mindful state is less detached and rule bound, more reliant on intuition, knowing from past experiences and the know-how to see patterns in situations without decomposing them into component features.

Beliefs colour the sense that is made. At a leadership level, increased complexity causes people to take strong steps to manage the information load. Believing what is seen is one of

¹⁰² Weick (2009) Emotional (feelings); cognitive (ideas), and behavioural (actions). Negative emotions such as anxiety and sadness as well as neuroticism can lower levels of mindfulness.

¹⁰³ Wright (2005)

the ways that people make sense under conditions of stress. The more variety of beliefs in a repertoire the less likely it is that important cues will go unnoticed. Belief driven sensemaking in the form of expectations and arguing are the ways that people notice and reduce the variety in relevant beliefs which they hold.

Chapter 3

Belief driven Sensemaking

'I shall consider that the heavens, the earth, colours, figures, sound, and all other external things are nought but... illusions and dreams... I shall consider myself as having no hands, no eyes, no flesh, no blood, nor any senses, yet falsely believing myself to possess all these things.

Descartes

3.1 Belief Driven Approaches to Sensemaking

This thesis is focused on belief driven approaches to sensemaking as beliefs can obscure the ability to notice weak signals, or enable the highlighting of weak signals. Beliefs and identities are intertwined as what people believe shapes their identities. We have already seen that identity is important in sensemaking as there is no sense without a sensemaker. Equally there is no sensemaker without his or her belief system.

The finding of new meaning is important to modern strategy making and therefore belief driven processes, where new meaning is found, rather than action driven processes, where meaning is created to support actions, are the focus of this research. Beliefs are not truths; they are the pre-existing trusted and accepted norms which individuals use to make sense, and therefore vary between individuals. Personal beliefs, vocabularies of ideologies, third order controls, theories of action, traditions and organisational stories influence the content of beliefs and therefore the sense that is made in organisations. Beliefs affect what is noticed

and the actions which are selected once cues have been noticed. Believing as Weick notes, is seeing in sensemaking, because beliefs colour and obscure the sense which is made. When in expectations are built upon beliefs, they impact the sense that is made, as people are more interested in confirming beliefs than in rebutting or contradicting them. Arguing is both the way in which organisations are structured and one of a few tools readily at hand in organisations which can change existing beliefs or create new beliefs.

Reaching consensus in an organisation between multiple individuals and their belief systems requires socialising, interaction and arguing. At a leadership level reaching consensus around strategy is often clouded by the senior leader's sensegiving activity or the leader's desire to conform to majority views or meet stakeholder expectations. Leaders should be particularly mindful of their own beliefs, and the environment they create, as well as the beliefs of the group members when they lead a strategy making session.

3.2 Believing is Seeing: Sensemaking as Expecting

Beliefs create expectations which people use to guide interpretation when they make sense. Perceivers see what they expect to see, and this expectation drives selective attention¹⁰⁴, which could be either enabling or constraining. Expectations cause people to absorb and integrate what is seen with what was expected. Expectations are therefore directive, as they tend to filter more strongly than the beliefs embedded in arguments. This feature of expectation causes expecting to be a very strong force in sensemaking and the source of self-fulfilling prophecies. Self-fulfilling prophecies tend to amplify for both the perceiver and the target creating a new set of organisational cues, which have meaning precisely because of the expectations that created them.

If significant deviations from expectations occur, first surprise, then learning as a stimulus response takes place and the perceiver's expectations will be adjusted to align to what has occurred. Expectations if held strongly, can limit this learning¹⁰⁵, particularly at a strategic level as they act as filters inhibiting or enhancing what is noticed. Learning to update

¹⁰⁴ According to Maitlis and Sonenshein (2010), people see the events that they believe they have the ability to do something about. Wise people know that they have limited understanding of what is happening around them as what is happening is unique to that time. Wisdom

¹⁰⁵ Starbuck et al (2008): "A few case studies suggest that strategic learning can be very effective, but that the firms that gain strategic advantages through learning are abnormal". In contrast: Narayan et al believe that strategic learning is the foundation of strategy, which supports much other research..

expectation based on new information is an important leadership skill. Weick, in his review of the Bhopal disaster discusses three foundational concepts for sensemaking: commitment, capacity and expectation¹⁰⁶. Commitment is a foundation for sensemaking and acting which keeps the organization moving. It is also a source of blind spots which obscures noticing important but weak cues. When an organisational actor has committed to a way of thinking, moving from this position is difficult and obscures the sense that can be made from cues. Maitlis in her assessment of sensemaking in strategic change, notes that “individuals undergoing change are often emotionally tied to their current organizational identity and therefore reluctant to abandon it”.

Self-fulfilling prophecies are mentioned not because they should always be avoided but because during the strategy making process of uncovering new information, they take the form of expectations which can hide weak signals. As new meanings are found and assimilated, people add new meaning to old, learning new information which in turn become new expectations¹⁰⁷ or prophecies. Cohen, March and Olsens’ view of an “Organisation as a set of procedures for argumentation and interpretation as well as for solving problems and making decisions” coincides well with the view of Andersen that “goals are discovered through a social process involving argumentation and debate in a setting where justification and legitimacy play important roles” and holds important ramifications for the strategy making process in an organisation, where strategy making takes place in a similar setting.

The traditional strategic planning process in an organisation is a process of debate and arguing, in which leader sensegiving and excessively linear processes mask weak signal identification. Autocratic leadership which attempts to guide the sense that is made, is most likely to cause weak signals to be ignored in the interest of meeting the expectation of the leader. Self-fulfilling prophecies then become intentional ways in which people are focused on the future, creating strong expectations of what can be expected from the future; so strong that people fail to see signals that their expectations are wrong.

¹⁰⁶ Weick (1999) : On Commitment: ‘When people make a public commitment that an operating gauge is not inoperative, the last thing they will consider during a crisis is that the gauge is operating. Had they not made the commitment, the blind spot would not be so persistent..’ On Capacity: “people see those events they feel they have the capacity to do something about..” On expectations: “A plant perceived as unimportant proceeds to act out, through turnover, sloppy procedures, inattention to details, and lower standards, the prophecy implied in top management’s expectations.”

¹⁰⁷ Updating and doubting expectations cause people to generate possibilities and experiment with them until they either abandon them or adopt them as new expectations.

3.3 Argument and Arguing

In an organisation, leaders or managers hold assumptions about the systems or controls for which they are responsible. These assumptions or expectations trigger enactments to confirm the expectations, causing what is seen to be what is expected (believing is seeing). This process is the process that causes sensemaking to be concerned with plausibility rather than accuracy. Plausibility is not wrong in strategy making for the future can never be known in advance and strategy is nothing more than a plausible story, but by ensuring that weak signals are noticed, the best plausible story can be agreed upon.

Sensemaking in organisations, is not a monologue, but an argument, where people create meaning by the use of debate and challenge to reason their way from one idea to the choice of another idea. Arguing therefore is central to changing current beliefs and expectations. Arguing is defined for this thesis as an orderly organisational attempt to apply a process to reduce the variety of beliefs which are important to individuals, to increase the diversity of cues that are noticed, and the extent of the foresight of individuals. Arguing does not imply that moods of anger are necessary to the argument, as anger clouds judgement and may inhibit the discussion.

Arguing is associated with a social constructivist conception¹⁰⁸ of meaning making. In organisations arguing is an important precursor to decision making, as in organisational settings, there are multiple, often conflicting view of the sense that is made of an event by the people in the organisation. Arguing is therefore central to achieving a collective mind in the organisation¹⁰⁹.

Humans think narratively rather than argumentatively but organisations are structured in an argumentative manner, implying that arguing is critical to the way in which organisations operate.

¹⁰⁸ Social constructivism is defined as “a variety of cognitive constructivism that emphasizes the collaborative nature of much learning”. Developed by post revolutionary Soviet psychologist Lev Vygotsky, who believed that it is not possible to separate learning from it’s social context. Vygotsky also emphasized the role of language and culture in cognitive development. (www.gsi.berkeley.edu).

¹⁰⁹ A collective mind is a double-edged sword as it can both create momentum within an organisation, by focusing the minds of the individuals on common goals, but when it manifests as groupthink it can cause important events to be overlooked.

Argument has both an individual and a social implication¹¹⁰. In an individual sense, argument is reasoned discourse, while in a social sense argument is debate or dispute. Argument is a form of higher order thinking and reasoning which uses critical thinking to engage deeply with ideas in order to rationally resolve questions, solve problems and clarify disputes. Argument uses deep knowledge in the form of know-how and know-that to structure and populate a viewpoint which is then used during the process of arguing. Broderiede¹¹¹ defined argument as having 5 generic characteristics which form a gestalt:

- An inferential leap from existing beliefs to the adoption of a new belief or the reinforcement of an old one.
- A perceived rationale to justify the leap.
- A choice among two or more competing claims.
- A registration of uncertainty in relation to the selected claim.
- A willingness to risk a confrontation of the claim with one's peers.

Walton (1996) shares a similar view of argument as he regards argumentation as a goal directed and interactive dialogue in which participants reason together to advance arguments by proving or disproving presumptions. In order for arguing to have sensemaking value it needs to follow the criteria described by Broderiede, and particularly towards the end of the continuum¹¹², where narratives are powerful sensemaking tools, and where there a sense of trust in one's peers; to explore the uncomfortable, and risk the team selecting against one's viewpoint. Two important criteria for effective arguing to make sense can thus be drawn from this in order for arguing to be successful in an strategy making environment: there is an environment of trust within which the participants of the arguing process feel safe to explore alternative viewpoints; the alternative viewpoints or expectations are made available for the participants to consider.

The fifth dimension of Broderiede's definition of arguing is where the arguing process begins

¹¹⁰ Weick (1995), quoting Billig: "The word Argument itself has both an individual and a social meaning. The individual meaning refers to any piece of reasoned discourse. The social meaning of Argument refers, not to chain of reasoning, but a dispute between people.. Individual reasoning is embedded in social controversy. And the unfolding of controversy is what we mean by Arguing as a vehicle for sensemaking. Because sensemaking starts with a piece of reasoned discourse, it is said to be Belief-driven sensemaking.

¹¹¹ Broderiede (1974) quoted in Weick (1995)

¹¹² Weick (1995)

in organisations, but confrontation alone is not arguing: arguing takes place when the five dimensions can be said to have been addressed simultaneously during a conversation or discussion. Any of the five dimensions affords an entry point to an act of sensemaking, but only when all five dimensions are simultaneously present can there be said to have been arguing.

Arguing is said to be useful for sensemaking when an evaluating critic is able to clearly explain the rationale behind his or her argument. Explanations in narrative form allow for concrete experience to be connected to more general concepts in an inductive manner. People often discover new thought processes or explanations during the process of developing and criticising other explanations. Arguing requires that people should have “numerous sensemaking frameworks”¹¹³ in order that there are plenty of interpretive opportunities when they are faced with a sensemaking event.

3.4 Arguing as we Believe

Arguing allows people in organisations to socially construct knowledge and reach agreement on the sense that is to be made from a cue or event. The process uses arguments to foster learning, create productive new ways of thinking, promote conceptual change¹¹⁴ and solve problems. People learn through arguing when they reflect on what has been said, as learning happens through the reflective interactions which occur during arguing. Critical reflection during which the individual critically considers the beliefs or expectations held is a transformative learning process which corrects errors or distortions in our beliefs, and is an important step towards reaching consensus in arguing. Collective learning is achieved when conceptual ideas identified through intuitive processes are reflected upon and rationalised through reasoned debate.

To argue in an organisational sense does not imply loss of temper or ill will, although the common definition of arguing is an acrimonious debate. A more constructive form of arguing takes place when arguing is structured and rational, delivering a deeper level of epistemic enquiry, which enables the resolution of both well and ill-structured problems.

¹¹³ Starbuck & Milliken (1988) cited in Weick 1995

¹¹⁴ Conceptual change occurs when people change their understanding of concepts and conceptual frameworks to include new paradigms.

When participants in arguing formulate arguments¹¹⁵ of which are used in the arguing process, a deeper conceptual engagement and understanding occurs, as in the process of developing an argument, a participant reflects on what he or she has heard, considers what he/she is analysing, chooses viewpoints that best assist him/her to understand the object of the criticism, and thereafter is ready to argue the alternative viewpoint and explanation.

Arguing in an individual sense is to follow a process of reasoned discourse, through structured arguments based on the individual's belief system. Arguing in a social sense is a debate or dispute between two or more people: a connection made on the basis of Protagoras's maxim, which states that "in any question there are two sides to the argument, exactly opposite to one another"¹¹⁶. Thus any individual statement is potentially likely to open a social argument when one or more individuals are prepared to argue the other side. Solving problems is thus a pervasive activity across all organisations and daily life.

In any organisational argument there are people who adopt the positions of proposers and critics, listeners and protagonists, minorities and majorities. These positions shift and move through the process of arguing, and add dimension and depth to the process of arguing. At leadership levels, where decision making and strategy setting takes place, reasoned discourse is used to establish which framework fits the situation best, leading to decision making. At this level too information load, ambiguity and complexity are at their highest and leaders need to be mindful of their own bias, and expectations.

Researcher have classified multiple forms of argument: Collaborative argumentation is an arguing process which facilitates discussions between multiple participants, to achieve a form of collaborative reasoning¹¹⁷; constructive arguments are arguments in which participants present explanations which link concrete experience and more general concepts, discerning judgements which provide the theoretical or philosophical foundation upon which their arguing is based and who are prepared to argue the convincingness of their explanation; social arguing is a process in which reasoned discourse is used to articulate a position in a group setting. Dialectical arguments which match Broderiedes' description of a social argument, are dialogues between proponents of alternative claims during a discussion.

¹¹⁵ Jonassen, Kim (2010)

¹¹⁶ Billig (1989), quoted in Weick (1995)

¹¹⁷ Collaborative reasoning is defined as a group of people working together on the same task or tasks to negotiate meanings that may challenge the knowledge of the participants or create new knowledge.

Presumptive argument, a form of dialectical¹¹⁸ argument is a goal-directed and interactive ¹¹⁹ dialogue in which arguers reason together to prove or disprove presumptions, or to make sense¹²⁰. Rhetorical arguing is the way in which a leader gives sense to the strategy making team initially; setting the scene for the team, articulating his or her approach and giving impetus to the sense making process.

All of these classifications of argument may be at play at various stages of the proceedings in a strategy making session, and all may add value to the final decision which is made, although collective and dialectical arguing are the most likely to foster productive debate.

Positions in arguing are adopted via confrontation: the arguer puts forward his explanation; the listener can then confront, and attempt to disconfirm the arguer's position. If the listener fails to do so, the intersubjective reliability of the argument increases.

The greater the number of sensemaking frameworks which contradict or adopt different viewpoints that people in an organisation have access to, the better their ability to interpret the cues presented to them and to participate in arguing in a meaningful way. When an arguer sets forth an argument or presents an 'item' which was unexpected by the team, a surprise cue in the flow of information is noticed and sensemaking begins.

Autonomic arousal occurs when a cue is noticed. If one framework does not fit the cue, then another will do, implying that those with more frames are better able to make sense of strange events. The more emotion which is experienced the more information processing capacity is absorbed by the emotion, making less available for sensemaking. Emotions serve as cues for sensemaking. Self-conscious emotions caused by perception can inhibit the sense that is made. Intense negative emotion will cause narrowed attention and systematic sensemaking. People will tend to focus on what they deem to be most important and fall back onto earlier often over-learned and simpler responses. Surprises leading to negative emotion are more likely to be experienced in long established groups than in newly formed or groups without relational identities.

¹¹⁸ Dialectical argument is arguing between an arguer and an audience (real or imaginary). It represents a dialogue between opposing sides of the argument. The purpose of dialectical argument is to resolve differences of opinion or to find a compromise between multiple claims. Dialectical arguments can take place between individuals or in a group environment.

¹¹⁹ Walton (1992)

¹²⁰ Rhetorical arguments, which are one directional dialogues between an arguer and an audience, are intended to persuade the audience. They have a place in sensegiving but not in sensemaking.

Generalists and people who are able to improvise show less emotional behaviour and less extreme emotions¹²¹. This implies that it is important to have generalists in such a group, to notice and make sense. Once they make sense they can suggest or describe what they have noticed as a scenario or narrative to the group.

Reduced information processing capacity may lead to the omission of important sensemaking cues and an increase in cognitive inefficiency. In a creative or problem solving environment, the most likely emotion to be experienced will be a positive one for those who solve the problem, but a negative one for persons who perceive that the solution to the problem indicated a failure on their part, although this is offset by the relational identities which exists between the stakeholders. Provided that there is an environment of trust, the participants will argue their viewpoints.

Positive emotions have a constructive effect on sensemaking, as they broaden the scope of attention, and the individual's ability to deal with stressors, they "...broaden individual's scope of attention and their thought-action repertoires... are important resources in building capacity, increasing resilience and individual's ability to cope with stressors...positive felt emotions are associated with the more inclusive and flexible categorization of cues..."¹²² . Positive emotions are associated with a more flexible categorisation of cues, broadening attentional focus, and stimulus-response actions.

3.5 Arguing to Solve Problems

Cho and Jonassen have noted that "an important skill in solving problems, especially ill-structured problems, is the production of coherent arguments to justify solutions and actions." Although problems differ in content and complexity, and vary from well-structured to ill-structured, argument is a critical skill in solving problems¹²³. Organisations are full of problems that need solving, which range from simple operational problems to the strategic problem of countering the competition. Ill structured problems offer more than one possible solution, have vaguely defined or unclear goals required from the potential, multiple solution paths with multiple criteria for evaluating the solutions are offered, similar in some aspects to

¹²¹ Loose coupling, few developed plans and limited standard operating procedures will also generate less emotion in an organisational setting, as expectations are limited.

¹²² Maitlis, Sonenshein, (2010)

¹²³ Cho and Jonassen (2002) have shown that argument is more important in solving unstructured problems than it is in solving structured problems.

the challenges related to weak signals. Creativity plays a role in first mapping the nature of the problem before crafting potential solutions, as creative people associate disparate concepts which often lead to solutions or even completely new ideas.

Arguing alone is not the way to solve problems with multiple potential solutions, but it can be used to determine which of the multiple possible solutions presented, is the best fit for the organisation. Possible solutions are presented based on what the individuals have noticed on the periphery of the organisation through an application of tacit knowledge.

3.6 Intuition, Emotion and Rationality

Intuition or the use of tacit knowledge is increasingly noted by researchers as an important dimension in decision making, particularly related to complex problem solving¹²⁴. Intuition relies on past pattern recognition and the connection of these in new and different ways. Sinclair & Ashkanasy (2005) note that: “intuition is defined as an experience based phenomenon which uses tacit knowledge gained through experience and drawn on through pattern recognition”. Intuition is not a conscious cognition process although emotions do play a role in intuition.

The knowledge and skills which lead to intuitive judgment are based on extensive experience. When intuition is applied information is processed broadly without singling out specific pieces of information, which is why intuition is often seen as irrational¹²⁵. Collective intuition is the use of tacit knowledge among groups of people to surface new ideas or hidden patterns, possibly leading to collective learning¹²⁶. Hardiman’s (2011) description of creative intuition is similar to the concept of mindfulness in some ways, although mindfulness implies an enhanced awareness of content and context which creative intuition does not: “..”involves a state of expanded consciousness; is an open, fluid state of becoming; focuses on the particular rather than the general; operates through an act of sympathetic identification; relies on emotion.”

¹²⁴ Sadler-Smith (2008)

¹²⁵ Sinclair and Ashkanasy, (2005): 1.Intuitive events originate beyond consciousness, 2. Information is processed holistically, 3. Intuitive perceptions are frequently accompanied by emotion”.

¹²⁶ Nonaka, Toyama, and Konno’s (2000), quoted in Sadler-Smith (2008): “socialisation, externalisation, combination and internalisation” or SECI-*ba* model of knowledge creation (*ba* signifies a “place”), examined the dynamics of the relationships between tacit and explicit knowledge.

Rationality is thought to dominate in organisations, although it is a false dichotomy as many organisational decisions are made on emotive grounds, but described as rational. Rational decision making processes do not deliver the required results in the view of a number of researchers¹²⁷. There is a role for rationality in organisations, to argue through viewpoints, analyse data and extract and enhance meaningful information before making decisions.

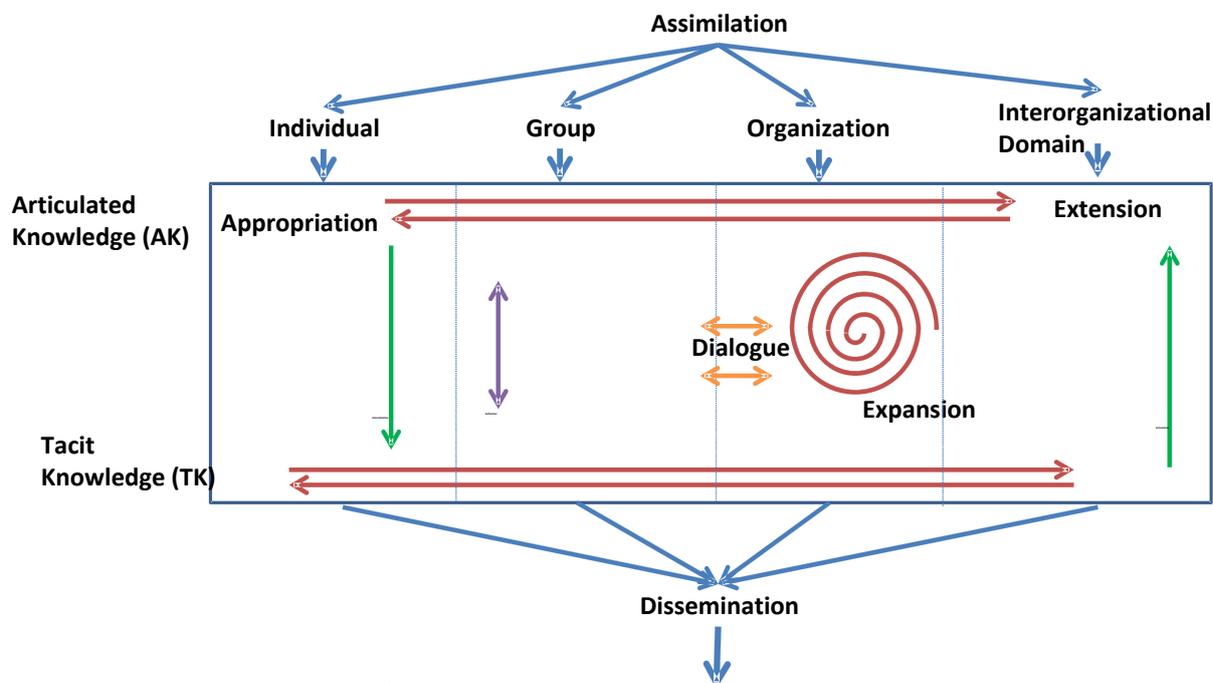


Figure 1
A Model of knowledge categories and transformation processes:
Types of transfer and transformation. Hedlundt 1994

Hedlundt’s model of knowledge categories and transformation processes (Figure 1) presents a view of knowledge categories and that tacit knowledge underpins the individual process of internalisation. While his view is focused on knowledge from individual to interorganisational, he notes that groups are the environment in which much innovation, and product development takes place. He also notes that the interorganisational domain is also important for knowledge development. This correlates with the view (later in this study) that those individuals who operate on the periphery of an organisation (and interact with other organisations) are often the individuals who first notice the subtle patterns that are weak signals. The process of reflection is stimulated by articulation, and followed by internalisation as individuals internalise knowledge articulated by those individuals who held it as tacit knowledge. Through dialogue, knowledge is extended and appropriated. Hedlundt

¹²⁷ Mintzberg (2007), Sinclair & Ashkanasy (2005), Sadler-Smith (2008)

is not specific about the kind of dialogue which is used to extend and appropriate knowledge, although he notes that articulation allows for open scrutiny and critical testing. Combining rationality with intuition to firstly identify and then amplify weak signals as suggested by the application of Hedlund's model (Figure 1) of knowledge categories and transformation processes, to strategy making will improve strategic teams foresight, and their ability to intuitively identify weak signals, then amplify these through a process of rational arguing.

Hedlund holds the view that groups, and temporary groups in particular, are the place where most knowledge transfer and learnings take place in organisations. His model of knowledge categories and transformation processes shows the transformation that takes place in groups particularly when tacit knowledge (TK) is articulated and internalised through reflection. In his representation of knowledge categories and transformation processes skills and embodied knowledge are as important as cognitive knowledge in the transfer of knowledge.

His research suggests that N-form organisations which contain temporary groups of people acting as a heterarchy, drawn from the middle rather than the top of an organisation, who fulfil the roles of catalyst, architect and protector of knowledge rather than the typical monitor and allocator roles, is more suitable for activities which generate innovation. Themes within the N-form lend themselves to strategy making: an approach towards combination rather than division; focused temporary groups of people; mixtures of people with a variety of expertise; lateral communication; leaders who act as catalysts, architecting communications and protecting knowledge in a heterarchy. Although his research was broadly focused on corporations, the application of the N-form in a strategy making session should create an environment in the necessary conditions for creativity, intuition and debate to flourish.

As stakeholders at a strategy making session reflect, there is therefore an inter-play between the tacit and the explicit knowledge which they hold. This is articulated as a feed-in process in Figure 2, where Sadler-Smith proposes that learning, knowledge and skills influence what is noticed.

It is in this process that tacit knowledge is applied through intuition to notice weak signals, which are then shared with the team through conversation and dialogue. This is a creative intuitive process, which taps into cognitive associative processes, expressing and enhancing what has been noticed.

Weak signals are noticed intuitively and articulated to the group, (see Intuiting in Figure 2) during the process which Sadler-Smith calls extension, dialogue in the form of arguing or reasoned debate takes place. Provided that the leader sensegiving is not autocratic, there is trust among stakeholders and the leader, productive arguing will allow for a feed-forward process to make sense of the weak signals articulated, amplifying them into potential strategic opportunities, disseminating the ideas among the team. During the arguing process, which is a more logical, and rational approach, balancing against the earlier intuitive approach, it is likely that quick conflicts will occur between minority and majority viewpoint holders. As the members argue their way to strategic sense, new knowledge is created, feed-back and learning takes place and weak signals are amplified into potential strategic opportunities or scenarios.

3.7 Creativity and Creative identities

Creativity and intuition are part of any job that contains complex, poorly defined problems which require new and useful solutions.¹²⁸ Creativity is the result of individual characteristics, cognitive skills, intelligence, convergent and divergent thinking. At an individual level, creative people first gather information, then formulate concepts to understand the problem or generate ideas. Once they have done so, information gathering takes place, followed by a process of analogical reasoning which makes it possible to combine different concepts into new conceptual combinations, generating new ideas and solutions.

When creative individuals work together in groups or teams to solve problems, heedful interrelating is used to create new intersubjective meanings, and collective knowledge. In complex problem solving groups of people often need multiple different forms of expertise to articulate and debate all viewpoints, thus collaboration between the different forms of expertise is required in a group setting. In such a group setting, creativity is an iterative process, as people argue their way to a final agreed solution or debate their way through innovative ideas. When the group creates social meaning or articulates sense made of a common cue, collective knowledge is created. There is an inherent tension between the generic subjectivity of the organisation itself which has embedded controls, and the creative process of knowledge creation. This tension, if not managed correctly, can lead to dispute

¹²⁸ Mumford et al. (2002), Sinclair & Ashkanasy (2005)

or unproductive arguing.

Creative work is characterised by high ambiguity, demands sustained attention, often over long periods of time with negative feedback likely to take place. Thus creative work also takes place under conditions of high stress. Managing collaboration among different forms of expertise places a premium on leadership¹²⁹, and it should be noted that intensive interaction with group leaders is positively related to creativity and conversely, poor interactions or supervision led to poor performance of groups.¹³⁰

3.8 Meetings as Opportunities for Arguing

Meetings are sensemakers:¹³¹ they provided frames which guide the behaviour of the participants who take away with them memories and learnings in the form of conversations, writings, memories and decisions. Meetings frame the behaviour that occurs within them, as relating to the business of the meeting. Meetings help people clarify ambiguity and equivocality, string together learnings and make choices from the multiple options presented. In meetings managers review the past and extract from that past sufficient information to populate their visions of the future, and make decisions about that future. The sense that is made is notably different when meetings are managed by a leader who maintains high levels of sense-giving¹³². A meeting is a social communicative occasion at which more than one person is present, with a pre-determined purpose¹³³. The form of the meeting frames the behaviour that occurs within the meeting. Meetings make organisations real, create focus, purpose and decision-opportunities, which in turn lead to activity within the organisation. They are the place where most arguing happens in organisations. Meetings provide a

¹²⁹ Langer (1989): “The successful leader may be the person who recognizes that we all have talents and thus sees her or his main job as encouraging mindfulness in those being led.”

¹³⁰ Mumford et al (2002)

¹³¹ Schwartzman (1987)

¹³² Maitlis, (2005)

¹³³ In the words of Schwartzman (1987), quoted in Weick (1995): meetings are “.. a communicative event that organizes interaction in distinctive ways. Most specifically, a meeting is a gathering of three or more people who agree to assemble for a purpose ostensibly related to the functioning of an organization or group, for example, to exchange ideas, or opinions, to develop policy and procedures, to solve a problem, to make a decision, to formulate recommendations and the like. A meeting is characterized by multiparty talk that is episodic in nature, and participants develop or use specific conventions for regulating this talk... The meeting form frames the behavior that occurs within it as concerning the “business” or “work” of the group, or organization, or society.”

platform for majority and minority groups to articulate and strengthen their respective positions, and to argue their way to a new form of sense. Weick has noted a hunch that meetings are frequently unproductive as they are directed at problems of uncertainty which would be better handled by other media and often are restricted by autocratic leadership¹³⁴. In a strategy environment, this is supported by Maitlis who found that environments with high levels of both leader and stakeholder sensegiving produced strategies that were high in animation, with multiple rich accounts. Her work further showed that high levels of control without animation produced restricted sensemaking. Hedland's investigation of N-form organisational characteristics¹³⁵ supports a view of leadership in such an environment as a catalyst, seeking to combine knowledge, rather than divide knowledge.

Arguments in meetings create generic subjectivity in order to develop premise control and the interchangeability of people. At the top of organisations, where managers need to make sense in order to make decisions and provide direction, meetings are a critical way to create sense and regulate the variety which presents itself on a daily basis. Meetings are events in which people communicate, via narrative and arguing to share information, persuade and make decisions.

They are events in which ideas or opinions are exchanged, policies or procedures are developed, problems are solved, and decisions are made.

Arguing to make sense in a strategy group session takes place where there is trust between stakeholders. The leader sensegiving provided to the group creates positive energy, and allows for creativity. Intuitive concepts and ideas, are encouraged without judgement, with a

¹³⁴ Weick (1995): "My hunch is that many of them prove to be unproductive because they are directed at problems of uncertainty that are better handled by other media that are more efficient. I would also be that those meetings that are directed at problems of ambiguity fail to handle it because potentially rich media are squelched by autocratic leadership, norms that encourage obedience, unwillingness to admit that one has no idea what is going on, and so on. People often treat the existence of multiple interpretations as a symptom of a weak organizational culture rather than as an accurate barometer of turbulence outside the organization."

¹³⁵ N-Form organizations: "... put things together, combining rather than dividing...temporary constellations of people and units rather than permanent structures.. importance of personnel at lower levels in inter-functional, interdivisional and international dialogue, rather than handling coordination through managers and only at the top.. lateral communication and dialogue rather than vertical.. top management as catalyst, architect of communications (technical and human) infrastructure and protector of knowledge investment rather than monitor and resource allocator... focusing the corporation of fields with rich potential for combining knowledge elements rather than diversifying to create semi-independent parts.. heterarchy as the basic structure rather than hierarchy..."

free association scenario approach encouraged, followed by a structured argument to debate concepts and ideas. Minority and majority positions are important in organisational sensemaking as these routinely occur in meetings.

3.9 Minority and Majority Positions

The role and adoption of minority and majority positions in social arguing are important for this discussion of arguing to make sense, as these positions induce different sensemaking processes which can be utilised to identify or create knowledge. Two kinds of social behaviour¹³⁶ can be noted in response to majority and minority positions: Compliance which consists of public but not private acceptance of the attempt to influence the position and conversion in which there is private but not public acceptance.

People who adopt the majority positions focus on the source and proposed position of the majority viewpoint and coalesce without thorough interrogation of the multiple stimuli present, rather focusing on the cues which support the majority position, thus making sense in a narrow way. Multiple and unusual cues are often missed due to this passivity, while flaws in the position are unnoticed, leading at times to collapse into incomprehension when the argument fails. Majorities influence through compliance. When people question the majority position their arousal is high causing them to miss cues. The cues they do notice are those of majority position.

Minority positions trigger a more in-depth cognitive examination of the position of the minorities and of alternatives. Different thought processes are induced than when majority positions are supported, with a focus on stimulus and multiple alternative arguments. More cues are examined for the minority position, often leading to innovative solutions. Minorities influence through conversion and people will shift their positions to move closer to minorities although the arousal is higher as a result of challenging the majority position. Arousal is not high when questioning minority positions and therefore more cues are noticed, with correspondingly more sensemaking opportunities. Minority influence is more likely to cause a consideration of alternative viewpoints with a wide ranging thought process, incorporating more cues. Sensemaking influenced by minorities is more stable, more plausible and less subject to disconfirmation.

¹³⁶ Moscovici (1980). Toward a Theory of Conversion Behaviour, As quoted in Weick (1995)

Minority group members receive less acknowledgement of their knowledge and expertise than majority group members¹³⁷. Those group members who belong to the minority group thus experience an enhanced need for trust status as members of the team. Social uncertainty can lead to mistrust among minority group members due to ambiguity and confusion related to the behaviour of other stakeholders towards them. A sense of mindfulness, of knowing where one is in one's emotional landscape, allows for sympathy, understanding and a capacity for accurate analysis and problem solving.

3.10 Teams, Leadership and Trust

A team is defined as a group of people who need to cooperate for a period of time to achieve a specific goal or accomplish an objective. The members of a team are typically drawn from the ranks based on the merits of their specific skills or knowledge. Strategy making teams are usually the leadership team of an organisation, who gather together for a short space of time to craft strategy. A balance of differences and similarities between stakeholders is important to consider when formulating teams as it not only fosters creative thought but enables a relational identity¹³⁸ in the individuals which defines their relationship to the other members and to the team. This builds trust among stakeholders and makes them less vulnerable to identity threats.

An innate tension can be found in individuals, between the need to belong, to have a sense of identity with other 'in' teams or people; and the need to have something which creates an individuation, or uniqueness that sets us apart. Fellowship with other stakeholders allows all members to perceive similarities with others, although if members are too similar, they may feel redundant and not part of the team. The creation of a joint identity for the team may reduce tensions, as it creates a collective identity which leads to feelings of trust among stakeholders. Trust is the belief or confidence in a person or organisation's ability to always do what is right with integrity, and fairness. Trust in another person implies that stakeholders will allow themselves to be vulnerable to others actions and results in improved information sharing and team synergy. Collective or shared identity is important to making strategy

¹³⁷ Van der Zee et al. (2009)

¹³⁸ Josselson, (1994). Quoted in Sluss and Ashforth (2007) Identity is at its core psychosocial: self and other; inner and outer; being and doing; expression of self for, with, against, or despite; but certainly in response to others. It is both those for whom one works and the work of loving

because it builds intrapersonal relationships in the strategy making team¹³⁹. Identity in teams operates at all three levels: individual, interpersonal and collective.¹⁴⁰ A strong collective identity strengthens strategic foresight. Typically strategy making sessions are sessions of a limited duration during which people from a variety of functional specialities coalesce to solve organisational problems. Intended to be sessions within which synergistic combinations result in cross functional teams, the reality is that generally these sessions exhibit member cynicism, stress and divisiveness which reduce the team effectiveness, lower satisfaction levels and inhibit cohesion¹⁴¹.

Leadership of these teams and sessions has been found to be critical to the outcomes achieved as leaders guide the sense that is made, ensuring a balance between rational and intuitive viewpoints¹⁴². Leaders who rationalise what is seen to fit their own expectations, rather than appreciating the significance of what is seen, can obscure weak signal identification. When the clock strikes 13, it is not heard by the team because it is not what was expected. Leader sensegiving which is tolerant of disruptive innovation, and outlier views in order to stretch or even threaten current beliefs, has a sensitivity for creative identities, builds trust among stakeholders and allows for arguing to take place in order to develop collective views can reduce barriers to communication, and allows room for decision makers to champion weak signals.

Trust is a primary attribute associated with leadership. Trust in leaders is associated with stress reduction in individuals where there are high trust levels. Reduced stress levels means that sensemaking is more likely to be effective as less actions will be taken to reduce information load. Intra-team trust reduces the likelihood of task conflict evolving into relationship conflict. Relationship conflict differs from quick conflict as mentioned above as

¹³⁹ Rolf & Schuh: (2010): "Individuals who identify with a group will internalize the norms, values and goals of this group (e.g. of an organization). Additionally, they will strive for a high status of the group as this group membership has become a vital part of their self-definition. As a result, highly identified individuals will show attitudes and behaviors which are beneficial to the group."

¹⁴⁰ Gioia and Thomas (1996), Gioia (2000) quoted in Sluss, Ashforth. (2007): "...the suggestion that identity may not be nearly as enduring as first thought, and may be more usefully conceptualized as a variable, mutable continuity. If this were found to be the case, then identity would turn out to be an issue of plausibility rather than accuracy, just as is the case for many issues that involve organizing and sensemaking."

¹⁴¹ Peele (2006).

¹⁴² Maitlis (2005). Maitlis & Lawrence (2007). Mendonca et al (2009). Crossan et al (2011).

relationship conflict is a breakdown in intra-member trust where quick conflicts are debates between members to build collective perceptions. Leaders in strategy making teams need to reduce stress and improve trust if they are deliver results in which competitive advantage through the identification of weak signals can take place. Oster (2010) found that in teams where emergent innovation took place, it did so because the leaders encouraged it. Conversely, the expectations of leaders cause them to rationalise what is seen, rather than to appreciate the significance of what is seen; therefore when the clock strikes 13 it is not heard because it is not what was expected.¹⁴³

Trust is high where minority representation is high. Improved intra member trust in teams can be achieved by the creation of an overarching team identity with which all stakeholders can identify. This reduces the tensions and uncertainties which may exist among the members, and increases satisfaction levels by creating a sense of belonging. As stakeholders build relational identities, and become increasingly task-dependent on other stakeholders for the fulfilment of plans and goals, there is an increasing expectancy about each other. Opportunities for negative emotions therefore increase. It must be noted that the presence of a team identity can itself bring vulnerability to identity threats among stakeholders. High performing teams exhibit the same characteristics: clear goals with a common purpose and long term vision, strong trust relationships among themselves and a sense of accountability and commitment to the achievement of their collective goals. Trust relationships are built on consistency of behaviour and honest communications. Strong trust relationships foster innovation among stakeholders¹⁴⁴.

Team diversity brings cognitive complexity to the team, through the variety of viewpoints, experience, skills and beliefs¹⁴⁵. Weak signal identification in a strategy making

¹⁴³ Drummond (2001)

¹⁴⁴ Hoholm & Stronen.(2011)

¹⁴⁵ This is supported by Mendonca et al (2004) who noted that a diverse base of individuals should be empowered to make claims for weak signals: Tolerance of marginal and outlier opinions that stretch or threaten current beliefs; Collect the qualitative arguments behind those claims; Use an anonymous argumentative process when it is important to open up new options and use face-to-face processes when ensuring commitment is key; Identify and reduce barriers to communication between different sectors, departments and communities of experts; Provide room for senior decision-makers who can become champions of hypothetical weak signals amplifying the strategic message among the community of stakeholders; Foster the use of network mediation and brokering approaches using information gathered from different sources and media; Use an anonymous argumentative process

environment needs a diverse base of identities and opinions.¹⁴⁶ This diversity, of nationality or culture, age, gender, skill and experience, demographic differences, can be the cause of task conflict in teams, if not controlled, yet too much control kills innovative ideas. Eisenhardt (1999) found that quick conflicts were valuable for making decisions in teams and fostered creativity. Task conflict can lead to relational conflict and a lack of trust among stakeholders which in turn causes fragmentation of the team. It has been found¹⁴⁷ that the impact of conflicts in diverse teams can be minimised when there is perceived psychological safety and norms to stimulate openness.

3.11 Scaffolding

Argumentation is an intellectual skill needed for problem solving, and for productive rational debate.¹⁴⁸ Although organisations are structured around arguing, people think narratively, and need to be guided to formulate effective arguments. Formulating arguments to support a concept or position, with justification for the claims is a form of reasoning is linked to the intellectual ability for problem solving. Cho and Jonassen¹⁴⁹ have shown some success with facilitating development of cognitive argumentation skills through the provision of scaffolding. Their research further shows that the use of scaffolding to provide direction when solving ill-structured problems was particularly effective. Although research in this area is limited, the concept is supported by other research, which suggests that the imposition of scaffolding which requires participants to pre-structure their argument is an effective means of encouraging the necessary thought processes needed to build a rationally constructed argument. Cho and Jonassen applied criteria which imposed conversational ontologies onto the conversation requiring that participants pre-classify their contributions before making them. This is a leader driven form of sensegiving which guides participants by requiring that flesh out a framework or scaffolding with their thoughts before articulating them. Scaffolding can take the form of pre-planned questions which are posed to the members of a team, to trigger sensemaking and the expression of intuitive thoughts, or the

when it is important to open up new options and use face-to-face processes when ensuring commitment is key;

¹⁴⁶ Cho, Jonassen, (2002)

¹⁴⁷ Curseu, Schrujijer, (2010)

¹⁴⁸ Cho. Jonassen (2002)

¹⁴⁹ Cho. Jonassen (2002)

leader can stimulate debate through asking pre-determined questions after an intuitive noticing has been articulated.

Chapter 4

Strategy making

“Each of us can walk only the path he sees at his own feet. Each of us is subject to the consequences of his own belief.”

Morris L West

4.1 A brief History of Strategy

Business strategy as a subset of organisational theory, has a relatively short academic history, beginning with the work of Chandler in 1962, who first applied strategic direction finding to business, to support his viewpoint that the structure of an organisation should follow from the strategy. The origins of strategy can be traced back thousands of years to military campaigns and ancient treatises such as ‘The Art of War’¹⁵⁰ before strategy became a way of setting direction in organisations. Creating a recipe for the formulation and execution of a successful strategy has captured the minds of many scholars since Chandler, and many schools of thought, major trends and ideas have been proposed or adopted by business schools and management consultants as the concept, context and extent of strategy making has evolved to meet the needs of a business world struggling to stay ahead of the competition.

¹⁵⁰ The Art of War is a Chinese military treatise attributed to [Sun Tzu](#), who was a high-ranking military general, strategist and tactician thought to have lived between 544–496 BC. The Art of War is viewed as a definitive work on military strategy and tactics https://en.wikipedia.org/wiki/Military_strategy of its time, with an influence on both Eastern and Western military thinking, business tactics and strategy.

The formulation of strategy: the strategy making process, is a complex mix of historical analysis, knowledge, intuition, understanding of the industry and markets, coloured with the beliefs of the strategy makers, to formulate a plausible future direction for an organisation¹⁵¹. Some scholars see the formulation process as a linear and structured analytical process to deliberately form a strategic direction, while for some others it is an emergent process.

Strategy is narrative process which produces a story: a plausible, influential and influencing work of fiction: a story which can be told to people in the organisation. If the story telling is good enough, the story becomes a self-fulfilling prophecy. The making of strategy takes place, much like change and crisis, in situations of ambiguity, confusion, and often feelings of tension and disorientation¹⁵² among those making the strategy. The real challenge of crafting strategy however lies in detecting the subtle discontinuities which lead to innovation and advantage.

Increasing turbulence¹⁵³ increases the need for strategy making which can enable organisations to take advantage of market opportunities¹⁵⁴. From business planning through linear analytical methods, to the emergent strategy making described by Mintzberg and

¹⁵¹ Mintzberg. (2005): “Strategy making is an immensely complex process involving the most sophisticated, subtle, and at times subconscious of human cognitive and social processes”

¹⁵² Maitlis and Sonenshein (2010), view both crisis and change situations as situations of enactment: people generate the environment through their own actions and their subsequent attempts to make sense of their actions.

¹⁵³ Turbulence is not new, but we are living in a time when the turbulence is unprecedented: the global financial crisis which began in 2008 is one of the worst on record. The rate and pace of change is increasing with globalisation; increasing complexity and accelerating information exchanges as well as huge market volatility. Increasing turbulence increases the need to find new ways to keep the edge and remain competitive. As Boisot (1998) noted, “The environment to which strategy is called to respond has undergone a profound transformation in the past two decades...strategy is an emergent process shaped as much by the capacity of people throughout the organization to respond to or create unexpected opportunities as by the strategic intentions of those at the top ..”

¹⁵⁴ The need for strategic planning is more important, but also less structured in turbulent economic times or when businesses undergo a period of uncertainty or instability: compared to organisations in a state of stability, or operating in an environment of stability, where strategies or plans are articulated in detail and followed, without the need for adjustment. Mintzberg (Strategy bites back) notes that strategic planning rises in importance in turbulent or uncertain times. Gryskiewicz notes that this turbulence is the resonance that stimulates innovation and renewal. Prahalad & Hamel note: “the need for strategic thinking and behaviour among managers has never been more urgent”.

others¹⁵⁵, strategy making is of necessity adapting to the changing business world in which people are bombarded with fast changing, ambiguous and complex information¹⁵⁶.

For the further purposes of this thesis, strategy is defined as: ‘the mindful crafting of a future vision for an organisation, based on deep understanding, beliefs, knowledge of the organisation and it’s environment, analogical and rational thinking and a willingness to explore the unexplored’.

4.2 The Context of Strategy¹⁵⁷

The pace of global change is accelerating exponentially¹⁵⁸ and the business environment is changing constantly in response. Societal frames of reference have undergone fundamental changes¹⁵⁹ which have changed the expectations that society has of the value to be delivered

¹⁵⁵ Deliberate strategizing is acting intentionally to provide direction which enables and encourages commitment. Deliberate strategizing is a very formalised process which requires management to plan to co-ordinate all strategic and operational activities. Those who advocate deliberate strategizing view any emergent strategy as a brilliant improvisation or a stroke of luck. This form of strategy making encourages long term thinking, but much of the strategy is based on assumption and forecasts.

Emergent strategy is based on a coherent pattern of action which evolves over time. Managers may have no prior intentions, but question assumptions, challenge ideas, encourage learning and their direction is pieced together over time. Those who advocate emergent strategy believe it is flexible as it is an approach which uses sensemaking and reflective thinking while learning and envisioning. It is very much an experimental, and changing approach, which is messy and often fragmented. It is opportunistic and allows for a lot of flexibility. Emergent strategy is seen as useful for dealing with wicked problems.

¹⁵⁶ Prahalad & Hamel (1994): “Thoughtful members of the academic community are increasingly recognizing that the concepts and tools of analysis that formed the backbone of the strategy literature during its period of major growth (1965-85) may need a basic re-evaluation in order to pave the way for new ideas”

¹⁵⁷ Langer (1989): “Who we are at any one time depends on the context in which we find ourselves”

¹⁵⁸ Many scholars have referred to the increasing rate of change, including Alvin Toffler in *Future Shock*, but limited research has been conducted to measure the rate of increase. Ray Kurzweil (2001) in his book ‘*The Law of Accelerating Returns*’, theorizes that Moore’s Law can be applied to the exponential change in other areas of technology. He believes that as a technology matures, it becomes exponentially more effective, causing greater resources to become deployed towards further progress of that technology, in turn generating further exponential growth. He cites technological progress as currently doubling every decade, implying that the technological progress made during the twenty-first century is equal to the progress made in the previous 200 centuries.

¹⁵⁹ Increased democratisation, emancipation of women, and other previously repressed classes and races, family dis-integration, improved access to education and literacy levels, immigration, urbanisation, the reduction in the power of some large religions, reduced nuptiality, and other changes within societies have impacted on the western world in ways that have not yet been fully quantified, but which have fundamentally changed the way in which society is constructed.

by business¹⁶⁰. Technological change and economic growth cycles are linked¹⁶¹ to the evolution of economic, organizational, competitive and management thought. Dealing with information load, ambiguity and complexity, while managing unpredictable events and the vulnerabilities which arise from the complexity and turbulence is the challenge facing the leaders of today and tomorrow. Failures in foresight can be very costly. Disasters take a while to incubate but once arrived overwhelm sensemaking.¹⁶²

We are living the unprecedented times of which Drucker warned: times in which we are more interconnected but further apart¹⁶³ with the danger of more conflict as a result. The pressure on leaders to make strategic sense is increasing.

Focusing on strategy is increasingly difficult in such times¹⁶⁴ but more important than ever before¹⁶⁵. As turbulence increases so does the reliance on heuristics, and the familiar¹⁶⁶. Weick speculated that this would cause occasions for sensemaking to be defined more idiosyncratically. In a strategy making context, sensemaking is multi-contextual, and it is

¹⁶⁰ Jensen in Forbes Magazine has questioned the importance of shareholder value as a driver of business for the future in the wake of the 2008 recession

¹⁶¹ Technological, economic and management evolution is interlinked. Some scholars believe that there are economic cycles of prosperity and depression. Peter Dicken (2011) said that :“The idea that economic growth occurs in a series of cycles or ‘waves’ goes back almost 100 years. One particular type of wave – usually known as a Kondratief wave (K-wave) – is a long wave of more or less 50 years duration... Four waves have been indentified; we are now in the early stages of a fifth. Each long wave may be divided into four phases: prosperity, recession, depression and recovery. Each wave tends to be associated with particularly significant technological changes around which other innovations – in production, distributiun and organization, awarm or cluster and ultimately spread through the economy. Although such diffusion of technology stimulates economic growth and employment, demographic, social, industrial, financial and demand conditions also have to be appropriate. In other words it’s the ‘total package’ that counts. ... Each phase is associated with characteristic forms of economic organization, cooperation and competition.”

¹⁶² Foresight includes the use of intuition, experience, minority views and contrary thinking. Foresight failure implies that weak signals which mask opportunity, risks and new developments can be missed due to dominant logics or managerial recipes.

¹⁶³ Drucker (1998). “As we advance deeper into the knowledge economy, the basic assumptions underlying much of what is taught and practised in the name of management are hopelessly out of date... Most of the assumptions about business, technology and organisation are at least 50 years old, they have outlived their time”

¹⁶⁴ Gordon Brown (former British Prime Minister) referred to this in acknowledging that he found it hard to focus on strategy: as you have to deal with immediate events, like it a bank’s going to go under” (Viner, based on an interview for the Guardian, 20 June 2009)

¹⁶⁵ Mintzberg 1987 noted the importance of strategy in turbulent times.

¹⁶⁶ Mintzberg 2005: “.. as much as 90 percent of all information we are searching for aims at supporting views, beliefs or the hypothesis that we have long cherished..”

very easy to miss the weak signals which could mean the next competitive advantage or a new source of revenue. Intelligence about the future is essential for making meaningful strategies¹⁶⁷.

A strategy is successful when it can be seen to be achieving its long-term and consistent goals through effective implementation which is based on a profound understanding of the organisation and its competitive environment. Strategy making takes place in the context of that complex human social structure: the organisation; a complex evolving system¹⁶⁸ in which the rules can and should, change over time.

Organisations are built around people. People show a strong preference for reducing complexity¹⁶⁹, disorder and data processing loads, to allow them to focus on the work at hand. Abstraction and codification of knowledge; common beliefs, values and assumptions; and standard plots contribute to the creation of generic subjectivity¹⁷⁰ among the people of the organisation, reducing the need to make sense. This reduction in the need to make sense is fine in organisational routines, scripts and normal organisational activities. When it comes to strategy making, what is needed is more sensemaking, not less. Strategy making is a subjective-interpretive process, taking place as multi-contextual sensemaking, where the sense that is made is dependent on the sensemakers, their beliefs and frames, and the cues they notice. Weak signals are often the hazy patterns we are not sure we have seen: “Sensemaking starts with chaos.. the order in organizational life comes just as much from the subtle, the small, the relational, the particular and the momentary as it does from the large, the substantive, the written, the general and the sustained.. It is about organising through communication¹⁷¹”

Traditional linear methods of strategy making used deductive reasoning with a linear process to first order, then analyse data and draw reasonably scientific conclusions from it. In the

¹⁶⁷ Ansoff . weak signals consist of advanced and imprecise symptoms of impending future problems

¹⁶⁸ Jackson (2005): “Social systems are not just complex adaptive systems bound by the fixed rules of interaction of their parts. Rather they are ‘complex adaptive systems’ bound by the fixed rules of interaction of their parts.”

¹⁶⁹ Boisot (1998)

¹⁷⁰ Generic subjectivity is the level in an organisation (Wiley, quoted in Weick) at which selves are replaced by rules, role-followership, and the social network of the organisation. Generic subjectivity creates organisational controls, which reduce opportunities for innovation.

¹⁷¹ Weick Sutcliffe, Ostfeld (1999)

turbulent world of today, these methods for systematic strategy planning make it difficult to achieve meaningful results¹⁷².

Inductive reasoning is the reasoning which notices patterns and draws tentative hypotheses from the patterns. Deductive strategy making at the centre of the organisation is mechanistic: focused on current and traditional knowledge and the exploitation of this to develop a competence-based advantage.

Inductive or transformational strategy making takes place close to the periphery of the organisation by those who interact with external sources both within the industry and without: it is focused on the creation of new knowledge, and identification of potential opportunity. It is a more intuitive form of strategy making which uses trial and error, informal contacts, noticing, experiments and creative processes to combine discontinuous concepts to form new ideas. Leaders at the periphery are bricoleurs adept at transforming raw experience into a linguistic frameworks to make sense¹⁷³. The interpretive activities of the leaders at the periphery use a variety of methods to create an understanding of the world, but mostly interpretive acts to improvise, develop wisdom¹⁷⁴, respectfully interact and to communicate. A characteristic of wisdom is foresight or the belief that the future can inform the past¹⁷⁵

Even though leaders are tasked with strategy making, they are not necessarily strategic thinkers. Strategic thinkers in the view of Mintzberg, are those visionaries who are able to

¹⁷² Grant (2008), Mintzberg (2009)

¹⁷³ Levi-Strauss (1966) quoted in Wright. (2005): “The Bricoleur” is adept at performing a large number of diverse tasks but, unlike the engineer, he does not subordinate each of them to the availability of raw material and tools conceived and procured for the purpose of the project. His universe of instruments is closed and the rules of his game are always to make do with ‘whatever is at hand’, that is to say with a set of tools and material which is always finite and is also heterogeneous, because what is contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock or to maintain it with the remains previous construction or destructions”

¹⁷⁴ Weick (1995)“...wise people know they do not fully understand what is happening at a given moment, because what is happening is unique to that time. They avoid extreme confidence and extreme caution, knowing that either can destroy what organizations need most in changing times, namely, curiosity, openness, and the ability to sense complex problems. The overconfident shun curiosity for fear it will only deepen their uncertainties. Both the cautious and the confident are closed-minded, which means that neither will make good judgements. In this sense, wisdom, understood as simultaneous belief and doubt, improves adaptability.”

¹⁷⁵ Gioia et al. (2002). This understanding of foresight proposes that scenarios in which manager locate themselves in the future, the past and the present can create improved sensemaking

see the organisation from a multitude of viewpoints¹⁷⁶, and extract meaningful directions from the many viewpoints they have.

“The more different ideas we process, the more likely it is that other associations not at all closely related to the original topic will be triggered”.¹⁷⁷

4.3 Strategy

Strategy is a form of story-telling with multiple plausible endings, as all strategy is fiction until it can be proven to be implementable. Strategies are traditionally conceived as visions and plans, yet as Mintzberg has observed¹⁷⁸, often the realisation of the strategy delivers something different, as strategy emerges from the streaming of organisational life. Finding the unexpected patterns and signals on the periphery and then holding the conversations necessary to make changes is the challenge facing leaders today¹⁷⁹ as they need to focus people’s effort and ensure that collective action takes place to keep the organisation in play.¹⁸⁰

If “..a problem is a gap, difference, or disparity between the way things are and the way one wants them to be”¹⁸¹, then strategy making is a problem. There is no common theory or definition of strategy creation¹⁸²; and limited agreement among scholars regarding the nature of strategy. Strategy has been variously defined as "a pattern in a stream of decisions..’ collectively a perspective, plan, position, and a pattern"¹⁸³; strategy is “.. about shaping the

¹⁷⁶ Mintzberg in Garratt (2003)

¹⁷⁷ Gyskiewicz. (1999)

¹⁷⁸ Mintzberg, (2007)Tracking Strategies: towards a general theory

¹⁷⁹ Mintzberg (1994) referred to attending to weak signals as the Leaders challenge.

¹⁸⁰ Mintzberg (2001)

¹⁸¹ Smith quoted in Weick (1995). He further defines a problem as having a gap which is “difficult to close” and one which “must warrant a place on one’s agenda”

¹⁸² Hamel (2003): “The dirty little secret of the strategy industry is that it doesn’t have any theory of strategy creation

¹⁸³ Mintzberg’s views were anticipated by Kenneth Andrews (1971)who defined strategy as: "Corporate strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities.”

future.. to get to desirable ends with available means"¹⁸⁴. Competitive strategy is about being different¹⁸⁵ when compared to competition.

Much emphasis has been laid by business on strategic planning, but strategic planning is not strategy making¹⁸⁶, focusing effort on the plan and not on the desired outcomes. Strategy is by its nature paradoxical. It is about change; yet the desired change is rooted in stability¹⁸⁷, as the organisation strives to create continuity and longevity. Strategy is action driven, but is often based on belief and perception; and these same beliefs and perceptions can prevent the action from occurring. Strategy is a vision of the future, articulated in a plan. It is also, as Mintzberg observed, a pattern of behaviour or actions, observed or enacted. It is the perspective or viewpoint which the organisation adopts as its own; which is used to shape decisions and determine competitive positions. Simon¹⁸⁸ referred to strategy as “The series...of decisions which determines behaviour over some stretch of time may be called a strategy”, implying that strategy is not only about decisions, but also about behaviour.

If a decision is a ‘commitment to action’¹⁸⁹, then strategy is not only concerned with direction, positioning, and behaviour patterns, but must also be concerned with mindful¹⁹⁰ action-taking to achieve the desired outcomes. It must be concerned with the external environment, as strategy creates the links between the external environment and the organisation. The external environment is the source of change; change that impacts the organisation through altered states of competition; radical changes to technology; economic, changes to economic, social or political landscapes which constantly occur in the world.

184 McKeown (2011)

185 Porter (1998)

183 Mintzberg (1998)“The great fallacy of strategic planning is that because analysis is not synthesis, strategic planning has never been strategy making”. Hamel also noted that there is no process to create unique ideas in strategy and that revolutionary ideas have always been the product of lucky foresight. He then noted that there are five ways to rethink strategy: with new voices, new conversations, new perspectives, or seeing in new ways, with new passions and by experimentation.

187 Mintzberg (1998) “Strategy is about change, but change with the intention of creating consistency and permanence.”

188 Simon (1993).

189 Mintzberg, Raisinghani, Theoret (1976)

190 According to Weick (2005), mindfulness is when we realize our current expectations, continuously improve those expectations based on new experiences, and implement those expectations to improve the current situation into a better one

Making strategy is complicated: “Creating strategy is judgemental designing, intuitive visioning and emergent learning: it is about transformation as well as perpetuation; cooperation as well as conflict; it has to include analysing before and programming after as well as negotiating during, and all of this must be in response to what can be a demanding environment. Just try and leave any of this out and see what happens”¹⁹¹.

Within organisations, strategy making is concerned with creating new knowledge, or applying old knowledge in new ways to create value for the organisation. It is complex, and profound, and yet simple.

The ability to create innovative products or services has come to be seen as a key goal of many organisations. Innovation is a sensemaking process and a creative process, which requires expertise in different fields and a deep knowledge of the organisation and its industry. Typically innovators have broad experience, multidisciplinary minds, and are intellectually curious. In an organisational sense, being innovative does not come easily to organisations with tight couplings and well established intrasubjective and generic subjective processes as the crystallised conversations and texts are part of the vocabularies of the organisation, holding tight to the organisational structures.

Much effort and research around strategy has been related to strategic planning as a linear, structured, analytical and repeatable process, yet strategic thinking, which drives the entire process of strategy making; is often non-linear, unstructured, and non-repetitive¹⁹². In environments of turbulence, complexity and high uncertainty, the rationality of decision making processes decreases ¹⁹³ due to biased misrecall, expectations and other sensemaking failures.

4.4 Leaders: The Strategy Makers

Strategy making starts with a strategy maker. The strategic makers are the leaders or knowledge holders in an organisation. Traditionally Boards of Directors were those

¹⁹¹ Mintzberg, (1998)

¹⁹² Mintzberg, Raisinghani, Theoret (1976) found that decision processes from which strategic decisions are created is unstructured in that the selection phases of decision making do not follow a sequential relationship. Rather these can come in any order, loop and repeat. By contrast, Henderson B of the Boston Consulting Group believed that strategy should mostly be a linear, logical process: “.good strategy must be based primarily on logic, not.. on experience derived from intuition..”

¹⁹³ Eisenhardt and Zbaracki (1992)

responsible for strategic outcomes but had limited knowledge of the internal and external environments of the organisation, and thus delegated the responsibility for making strategy to CEOs and executive management. These strategy makers are the leaders of the organisation, operating amongst turbulence, subject to high levels of information load, complexity and ambiguity; which cause an autonomic arousal response, reducing their ability to make sense¹⁹⁴. The leaders are tasked with the identification of new directions, based on new opportunities. They have either deep knowledge or broad experience, are people from a variety of functional specialities who focus for limited duration on the future or on solving the strategy problem. Strategy is the learning process, performed by strategic thinkers who design, plan and enact strategy. In so doing they gain deeper knowledge of their environment, and understand how to identify the weak signals which indicate new opportunities. Learning as they act and enacting the learning as they go, these thinkers incorporate experience, insight, and intuition, synthesising existing knowledge into activating the vision of the future for the organisation¹⁹⁵.

The making of strategy is a social cognitive process rooted in the organisational culture, intended to produce economic value add. It is about making sense of patterns, finding the weak signals in the stream of information that passes the strategy makers. It is influenced by the identities and perspectives or worldviews of the organisational decision makers which in turn filters their noticing and ability to create new ideas through cognitive processes of association. Decision making requires a multidimensional approach based on bounded rationality, emotions, intuition, heuristics, and insight.¹⁹⁶

4.5 Strategic Thinkers

Strategic thinking creates strategy, through the words and language of the organisation. It is a social process, where the leaders think associatively and creatively¹⁹⁷, about the

¹⁹⁴ Sinclair & Ashkanasy (2005) note that linear rational models are not appropriate for conditions of rising pressure and high ambiguity.

¹⁹⁵ Mintzberg,(1998) Grant (2008),

¹⁹⁶ Sinclair & Ashkanasy (2005)

¹⁹⁷ Mintzberg (2005) refers to this as “strategic thinking means seeing *ahead*. But, you cannot see ahead unless you can see *behind*, because any good vision of the future has to be rooted in an understanding of the past... strategic thinking is seeing *above*... strategic thinking is also inductive thinking: seeing above must be supported by *seeing below*... You can, however, see ahead by seeing behind and see above by seeing below and still not be a strategic thinker. That takes more—creativity for one thing. Strategic thinkers see differently from other people; they pick out the precious gems that others miss.

organisation, it's future and patterns in the information which they observe. They talk the walk of the organisation¹⁹⁸, by getting out into the organisation, and talking, holding conversations with other strategic thinkers and with knowledgeable people within the organisation, scanning codified and abstracted knowledge; and gathering un-codified, and non-abstracted knowledge. Strategic thinkers observe the streaming of organisational life within their organisations and in their environments, and identify cues from the stream of disorder and chaos, usually on the periphery, which have the potential to provide opportunities.

4.6 Emergent Strategy and Strategic Intent

Strategy is about seizing opportunity and should therefore create innovation, yet the structured and controlling nature of strategic planning as it has been practiced in many organisations, kills the inconsistency which creativity needs to thrive¹⁹⁹. Often not formulated as an explicit plan, strategy can be observed as a "...consistency of direction based on a clear understanding of the "game" being played and a keen awareness of how to manoeuvre into a position of advantage."²⁰⁰ As strategy research evolved along with business and management, numerous schools of thought²⁰¹ created views on strategy. Mintzberg categorised the schools of thought into ten schools: from the design school to the

They challenge conventional wisdom—the industry recipe, the traditional strategy—and thereby distinguish their organizations. Since creative thinking has been referred to as lateral thinking, this could be called *seeing beside*.... beside seeing beside, strategic thinkers have to see *beyond*. Creative ideas have to be placed into context, to be seen in a world that is to unfold... Seeing beyond constructs the future—it invents a world that would not otherwise be”

¹⁹⁸ Weick, (1995)

¹⁹⁹ Creativity needs inconsistency in order to produce innovation: “creative work often requires collaborative efforts of differing composition, duration and intensity.. of course the need for collaboration among people places a premium on leadership.” Mumford et al (2002)

²⁰⁰ Grant (2008)

²⁰¹ Mintzberg (1998):

The Design school where strategy formation is a process of conception
 The Planning school where strategy formation is a formal process
 The Positioning school where strategy formation is an analytical process
 The Entrepreneurial school where strategy formation is a visionary process
 The Cognitive school where strategy formation is a mental process
 The Learning school where strategy formation is a learning process
 The Power school where strategy formation is a process of negotiation
 The Cultural school where strategy formation is a collective process
 The Configuration school where strategy formation is a transformation process

transformation school of thought around strategy, they have made it clear that there is as yet no definitive way to make strategy. All of the different schools make important contributions to the way strategy is made, and the way strategic thinkers think, but none can stand alone, for strategy is more than the sum of the parts. Broadly strategy is seen as either deliberate or emergent. Scholars differ on how the mix between the two should be approached in an organisation. Mintzberg suggests that this depends on organisation and its state of development. De Wit & Meyer suggest that the results if they can be are very rewarding although the process requires ingenuity and lots of energy. Grant believes that the two approaches should be complementary.

Emergent strategy describes an approach to strategy which assumes that foresight is unable to discern or anticipate future states. Intended strategies will not be fully realised, rather other strategies will emerge as ‘leakages’. Data for dealing with the opportunities that emerge will be found at any level in the organisation, where an ad-hoc response will need to be formulated. Boisot (2003) describes this approach as a legitimisation of ‘disjointed incrementalism’ operating at the strategic level, and believes that its effectiveness depends on a process of learning by doing which is likely to be disrupted by turbulence. Strategic intent is a broad intuitive statement of strategic intention formulated to guide the organisation without following a detailed descriptive process. Both approaches expect opportunities to emerge from the chaos. Fostering strategic adaptation through establishing a few broad principles and directives to guide decentralised decision making is consistent with the tenets of complexity theory²⁰², although the optimal balance between design and emergence depends on the stability of the external environment²⁰³.

4.7 Turbulence and the Implications for Finding Weak Signals

Turbulence creates multiple uncodifiable patterns, along with conflict: the multiple patterns or weak signals attract supporters and detractors, and the resultant conflict stalls the organisation. Boisot, quoting Ross Ashby’s (1958) *law of requisite variety* proposes that in environments with a high rate of change and high rates of environmental turbulence, a balance needs to be maintained with a high rate of learning and capacity to extract useful information from the chaos : see Figure 3 below:

²⁰² Grant (2008)

²⁰³ Grant (2008) Mintzberg (2007)

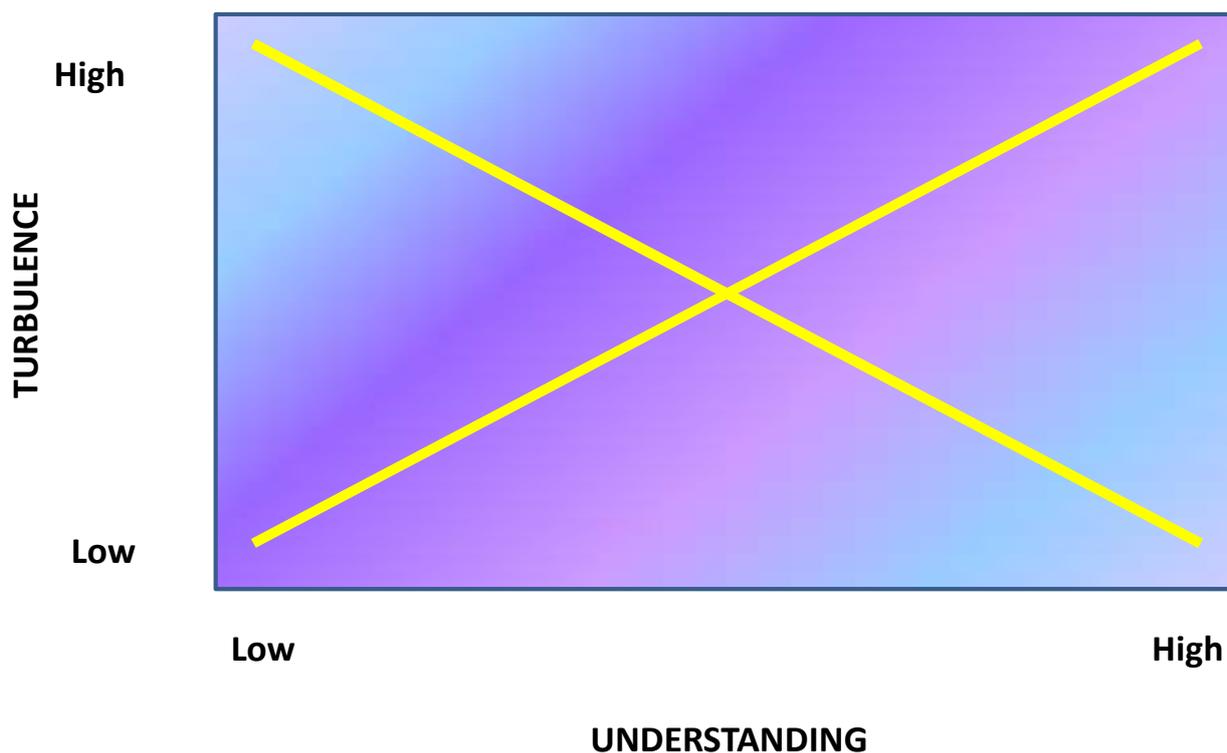


Figure 3: The Learning Environment (Boisot in Garratt 2003)

To the right of line A the system can retain its integrity, whereas to the left of Line A the degree of turbulence exceeds the degree of understanding. In the lower portion of the figure where turbulence is low, improved understanding can take place slowly moving from the left of the figure to the right. In the upper regions where turbulence is high, moving from left to right to increase understanding is a discontinuous process, in which new patterns or weak signals emerge. In this region, the sense that is made is no longer built on the lessons of the past but on assimilating new information from emergent patterns. Learning requires the organisation to move upward along Line A, rather than downward along Line B.

Many countries in the world have become mixed economies²⁰⁴, struggling to create public services amid the shifting sands of regulation and de-regulation. The competitive arena has

²⁰⁴ A mixed economy is one in which the private sector, profit seeking enterprises and the accumulation of capital drive the economy, although the state exerts considerable indirect influence over the economy through fiscal and monetary policies, often providing welfare benefits and environmental protection.

changed dramatically, necessitating a new way of looking at strategy and strategy making²⁰⁵. Competitive advantage is not easily sustained in many if not most industries. The economic environment post the economic downturn of 2008 is one in which competitive advantage is ephemeral. Being able to exploit and move in and out of states of advantage is key to future success.

4.8 Sensegiving

Sensegiving is a leader behaviour used during change, strategy making and other organisational activities where followers need to be directed. Maitlis, 2005 has shown that the type of sense-giving provided to teams by leaders²⁰⁶ or stakeholders can significantly impact the outcomes of the sense made during meetings. This research, although focused on meetings, may hold implications for sensemaking in strategy making sessions, which are meetings of the strategy makers. The manner of the sensegiving application can either inhibit or enhance the quality of sense that is made. Sensegiving in a structured strategy making environment forms a framework which gives structure to the process by articulating guidelines for stakeholders, and prompting debate and arguing.

Leaders are the sensegivers, the story-tellers, who give sense to others by telling stories to enable others to make sense. Extending the sensegiving to other stakeholders improves the quality of the outcomes, resulting in ongoing emergent and consistent actions. Sensegiving stories are rhetorical arguments, meant to persuade others. The vision which they present is an idealised future state in which stakeholders and the leader present a vision of an idealised future state, and thereafter engage in a retrospective interpretation of how that future state occurred. Leader and stakeholder sensegiving in strategy sessions has been shown to significantly influence the quality of the strategy that is made. Sensegiving with high levels of both animation and control from both leaders and stakeholders leads to unitary rich accounts and outcomes which are emergent and consistent. Control in this instance is not

²⁰⁵ Prahalad and Hamel (1994) saw the competitive space as having changed dramatically from that of previous decades, due to both regulation and deregulation; less protectionism; structural changes brought about by technology, and technological discontinuities; excess capacity, mergers and acquisitions, environmental concerns, the emergence of trading blocks, globalisation. In their view the ‘..thoughtful members of the academic community are increasingly recognizing that the concepts and tools of analysis that formed the backbone of the strategy literature during its period of major growth (1965-85) may need a basic re-evaluation in order to pave the way for new ideas..’

²⁰⁶ Persons with highest authority level in an organisation.

autocratic control, but guidance to the process, ensuring that participants feel the freedom to participate without fear.

Leader sensegiving which is highly directive, with low stakeholder sensegiving results in restricted organisational sensemaking, narrow unitary visions, with one time action plans. Where leader sensegiving is high and stakeholder sensegiving is low, and leader directiveness is limited, it results in guided sensemaking, unitary rich accounts with a series of emergent actions. See Figure 4.

Four Forms of Organisational Sensegiving

Maitlis (2005)

Leader Sensegiving	High Sensegiving	<p>Guided Organisational Sensemaking</p> <p>Process Characteristics</p> <ul style="list-style-type: none"> - High animation - High control <p>Outcomes</p> <ul style="list-style-type: none"> - Unitary, rich account - Emergent series of consistent actions 	<p>Restricted Organisational Sensemaking</p> <p>Process Characteristics</p> <ul style="list-style-type: none"> - Low animation - High control <p>Outcomes</p> <ul style="list-style-type: none"> - Unitary, narrow account - One time action or planned set of consistent actions
	Low Sensegiving	<p>Fragmented Organisational Sensemaking</p> <p>Process Characteristics</p> <ul style="list-style-type: none"> - High animation - Low control <p>Outcomes</p> <ul style="list-style-type: none"> - Multiple, narrow accounts - Emergent series of inconsistent actions 	<p>Minimal Organisational Sensemaking</p> <p>Process characteristics</p> <ul style="list-style-type: none"> - Low animation - Low control <p>Outcomes</p> <ul style="list-style-type: none"> - Nominal account - One time, compromise action
		High sensegiving	Low sensegiving

Figure 4
Stakeholder Sensegiving (Maitlis 2005)

Leaders are sensegivers, and when this sensegiving is in the form of excitement and enthusiasm to signal a commitment to a new direction, it triggers positive emotion. This

positive sensegiving can however also create blinkers which can cause important cues to be overlooked.

4.9 Sensegiving Narratives

Stories or narrative are used by leaders as a sensegiving resource when they guide followers to make sense. They pass on visions, and important strategic information through narratives.

People think narratively rather than argumentatively or paradigmatically, which is why story telling in organisations is an important communication tool, as it is one of the ways in which people try to make the unexpected expectable. Any narrative is filtered through the lens of the story-teller, providing a selective retrospective narrative of the event or events. Interesting stories challenge existing models of reality as acceptance of the stories encourages updates to existing frames. The presence of stories in an organisation implies a rich culture, and knowledge base and reduces arousal when problems do occur as there are always stories to refer to for guidance. Stories as a form of narrative tie together disparate concepts and integrate fact with conjecture, creating a causal order to events. They enable people to talk about history and the present in a way that is memorable, allowing them to use the knowledge gained as guide to the future. Thus stories become part of the organisational knowledge database, assisting in problem diagnosis and reinforcing third order controls.

Scenarios are socially constructed stories which people naturally engage in to predict plausible potential futures: hunches or stories of what could be, constructed by people who operate at the periphery. Narratives describe multiple potential or interlinked realities. Language and authorship influence strategic stories: traditional sensegiving related to strategy see strategic communication as value free and uninfluenced by either individual or group interpretation. Scenarios can create a common vocabulary through which “..people learn, develop, unlearn, relearn and apply common understandings by which to exchange, combine, create, renew, and transfer tacit, implicit, and codified processes of knowing from blueprints, ideas, emotional states and fuzzy hunches into problem definitions, solutions, added value and markets in lifeworlds of ongoing uncertainty, ambiguity, and contingency.”²⁰⁷

²⁰⁷ O'Donnell et al (2000), quoted in Wright (2005)

Individuals engage in scenarios as part of everyday thinking and making sense by constructing and testing possible responses in multiple possible futures.

4.10 Weak Signals

On the periphery of any modern organisation there exists a ubiquitous turbulence. This turbulence has a resonance that stimulates innovation and renewal, for those organisations who can see the opportunities.²⁰⁸ Within the periphery, on the edge of chaos are the weak signals. Too far in one direction and the rigidity of rules, systems and organisation will obscure what is seen. Too far in the other direction and disorder rules, creating too much noise to clearly see signals. We live in a non-zero-sum world. New opportunities or ideas can emerge from the periphery without precedent. On the periphery are often surprising asymmetries and it is from these places that black swans emerge. Weak signals are called weak not because they lack importance but because the signals they emit are easily obscured by other information including personal frames, attitudes and bias of those observing them.

The natural tendency of people is to fall back onto heuristics and intuition²⁰⁹ to deal with the confusion. Believing what is seen is the challenge as seeing fresh opportunity requires a mindful openness to surprises and challenges to the status quo. In the arts, weak signals are those elements that infuse artworks with greatness.

When we make strategic sense it is in the midst of chaos, where questions are vague and the answers are flimsy²¹⁰. Our expectations drive us to rationalise what we believe we see rather than understand the significance of what we are seeing.

Amplifying weak signals is only possible if they are part of a complex adaptive system on the edge of chaos. The social systems we find in organisations today are complex adaptive systems: ²¹¹ unpredictable and difficult systems which do not follow straight line paths of

²⁰⁸ Gyskiewics (1999)

²⁰⁹ Weick (2009)

²¹⁰ Drummond (2001)

²¹¹ Dyer Harris and Ziesler (2002) note that Complex Adaptive Systems have five characteristics: sensitive to small changes, adaptive to small changes in their environment, complex, driven

predictability. Weak signals are advanced indicators of change phenomena. Sometimes mistaken for Wild Cards, weak signals offer hints about the future²¹².

Weak signals are found in conditions of uncertainty where the impact is medium to high (Figure 5). Traditional methods to attempt to predict the future do not successfully identify the weak signals which are found on the periphery, although a sensitivity to small changes or weak signals in these systems implies that finding the weak signals is important. Weak signals are weak because they are easily obscured by other factors such as beliefs, or expectations, attitudes or bias. Because of the hints which weak signals offer about the future, they are important as they can offer insights into potential new products or services. They appear as incomplete, unstructured, or fragmented stimuli or patterns amongst the raw data which is available to observers. The stimuli or patterns which form the signal are not clear via direct observation, but are an exercise in realising the strategic potential of the information. These signals have to be amplified as they are weak. The power of weak signals lies in the ability of the observer to make the link or association with other weak signals, creating new interpretations. Weak signals abound on the periphery of an organisation, in the edge of chaos. Finding a weak signal may herald the advent of a wild card, or an event that could be a step change or offer a completely different strategic opportunity.

Weak signals are not easily noticed, and if they are, they are not articulated unless there is a culture within which tolerates mistakes and encourages learning. They are easily obscured by mindsets, attitudes and bias.

A characteristic of weak signals is their ‘weird’ nature; they do not fit current frames or mental models of the observers, and are often dismissed as anomalies or errors, until the frequency of the weak signals triggers a crisis. Cognitive bias, the use of heuristics (and in particular confirmation bias) in assessment and decision making, can blind the observer²¹³ to the important information contained within the weak signal. Weak signal detection is

determinism not randomness, offer short term forecasting possibilities and long term forecasting is very difficult.

²¹² Weak signals not only offer foresight about the future, but can also provide indicators about vulnerability.

²¹³ Ansoff (1977). “Typically only historically familiar raw data find their way into the interpreted consequences. Reports on unfamiliar discontinuities, if they find their way into the firm, remain in raw form, because the methods and approaches for converting them into action typically do not exist.”

dependent on the ‘eye of the beholder’: the mental frames and sensemaking models held by the observer²¹⁴. In strategy making, early identification of weak signals can create competitive advantages, new market opportunities, or totally new opportunities. Weak signals²¹⁵ are those patterns, signs or ideas which could alter the way an organisation performs its business operations, but are not easily noticed by decision makers.

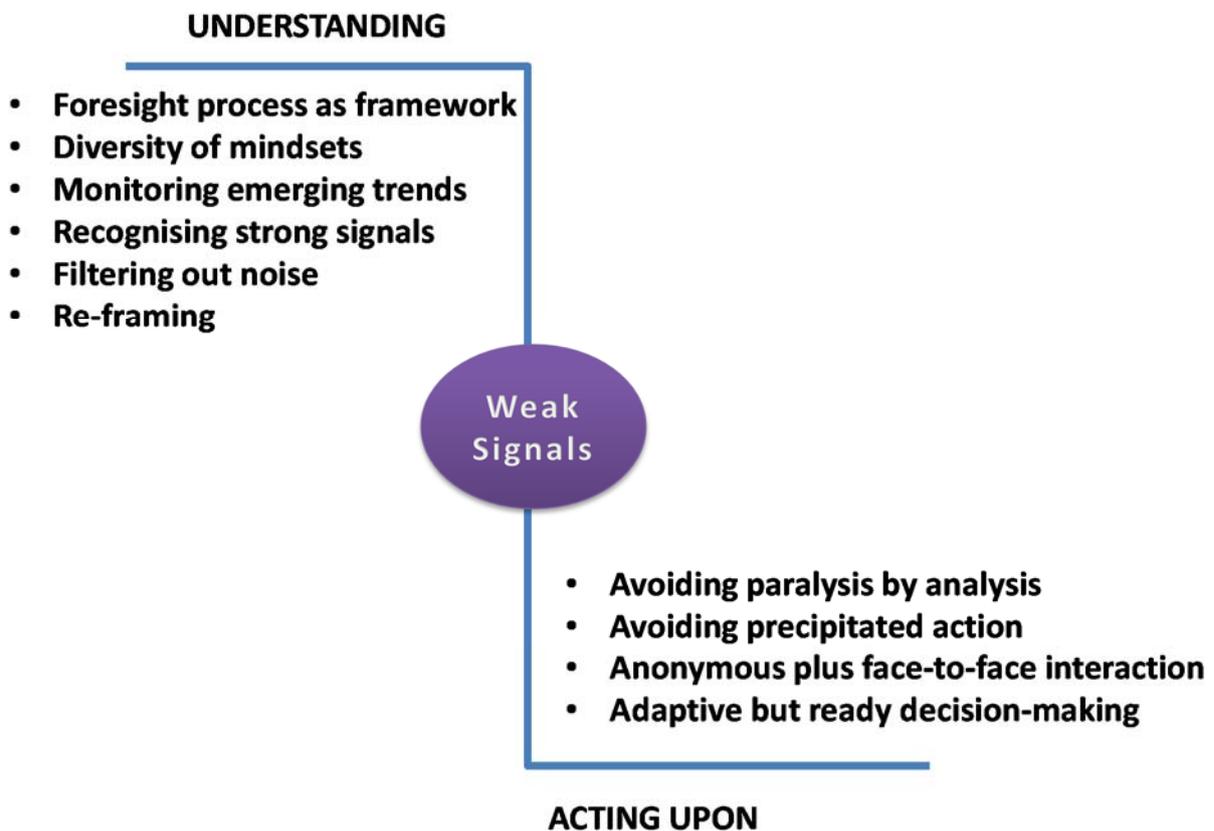


Figure 5
Making the most of weak signals (Mendonca S. Cardoso G. Caraca J. 2012)

Weak signals are often found in unstructured data; hence the importance of scanning. Linear thinking presupposes that there is proportionate responses to feedback (for every action there is an equal and opposite reaction), and therefore ignores unintended consequences and surprises. Participants in strategy making often overlook weak signals and a lack of

²¹⁴ Mintzberg. (2005) “As much as 90% of all information we are searching for aims at supporting views, beliefs or hypotheses that we have long cherished..”

²¹⁵ Saul (2006). “Weak signals are those ambiguous and controversial bits of information about the competitive environment that are typically hidden among the “noise” of the prevailing sense-making paradigm and that gradually coalesce to form a pattern of intelligence that alerts sensitive leaders that it may be time to change their game.”

consensus leads to misaligned or inappropriate strategies. Arguing in the sensemaking context is a belief driven process which can be directed to focus thinking and ensure alignment and to surface weak signals from the data presented to strategy makers. The process of arguing balances intuitive thoughts against the evidence offered.

Mendonca et al²¹⁶ proposed that in order to improve strategic foresight, a form of structured networked communications be used to improve understanding and create action on the weak signals identified. See Figure 5. Mendonca et al also suggested:

- Ensure that a diverse base of individuals are empowered to make claims for weak signals;
- _ Tolerance of marginal and outlier opinions that stretch or threaten current beliefs;
- _ Collect the qualitative arguments behind those claims;
- _ Use an anonymous argumentative process when it is important to open up new options and use face-to-face processes when ensuring commitment is key;
- _ Identify and reduce barriers to communication between different sectors, departments and communities of experts;
- _ Provide room for senior decision-makers who can become champions of hypothetical weak signals amplifying the strategic message among the community of stakeholders;
- _ Foster the use of network mediation and brokering approaches using information gathered from different sources and media.

4.11 Mindfulness and Weak Signal Identification

The need to notice weak signals is similar in many ways to need to detect small failures in high reliability organizations. Research into High Reliability Organisations²¹⁷ shows that people in these organisations are mindful: they are aware of the constantly changing nature of organizations and the emergent nature of outcomes set in motion by actions. Although their attention is rather on failure than success, they shine the penlights of attention on detail in order to detect weak signals of failures, rather than simplifying and categorising, thereby becoming more sensitive to small changes. Decisions are migrated to experts wherever these are located. Cognitively we are trained to be rational and to consider a logical to everything.

²¹⁶ Mendonca et al (2012)

²¹⁷ Weick & Sutcliffe, 2001, Weick et al., (1999)

When we become mindful, and open our minds to the philosophical concept that things can emerge from nothing, we become mindful of the small and subtle discontinuous changes that we see on the periphery of chaos.

Weick (2009) advocates that leaders cultivate four abilities that advance sensemaking through building mindfulness²¹⁸:

- improvisation, or developing individual and group intuition with the aim of becoming creative under pressure through surfacing,
- wisdom or the understanding that complete knowledge is not possible: there will always be ambiguity and uncertainty;
- respectful interaction through three imperatives: respecting the reports of others: being prepared to base beliefs or actions on other; report honestly in order that others can use your observations; and self-respect or integration with the reports of others without reducing one's own value;
- communication as a tool through story-telling and conversation to enable others to experience reality and individual constitution and re-constitution without losing the sense of self.

Mendonca et al are specific in that they are suggesting ways to identify and amplify weak signals. Weick is proposing mindfulness to advance sensemaking, which as has been noted, is appropriate for strategy making and weak signal identification. Applying both Mendonca et al and Weick's thought processes to the problem of weak signal identification, more commonalities than differences can be found. Communication is seen by both as critical. Mendonca advocates anonymous arguing but notes that where commitment is critical it has to be face to face. Weick agrees and goes further to note that communication needs to be respectful, honest, show integrity without reducing the value of any person. Mendonca advises gathering information from a variety of sources, maintaining a diversity of mindsets, and a tolerance for marginal ideas. Weick suggests improvisation and development of individual and group intuition, along with fostering the wisdom to know that not everything can be known. The differences which are notable are that Mendonca et al advocate senior

²¹⁸ Langer (1989). "...successful leader may be the person who recognizes that we all have talents and who has sees his or her main job as encouraging mindfulness in those being led" ..

decision makers to champion the weak signals among the community of stakeholders. Weick proposes that mindfulness is extended to more people, who would themselves notice weak signals.

Chapter 5

Arguing to make Sense

“If you do not change direction, you may end up where you are heading”.

Lao Tzu

5.1 Summary

This conceptual study has linked arguing as a belief-driven process of sensemaking, with weak signal identification in strategy making. Strategy has been defined for the purposes of this research as ‘the mindful crafting of future vision and opportunity for an organisation, based on deep understanding, beliefs, knowledge of the organisation and its environment, analogical and rational thinking and a willingness to explore the unexplored’.

Traditionally strategy has been developed as a rational process by reviewing past successes, combining insights from the past with an analysis of strengths, weaknesses, threats and opportunities in a linear fashion to craft a direction for the organisation. Weak signals are overlooked in this process, which has no place for intuitive insights or the detection of subtle patterns. Although this is a reasonably scientific process, based on retrospective views, what is produced is a story, which often misses potential opportunities.

A better story and better way to create the strategy story is needed for modern organisation. This research has focused on investigating sensemaking, and in particular belief driven sensemaking, linking this to weak signal identification in a strategy making environment.

The research has found that identity of the sensemaker is the most important of the seven properties identified by Weick, as individual identity is linked to belief, and beliefs colour the sense that is made. Beliefs create expectations, which inhibit noticing, but which can be changed through a reasoned arguing process. Several conclusions have also been drawn about the leadership and composition of a group of people (stakeholders) who create strategy drawing from the research several factors which will contribute to a more effective process of weak signal identification and then amplification.

Turbulence is the source of the multiple subtle un-codifiable patterns found on the periphery of organisations. Foresight or the ability to predict the future is limited unless these patterns can be identified and amplified before strategic decisions are made regarding future directions. The constant turbulence and changes taking place in economic and business environments today means that most organisations are complex adaptive systems operating on edge of chaos environments under conditions of ambiguity, complexity and information load.

Weak signals abound in the edge of chaos but will typically not be identified through traditional linear strategy making processes. Traditional strategy making relies on overly linear and rational approaches to develop strategy. Organisations need new strategic vocabularies of coping, new ways of identifying weak signals, new ways to find opportunity in order to respond to the chaotic conditions, to ensure their own survival.

Strategy making today is multi-contextual sensemaking which takes place in organisational environments operating on the edge of chaos, where subtle patterns exist to be noticed by those with improved abilities to discern cues and the freedom to express these as opportunities. Strategy making can no longer be a linear analysis of past success and failure combined with forecasting to determine a future direction. Strategy in organisations today should not discard all the linear approaches of the past, but should rather seek to combine these with more intuitive ways of identifying weak signals. Although emergent strategy and strategic intent are approaches to strategy making in which leaders and strategy makers observe organisational life and identify cues for the future from the disorder and chaos found on the periphery, the approach expects opportunities to emerge from the chaos Both are

opportunistic approaches to strategy making through learning by doing which are likely to be disrupted by the turbulence which is the source of the chaos. Without reverting to the linear methods of traditional strategy making, an approach to making strategy which builds on an emergent model retaining the rational thought processes but enhancing this with more intuitive surfacing methods is proposed by this research.

Information load leads to arousal which causes people to overlook cues, missing the subtle patterns which may be the leading indicators for the next competitive advantage. Intuitive thinking which applies tacit knowledge to noticed patterns has been found to be an important factor in decision making in organisations. An improved ability to deal with information load can be seen in people with broad experience or multiple identities. These people are more likely to notice very subtle patterns or cues. The ability to notice more is therefore reliant on multiple identities of the sensemakers, and a mindful approach which uses intuitive mental processes.

Weak signal identification is an intuitive process through which tacit knowledge is used to detect patterns in information flows. The ability to intuit is linked to broad experience and multiple identities as it is the unconscious application of tacit knowledge. It is increasingly seen by researchers as a resource for decision making in individuals, and in business. Weak signals as indicators of potential opportunity are often lost in the organisational noise. The subtle patterns need to be noticed, debated and amplified before they can be crafted into the vocabulary and stories of the organisation. Identifying these weak signals helps to determine the next opportunity or opportunities, but the final decision about what is noticed is made by people; reflexive beings who make sense through the lenses and filters of their own identities and beliefs. Arguing has been found to be a means to ensure that the people involved in strategy making move through a process in which the weak signals noticed are articulated to the group, the group then reflect upon what they have heard, before arguing their way to a collective agreement which may change existing beliefs.

The research indicates that combining an intuitive identification process with arguing as a rational process which takes place in an environment of trust, can amplify weak signals causing new knowledge to emerge.

In the arguing process, stakeholders argue their way from one viewpoint to another, or use analogical thinking to find new knowledge. The process of arguing to make sense is therefore a learning process in which knowledge is either changed or created.

This conceptual study contributes to the body of knowledge by proposing a new approach to identifying and amplifying weak signals through the application by stakeholders of an intuitive-rationalising process to the strategy making process.

The situational factors which have been identified through this research as likely to enhance an arguing to make sense process in strategy making are: mindful sensegiving from both leader and stakeholders; the perceived freedom and trust among stakeholders to apply tacit knowledge to intuitively notice subtle patterns; requisite variety in the identities and beliefs of the stakeholders; both narratives and arguing to enable the team to make sense and reach agreement. These factors form a gestalt in that they influence each other, all need to be present although the order in which they are created is not fixed. These situational factors are explored in some detail in the paragraphs which follow to explain the findings from the research conducted, and to present a model for an intuitive-rational process for arguing to make sense in strategy. The model has not been tested empirically as part of this research.

5.2 Mindful Sensegiving

The need to notice weak signals is similar in many ways to the need to detect small failures in high reliability organizations. People in high reliability organisations are mindful: they are aware of the constantly changing nature of organizations and the emergent nature of outcomes set in motion by actions. Although their attention is rather on failure than success, they shine the penlights of attention on detail in order to detect weak signals of failures, rather than simplifying and categorising.

Mindfulness is a state of conscious awareness, being present in the moment and being open to novelty. Mindful attention focuses on detail, and on being sensitive to small changes. Rather than categorising detail mindful people explore the detail to understand its nuances, creating new categories if necessary to make sense. In many ways being mindful is revealed in the manner in which sense is given: when the leader or the stakeholders in a strategy making session gives sense to the stakeholders, they reveal their awareness of the context and content of their environment.

Mindful leadership is the first critical factor as mindful leaders are not autocratic in their sensegiving but at all times hold an awareness of the impact of the sense they give, tailoring their sensegiving to encourage stakeholders in turn to be mindful, to use their intuition, focus on the detail of content and context and ensure that when conflicts take place as they inevitably will, that they are quick and productive. The mindful leader articulates strategic

visions and ways of working to the team, through the creative use of words, stories and conversations to help others be mindful, see things in different ways, managing the process to stimulate exposure of intuitive knowledge, creativity and arguing to make sense. Without mindful attention from the leader and from the stakeholders themselves to the context and content of the sense that is made, weak signals will be overlooked and opportunities missed.

Mindful leaders are aware of the innate tensions that exist in strategy making teams, caused by cynicism, stress and divisiveness, taking active steps to alleviate the tensions, although their guidance is with an invisible hand by giving sense to the team throughout the strategy making gathering. Leading in a strategy making environment implies personal awareness: of the personal expectations and beliefs held by the leader; awareness of the stakeholders and their expectations and beliefs, and awareness of the pivotal role which the leader in a strategy making session plays in the sense that is made by such a group.

Leaders of strategy making groups are both sensemakers and sensegivers: making sense of the organisational and environmental cues in order to give sense to the group. Sensemaking by both leader and stakeholders, when coupled with animation will stimulate sensemaking in the group. Control in the form of guidance by the leader plays a role in the sense that is made, but excessive control stifles sensemaking, introducing guardedness among stakeholders who seek to satisfy the leader's wishes rather than applying their intuition and exploring creative options.

Leaders who practice mindfulness aware of the impact of their sensegiving, are open to adapting to new information uncovered in the strategy making process, actively encouraging the finding of new information in their stakeholders. They are aware that human behaviour is stimulated by creating a desire for learning, positive emotions, and a safe platform to explore. As Plato notes: "Human behaviour flows from three main sources: desire, emotion and knowledge." Where there is the freedom and desire to learn, people will explore; where there is trust, knowledge and experience people become creative; where the cognitive emotional process of intuition is allowed to notice weak signals, an arguing process will draw in alternative viewpoints to reach consensus. The mindful leader pays attention to situations and contexts, welcoming new information, and in turn encouraging mindfulness in those who are led. There is an awareness of views other than their own, with an orientation towards process rather than outcome.

When the focus shifts to process rather than outcome, participants become more focused on the content and context, noticing more cues than when they focus on outcomes. Leader sensegiving which provides guidance, encourages creativity and develops an environment of trust, creates positive energy, and allows for creativity. The non-judgemental encouragement of intuitive concepts and ideas, with a free-association and scenario approach, which is then followed by a structured argument to debate concepts and ideas has been shown by the research to be likely to identify and amplify weak signals.

Stakeholders in a strategy making group are those other members aside from the leader who give their own form of sense to the group, and to the leader as they share intuitions and knowledge related to their particular area of expertise. Stakeholder sensegiving has been found by this research to be as important to the strategy making process as leader sensegiving as it focuses the attention of the leader and other members of the group on important issues and weak signals. Stakeholders are the members of the strategy making group who the research shows should be a balanced mixture of individuals broad experience and multiple identities, deep experience and knowledge, and those with creative identities as well as those who operate on the periphery of the organisation. The research has shown that mindfulness in stakeholders will ensure that they notice more cues and hold an awareness of their own expectations and those of the group throughout the strategy making session.

The manner in which sense is given by the stakeholders and the leader to the group, colours the sense made by the group. Leaders guide mindfulness by encouraging stakeholders to be aware and giving stakeholders the freedom to express mindful thoughts, thereby setting the scene and ensuring a trust environment for sharing of intuitive knowledge, and arguing to make sense. Stakeholders offer viewpoints and share insights with the group, employing the environment of trust created by a mindful leader to present weak signals and associative thoughts.

Cognitively people are trained to be rational and to consider a logical flow to everything. When people become mindful, and open their minds to the philosophical concept that things can emerge from nothing, they become aware (mindful) of the small and subtle discontinuous changes that exist on the periphery of chaos, and open their minds to the understanding that there is no complete knowledge, that things can appear from nowhere and ambiguity and uncertainty will always be present. This openness creates a less guarded approach to applying intuitive thinking in groups, which can be enhanced by explicit support for intuitive

thinking from the leader of the group. Being mindful means setting aside the pressing issues of self to address the more important issues of the collective.

Weak signal identification in strategy making needs mindful attention in order to be effective; the research indicates that mindful leadership is pivotal to guiding the successful identification of weak signals. When mindful attention is paid by stakeholders in a strategy making group, the intuitive-rational process model presented as part of these findings (Figure 6) can be applied to identify and then amplify weak signals.

5.3 Freedom and Trust

The rational and linear nature of most organisational gatherings does not encourage the application of tacit knowledge and intuitive thought processes. People are by nature reluctant to expose their intuited thoughts, particularly in an environment in which they feel threatened, exposed or where there is no common or shared purpose. When an environment of trust is created, and people feel safe to express their reflected thoughts, the subtle patterns which they have noticed are shared with others. The process of exposing the intuited weak signals to an arguing process therefore requires a trust environment, in which the stakeholders trust each other and trust the leader.

The leadership role is pivotal as the leader creates a collective identity and shared purpose, building trust and cooperation through communication, honesty and consistency. Leaders should be mindful of how to use narratives, scenarios and stories as communication which guides the stakeholders in a group with an invisible hand.

Leadership honesty has to be inviolable in order to build the level of trust among group members which encourages sharing of tacit knowledge. Consistency of words and deeds confirms the messages given in communications and the extent of the leader's honesty, building trust among stakeholders. Interpersonal identities create trust relationships between members of the team. Without trust relationships stakeholders will not contribute meaningfully to the strategy making, creativity and noticing are subdued and subject to the leader's sensegiving directives. Trust is built on consistency, honesty and on-going communications by the leader. These trust relationships foster innovation and intra-stakeholder accountability. Even in a trust environment a very directive or autocratic leader can create expectations and self-fulfilling properties in the minds of the stakeholders.

The research has shown that an appropriate group during strategy making sessions would be an N-form group. This way of operating in an organisation which creates more openness

innovation and equality among stakeholders, which is an important contributor to trust. In an N-form group, the constellation of people is temporary in nature, brought together to combine things rather than divide them, communication is lateral rather than vertical, taking place in a heterarchy, however temporary it may be, with the leader acting as a catalyst for the sharing of knowledge.

Strategy making sessions are meetings, which carry with them the culture and ideologies of the organisation. The formation of a heterarchy with leader as a catalyst supports the development of trust and interactions among the leader and the other stakeholders, creating a temporary unit which operates outside of the organisational ideologies to make strategy.

Short lived durations for group relationships prevent strong task dependencies forming between stakeholders. Group inter-relationships and interactions generate emotions as people make sense, and as relationships deepen dependencies on stakeholders form. Dependencies lead to expectancy, which in turn generate negative emotions when surprised by non-delivery against expectations. This implies that newly formed groups or groups which are temporary in nature are more likely to generate positive emotions as the relationship between group members will be such that expectations of other stakeholders will not yet have developed. Negative emotions form in long established teams as familiarity creates expectation of other stakeholders. Negative emotions limit innovation as the autonomic arousal caused by negative emotion causes people to disregard potentially important cues, while positive emotions stimulate innovation and noticing.

This implies that strategy making groups should not be the core leadership team of an organisation; if the core leadership team have strong established relationships, but rather should be a group of individuals selected for a requisite variety of identities, brought together for a short-lived relationship: that of making strategy. The non-routineness of the strategy making session increases positive stress in the group which in turn will improve the performance of the group. In such short-lived groups where predictability is reduced, but trust has been established, positive emotions are more likely.

Positive emotions are linked to innovation and creativity, and therefore to be desired in strategy making groups. Positive emotions are likely to be generated by sensemaking surprises within the group because the group has been formulated to identify surprises. Stakeholders who hold minority viewpoints have a greater need for trust in teams as their knowledge and experience is often discounted or is examined in greater cognitive depth

leading to the noticing of more cues and innovation. The viewpoints expressed by majority stakeholders are subjected to far less cognitive scrutiny than minority viewpoints. Leaders should encourage both the free articulation of minority viewpoints, and greater examination of majority viewpoints.

5.4 Story-Telling and Arguing

Mindful leaders set the scene for strategy making, by telling compelling stories to build rapport and create a sense of shared identity. The leader of the strategy making session or meeting gives sense and is the initial storyteller who provides the direction for the group, fostering mindfulness, intragroup communication, intra-group honesty and consistency and providing psychological safety for the stakeholders.

Through story-telling the leader creates a sense of collective identity, which in turn builds trust in the leader and in the stakeholders. The leader gives sense to the group, encouraging narrative descriptions of intuited patterns among the stakeholders, and then guiding arguing by providing scaffolding to ensure that the arguments expressed are well considered and rational.

Organisations are arranged around arguing: in planned gatherings of people: meetings and work sessions, which extend the rules and culture of the organisation to forums where people can make sense collectively. When groups gather to make strategy they traditionally do so in a relatively formal setting, as stakeholders in the strategy making process. The research suggests that making sense in a strategy session requires the temporary setting aside of the organisational ideologies, rather utilising an N-form style to create an environment conducive to strategic sensemaking.

When stakeholders articulate multiple scenarios, intuitive insights, through narratives and verbalised thoughts they provide the group with a means of triggering conversation around the noticed weak signals. As a group, members reflect on the articulated weak signals, creatively making associative connections between concepts, then constructing mental arguments using the scaffolding provided by the leader to argue their way to strategic sense around potential of the weak signals.

Stories in the form of scenarios are important as they allow people to express views and create organisational and time-based contexts for concepts or ideas. Stories in strategy making are potentially even more important as they enable stakeholders to understand the potential in the different scenarios: building plausible futures which can be used to craft new paradigms within the broader organisation.

Stakeholders are the strategy makers who tell stories as they describe the weak signals they have intuited. Other stakeholders extend these stories through embellishment and connection, creating multiple scenarios as possible future directions. Story-telling and conversations are used to stimulate discussion and arguing without losing the sense that was found. Stakeholders share stories to highlight patterns they have noticed, create multiple scenarios for debate, and amplify the potential in the weak signals and for decision making. Stories shared in these groups become vocabularies of strategy making; common themes which are then shared with the organisation, and become new ideologies, with new vocabularies. Arguing as the structured process of reasoned debate leads group members to move from one belief or expectation to another.

Such narratives make the complex simple, expose subtleties, make debates meaningful, and allow people in organisations to use a common language to rationalise and make sense. Mindful leaders share sensegiving stories and encourage stakeholders to do the same, to build rapport and shared identity, create context and give stakeholders the legitimacy and responsibility of being formal members of the group with joint responsibility for the outcomes.

Arguing about multiple potential scenarios is a means of triggering and rationalising debate around weak signals, and a way of building skill in intuitive-rational thinking and arguing. The natural tendency to think narratively rather than argumentatively inhibits the ability of stakeholders to meaningfully participate in arguing. Part of the leader's role is to encourage reasoned debate among stakeholders. The research has indicated that one way to achieve this may be via the use of scaffolding. Scaffolding is a leader-driven form of sensegiving that guides participants by requiring that they flesh out a mental scaffold provided by the leader, articulating their thoughts in a categorised and structured manner before presenting their argument to the group in narrative form. Scaffolding can also take the form of pre-planned questions which are posed to the members of a group, to trigger sensemaking and the

expression of intuitive thoughts, or the leader can stimulate debate through asking pre-determined questions after an intuitive noticing has been articulated.

Sensegiving gaps are perceived where is ambiguity or unpredictability which will lead to multiple stories rather than a single narrative. Mindful leaders are wise and know that knowledge is never complete and plausibility is good enough for a strategic vision. Thus stakeholders are encouraged to explore multiple versions of the strategy story before settling on the most plausible one. Words matter: strategy is constructed from words. Words create the organisational forms, scripts, expectations, memories, connections and structures of an organisation. Organisations have no structure and no form without words and conversation. Strategy likewise has no structure, generates no commitment or emotion without words. Words matter to the organisation, and to strategy making.

Vocabularies of intuiting and arguing for strategy making are the vocabularies of sharing and debate. During the process of intuiting-rationalising in strategy, multiple scenarios as narratives of sharing will permit the articulation of intuitive thoughts, and lead to rational arguing which makes sense

5.5 Requisite Variety in Identity and Beliefs

The research has shown that although all sensemaking properties are important, identity is particularly so in strategy making. Identities are the discursive constructions that individuals build around their sense of self to assist them to make sense of the world around them. Identity is a decision process as who we are as individuals can only be known once we have decided who we are.

Identity and belief are intertwined, but can be consciously considered through a mindful awareness of self. Identity encompasses beliefs, knowledge and skills, all of which influence what is noticed by an individual. What is noticed is important to sensemaking and particularly so in strategy making where what is noticed can be the next competitive advantage for the organisation.

A broad diversity of identity within the strategy makers ensures that there are opposing viewpoints, to argue alternative positions and stimulate noticing of cues. Requisite variety and cognitive complexity are created by selection for diversity and multiple identities among stakeholders, allowing for the multi-contextual sensemaking that is strategy making.

Intuition or tacit knowledge is related to identity, as the more identities an individual has, the more, knowledge, skills, and therefore frames the individual has to choose from when he or she notices subtle patterns or cues to make sense. Noticing these patterns is an intuitive and often a creative process, which happens most productively in an environment where there is intra-member and intra-leader trust, explicit understanding of and support for the need to innovate, and mindful leader sensegiving which guides but does not direct. The ability to notice weak signals is dependent on the multiple identities of the strategy maker and the associated beliefs and expectations. When strategy teams come together to make sense, they bring with them their individual and relational identities, beliefs, experience and the tacit knowledge which can focus the attention of the sensemaker on the indistinct patterns. The same identities, beliefs, experience and tacit knowledge can create expectations in the minds of the sensemakers, causing them to overlook the subtle patterns which indicate weak signals.

When people search for meaning the solutions which they adopt are plausible not factual, coherent and sensible, reasonable in the context of the situation and they resonate with the group.

In a strategy making environment, specialists should be part of the strategy making team, but not exclusively. A balance of specialists, generalists and people with creative identities is most likely to both identify weak signals and to amplify these to a meaningful opportunity. Generalists or people with multiple identities are less rigid than people with limited identities and deeper specialist knowledge, as their knowledge systems are codified less tightly than specialists. Specialists with fewer identities have less frames to select from to make sense and their deep levels of knowledge have tightly codified knowledge systems which inhibit the noticing of cues or weak signals and build strong expectations. Specialists are more likely to have tightly codified knowledge bases and as their experience is narrow and deep, they are more likely to experience the impact of information load, holding expectations which lead to their missing cues. Those who operate on the periphery of the organisation, on the edge between order and chaos, and those who possess creative identities are likely to have better insight into potential weak signals.

The broader the experience base of the individual, the more loosely codified is the knowledge base and the more identities he or she has to match cues against when making sense, and the less likely to suffer the impact of information load. The research suggests that a balance of specialists and generalists as well as those with creative identities in a strategy making group

will be the most effective mix for making strategy, and triggering sufficient opposing views. The generalists and those with creative identities are most likely to notice weak signals or generate new ideas by making connections. Specialists are important as they will usually hold a majority view, expressing their viewpoints based on expectation, arguing against the minority views of the generalists or creative.

Creative thinkers are better able to use analogous thinking to make associative connections between the cues they notice and their frames in a way which creates new information. The mixture of identities will ensure that there are minority and majority viewpoints represented and ensure meaningful debate.

Minorities have an enhanced need for group trust placing an overhead on the leader to manage the group but their presence and the proposal of minority views stimulates a more in depth cognitive examination of the cues which they present often leading to innovation.

Individual identity as noted, determines the cues which are noticed, and the frames against which the cues are matched, ultimately determining the sense that is made. Generalists are able to deal with ambiguity, complexity and information load better than people with limited identities. Although their multiple identities reduce the number of times they are likely to be surprised, their experience base opens their minds to the possibility of multiple potential solutions to the cues they notice. They are likely to be able to make sense of anything because their experience has proven to them that they can.

Requisite variety in diversity of identity therefore brings the required cognitive complexity to the group. Fixed expectations of viewpoints are more likely to be found among the majority viewpoints. These will generate quick conflicts, particularly where the minority members feel sufficiently safe to expose their viewpoints or tacit knowledge, to debate potential weak signals. These quick conflicts generate autonomic arousal which can restrict sensemaking, but as long as the leader is mindful of the autonomic arousal, quick conflicts are arguing processes, which can lead to innovation.

A balance in the strategy making group of people with deep specialist knowledge; people with broad experience and multiple identities, and those with creative identities, particularly those who operate on the periphery of the organisation close to the edge of chaos therefore appears to offer the best opportunity to identify weak signals, and to amplify these through associative thinking and reasoned discourse. The mindful construction of a team with the

requisite variety of membership selected based on their identities would generate opportunities for noticing weak signals and arguing these to sensibility.

After consideration of the findings of this research it has been incorporated into a diagrammatic model. This model is described in the following section of this thesis.

5.6 Intuitive-Rationalising: Arguing to make Sense

A model which diagrammatically presents a process for arguing to make sense has been extrapolated from the findings of the research and is presented in this section. A different approach to strategy making which embraces intuitive thinking and resolves the conflict is suggested by the findings of the research. Conditions for this approach must be correct: the leader and the stakeholders must be mindful of their own identities and the context of the organisation for making strategy. The leader should develop trust among the stakeholders as trust will lead stakeholders to feel safe to articulate their intuitive thinking.

The constellation of stakeholders to the strategy making session must not be a long established group of individuals but rather a group brought together for a short term assignment: that of making strategy. This will ensure that there are no established task dependencies among the group, which would cause negative emotion.

A balanced mix of identities among the stakeholders is also essential: to ensure that there are generalists, creative thinkers and those who operate on the periphery of the organisation; who will intuit new concepts or ideas and connect them with others. Specialists must also be present as they represent the majority views in many instances with tightly codified knowledge systems which will cause them to question the articulated signals and trigger arguing.

Once the conditions needed have been met, the leader gives sense to the session through story telling: creating context, shared purpose and a collective identity for the group, and explicitly encouraging creativity and the expression of intuited ideas. The leader's sensegiving throughout the session is pivotal to the success of the session as the leader provides context, guidance and description of the scaffolding which is to be used during arguing, to the group.

The weak signals identified by the stakeholders are articulated as scenarios or stories to the other stakeholders during a free expression session. The articulation by the stakeholders in the group is likely to start slowly as the articulation is dependent on short lived trust relationships developed in this session by the leader, and on the manner in which the leader

guides the session: allowing the stakeholder the freedom to be creative and innovative and managing conflicts to a quick conclusion.

The stakeholders reflect on the articulated weak signals before they present arguments to support or rebut the concepts proposed. Scaffolding is provided by the leader to ensure that their arguments are rational, categorised and will add value to the arguing process.

The process builds upon Sadler-Smith's Feed-in, Feed Forward and Feed Backward model to produce a model of Intuitive-Rationalising: Arguing to Make Sense (Figure 6).

People intuitively notice patterns in the flow of information. In strategy making groups as in other situations, identities, beliefs, experience, learning and knowledge, and creativity act as filters for what is noticed; the broader the experience, base and the more identities the stakeholder has to select from to match to cues in the flow of information, the more cues that will be noticed and the better the sense that can be made.

Beliefs and expectations colour the sense that is made, and influence what is not noticed or not made explicit. To find weak signals tacit knowledge is applied intuitively to notice subtle patterns in the flow of information. Generalists, those with creative identities and those who operate on the periphery of the organisation are most likely to intuitively notice weak signals. Mindful attention focuses the thoughts of the strategy makers on context and content. Cues noticed are filtered through the multiple identities to find relevant frames and to make sense to the stakeholders based on the context and content which he or she has understood. Once sense has been made of the noticed cue, the weak signal is articulated and shared with the Group through a narrative process.

The exploration of minority viewpoints is encouraged by the leader and the group as exploration of minority views causes more cues to be noticed by the strategy making group. Exposing minority view, tacit knowledge or intuition related to weak signals, requires trust in the other stakeholders as once the minority view of tacit knowledge is exposed, a process of arguing will either amplify the weak signal or cause it to be discarded by the group. Uncertainty will be present as the viewpoints are no more than plausible stories, but this is the conundrum of future thinking: nothing is ever known with certainty until it happens.

Once shared, weak signals or patterns are assimilated, then reflected upon by the other stakeholders and explored in narrative form. Opposing and associative views and scenarios are proposed by stakeholders in the group through arguing and reasoned debate. A minority view will cause the weak signal to be explored more thoroughly, causing more cues to be

noticed while a majority viewpoint is less likely to propose a weak signal concept and fewer cues will be noticed related to the majority viewpoint.

It is anticipated that the arguing process to debate the narrative presentation of possible scenarios will follow the gestalt of Broderiede's description of an argument. Arguments and counter arguments are formulated and presented through a leader driven scaffolding process which gives structure to the debate. Debate takes place in a reasoned manner, but research suggests that where there are strong majority and minority views, quick conflicts will occur, and will create innovation. The arguments presented will either reinforce existing beliefs of stakeholders or will justify an inferential leap to the adoption of a new belief. If a new belief is adopted a rationale to justify the leap will be presented as part of the argument. The application of requisite variety within the group should ensure that at least two opposing claims or proposals will be presented by the stakeholders.

The research suggests that expectations will be strongest from those with specialist identities, whose knowledge is tightly codified causing them to overlook cues (believing is seeing). When an intuitive thought is identified by a stakeholder that does not fit the expectations of other stakeholders, quick conflicts are likely. Provided the conflict is managed positively by the leader, it can lead to innovation. Those with many identities to choose from will hold fewer and weaker expectations as their knowledge will be loosely codified, but they will be able to make sense of more cues. Stakeholders with creative identities are most likely to apply associative thinking to create new concepts and ideas by linking multiple thoughts or disparate concepts.

Where trust is low in groups, or perceived legitimacy and importance of issues was not made clear through leader's sensegiving, the stakeholders will not notice the patterns due to filtering, or if they do notice them, they may adopt the majority position as it is psychologically safer. If trust is high: in the leader of the group and between stakeholders, there is legitimacy, and the importance of the issues has been made clear, the stakeholders are more likely to notice patterns and share their insights or minority views with the group as stories, suspending their beliefs and expectations.

After individuals share their insights a process of debate or rationalising takes place during which the stakeholders argue their way to sense about the patterns or weak signals, amplifying them in the process. Arguing as a belief driven process of sensemaking is used within the group to structure a path to agreement regarding the most plausible story.

The arguing process will only be successful if intuited patterns are reported on honestly to the group by the stakeholders who are mindfully aware of the impact of their individual beliefs on their tacit knowledge and expectations. Cognitive processes of association are applied during the debate process to link multiple weak signals together creating new concepts which arise from the chaos.

The group argues their way to agreement on the weak signals, learning in the process, and creating new knowledge and expectations. Beliefs may also be adjusted during this process. During the process of agreement, the stakeholders consolidate the arguments into decisions, which are absorbed by the individuals as learning. The process can loop until a decision is made by the group, after which the new information is shared with the organisation through a sensegiving process which the new information becomes newly institutionalised. Issues of trust can cause the filtering process to inhibit discussion and narrative sharing, and loop the process back to the initial articulation of weak signals.

5.7 Conclusions

Strategy is a multidimensional sensemaking to create a plausible story for the organisation. The stories presented by the strategy are those which are found to be most plausible by the group.

The research which was conducted found that strategy making in turbulent requires a new approach which gives more structure to emergent strategy and strategic intent, combining an intuitive with a rationalising process. Strategy making is the creation of a plausible story built from narratives and debated to agreement through arguing to make sense. Arguing to make sense can change or strengthen beliefs, and amplify weak signals intuited and articulated to the group.

The intuitive-rationalising model suggested by this conceptual study provides a means to apply tacit knowledge to intuitively identify subtle patterns, the weak signals which offer possible strategic advantages, and then to debate the potential of the identified weak signals among a strategy team in a way which amplifies the weak signal.

Three important findings can be drawn from this research, although empirical research is needed to prove these.

Mindfulness is as applicable to strategy makers as it is in high reliability organisations as being mindful underpins the awareness of self and of organisational content and context.

Mindfulness in the leader is pivotal to the success of the process as the leader guides the stakeholders, ensuring shared purpose and an environment of trust. This is done through narrative communication to give sense, on-going honesty and consistency throughout. Both the leader and the stakeholders should be mindful sensegivers as well as sensemakers, giving sense to the group, while making sense of weak signals, and all the time holding an awareness of their self and the context.

The freedom to apply tacit knowledge to intuitively notice subtle patterns and to express intuitive thoughts is dependent on trust relationships with fellow stakeholders in strategy making, and should be explicitly explained by the leader of the strategy making session.

Requisite variety of identities and beliefs of the stakeholders is essential to enable not only noticing of subtle patterns but for productive argument. A balance of generalists, specialists and creative thinkers will create the necessary requisite variety within the group.

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