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# MANAGEMENT ACCOUNTABILITY FOR ENTERPRISE PROJECT SUCCESS

**Abstract**

Despite the growth and adoption of project management tools and methodologies, and the recognition of the contribution of project-mature organisations, achieving project success remains a challenge. An extensive literature review revealed different, and even contradictory, views on project success. The literature often focuses on either project success factors or success criteria, but seldom on a comprehensive framework embracing all aspects. Failing to distinguish between project success and project management success has led to increased pressure on project managers to deliver successful projects, although their mandates only empower them to deliver successful project management. It is argued that the complementary nature of various management responsibilities has led to a vague definition of responsibilities, and ultimately accountability, for project success. This paper presents a framework of factors influencing project success. The framework constitutes: (1) the efficient execution of project management; (2) the continuous alignment of project objectives with organisation strategic intent; (3) the optimum allocation of resources to project activities; and (4) the effective operations management realising the benefits from the project deliverables. It is shown that strategic (executive), line (operations), project, program and portfolio managers all have a direct impact on project success and that organisations should hold the respective managers accountable to ensure a comprehensive and integrated work effort resulting in successful projects.

**Keywords**: Project success; project management success; management accountability; new framework.

# MANAGEMENT ACCOUNTABILITY FOR ENTERPRISE PROJECT SUCCESS

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## INTRODUCTION

Organisations increasingly use project management (PM) as a strategic tool to drive change and realise business objectives (Dietrich & Lehtonen, 2005: 386; Naughton, 2007). The increased use of management by project is the result of challenges and opportunities brought about by technological developments, the changing dynamics of the macro environment, the shifting boundaries of knowledge, as well as by significant advances in organisational thinking on strategic direction (Badiru & Pulat, 1995: 3; Bredillet, 2005: 3; Andric, 2007).

Project success is essential to the well-being of modern organisations that use projects to implement their competitive strategies and make significant business changes (Nieto-Rodriguez & Evrard, 2004: 3; Karlsen, Andersen, Birkely & Odegard, 2005: 526). Despite the growth in, and adoption of, PM methodologies (Fujinami & Marshall, 2001: 36-38), increased training of project managers (Thiry, 2004: 18), and the numerous project management tools available (Davis, 2005; Besner & Hobbs, 2006: 37), achieving **project success** still seems to be an elusive business goal for many organisations (Jennings, 2004; Jiang, Klein & Chen, 2006: 69; Grenny, Maxfield, Shimberg, 2007: 46). Various authors have commented on the poor success rates of both information technology (IT) and business projects (Smith, 2004; Jennings, 2004). A recent study among 1 000 executives and project management professionals in 40 companies indicated an 85% failure rate among high-stakes business initiatives such as product releases, organisational restructuring and ongoing IT projects (Weinstein, 2007).

Lists of success factors are often presented after sketching a background of high failure rates. The research usually contains qualifications indicating that the factors listed are not comprehensive, but applicable to the particular situation analysed, while some authors remark on the lack of a comprehensive framework of factors influencing project success.

One of the success factors defined by Karlsen, Anderson, Birkley and Odegard (2006: 297) is the practice of clearly defined project responsibilities. A study of 230 global businesses shows that organisations tend to perform better when they use specific practices to make employees accountable (Lesie, Loch & Schaninger, 2006: 64). The research indicates that companies should "concentrate on giving individuals clear roles …" (Lesie *et al*., 2006: 64). This study examines the essential management responsibilities in order to create a framework within which success factors may be unambiguously assigned to the correct management role, to ensure accountability for enterprise project success. The framework developed can be used by practitioners to assign accountability for project success to the various managers within the organisation in order to achieve enterprise project success. The framework can also be used by researchers as a guideline for future research.

## RESEARCH METHOD AND SCOPE

### Research methodology

In order to develop a framework of management accountability for enterprise project success, an extensive literature review was conducted to define project success. A list of the most common project success factors was compiled (Table 1) after a review of the primary sources by authors on the topic. Project management success was defined and a clear distinction was drawn between it and project success, both in definition and in scope (Figure 1).

A literature review of the fundamental management roles was subsequently conducted. Management roles with project responsibilities were used to identify the various management levels within the organisation that contribute to project success.

A high-level framework of the various management roles which contribute to project success was constructed (Figure 3) and the responsibilities of each of these management roles in respect of project success were defined.

### Research demarcation

Dvir, Lipovetsky, Shenhar and Tishler (1998: 915-916) established that different classifications of projects should be used when establishing project success factors. Cleland (1999: 225) and Archibald (2003: 149) highlighted the challenges of projects in matrix organisations, where the execution of projects is not the mainstream business, yet is substantial enough to impact on organisation success. It is often within matrix organisations that multiple projects wrestle for recognition, resources and management attention (Kuprenas, 2003: 52; Hällgren & Maaninen-Olsson, 2005: 17).

A specific category of projects, namely **enterprise projects**, was chosen as the field of study for this research. The notion of enterprise projects is not limited to the information technology (IT) field, from where it originates, but is expanded to include all significant projects that have an impact at a strategic level. As such, minor IT projects are excluded, while major product launches and business transformation and restructuring projects fall within the scope of this study. Project-driven organisations, such as the construction industry, are excluded from the definition.

This study does not profess to contain all possible success factors, but rather those success factors which the author deemed necessary in order to establish the framework for practitioners to assign accountability to management, and for researchers to use as a guideline for future research.

## PROJECT SUCCESS

Research on project success mainly focuses on success criteria (those which define a project as successful) and success factors (those which need to be done correctly to ensure that a project is successful). Some authors (Bryde, 2005: 119-123; Karlsen *et al*., 2005: 526) comment on the distinction between project success and project management success, a rather important distinction for practitioners striving for successful projects – and one that can lead to a clear understanding of responsibilities to ensure success.

## Success factors

Project success factors are often referred to in project management literature. Most authors note that the success factors identified by them are applicable to a particular project type and situation and are often followed by comments on the lack of a comprehensive framework.

Table 1 represents a concise list of some of the most common project success factors, identified from the literature scrutinised, that are fairly generic across project types and industry verticals. Note that the number of authors listed per factor is limited to three. Table 1 does not provide an exhaustive list of all project success factors identified during the literature review, mainly since the various authors might construe concepts like organisation maturity differently, while others would list subsets of such maturity as factors themselves.

| **Project success factor** | **Author** |
|---|---|
| An appropriate management role for the project leader and good leadership skills | Ager & White, 2006: 31-32;<br>Cleland, 1999: 225;<br>Thamhain, 2004: 533 |
| Availability of resources | Belassi & Tukel, 1996: 145;<br>Engwall & Jerbant, 2003: 403<br>Spinner, 1992: 91 |
| Mutual cooperation between project management and line management functions | Bryde, 2005: 120;<br>Cooke-Davies, 2002: 185-191;<br>Munns & Bjeirmi, 1996: 84 |
| Organisation maturity, inclusive of organisation structure | Anderson & Jessen, 2003: 457;<br>Kuprenas, 2003: 60-61;<br>Nieto-Rodriguez & Evrard, 2004: 2 |
| Project handover | Bryde, 2005: 120;<br>Christenson & Walker, 2004: 39;<br>Munns & Bjeirmi, 1996: 84-85 |
| Project manager's performance | Belassi & Tukel, 1996: 145;<br>Grundy & Brown, 2002: 105;<br>Turner & Muller, 2005: 59 |
| Project selection | Archer & Ghasemzadeh, 1999: 207-216;<br>Campbell & Park, 2004: 27-28;<br>Frame, 1994: 174-192 |
| Resource constraints, often associated with the project timing, and also the blend between internal and external supplied resources | Badiru & Pulat, 1995:163, 181;<br>Engwall & Jerbant, 2003: 406-408;<br>Nieto-Rodriguez & Evrard, 2004: 2 |
| Scope control | Cooke-Davies, 2002: 185-191 |
| Clear definition of the project's key objectives during the establishment of a project and agreeing on success criteria | Grundy & Brown, 2002: 62;<br>Karlsen *et al*., 2006: 297;<br>Turner, 2004: 349-350 |
| The degree to which project objectives support the organisation's strategic intent (the contribution of the project) | Cooke-Davies, 2002: 185–191;<br>Johnson, 2004: 3–5 |
| Top management support for the project | Belassi & Tukel, 1996: 145;<br>Ives, 2005: 40<br>Matta & Ashkenas, 2005: 1-18 |
| Training, education and learning from previous projects supported by processes and tools | Cooke-Davies, 2002: 185-191;<br>Nieto-Rodriguez & Evrard, 2004: 2;<br>Phillips, Bothell & Snead, 2002: 39 |

**Table 1: Project success factors identified from literature reviewed**

Most authors include a clear indication of the limitation of the success factors defined and warn against the extrapolation of the results. Studying the various sources of literature leaves the practitioner with yet another set of success factors, and often conflicting views on the responsibility for *managing* the success factor. As these responsibilities differ vastly in nature, this leads to the notion that different management roles in organisations could be responsible for the different factors.

**Success criteria**

According to Boddy and Paton (2004: 225-233), management often expresses diametrically opposite views about the success or failure of complex projects. Knights and Murray (cited by Boddy & Paton, 2004: 225) and Lloyd and Newell (cited by Boddy & Paton, 2004: 225) clearly indicate the diverse perceptions of managers on the definition of the successful completion of a project. Not only do the project success criteria tend to be vaguely defined, but, even after project completion, stakeholders in a particular project may have directly opposing views on whether the project was successful or not. Karlsen *et al* (2005: 528-529) presented a summary of the vastly differing success criteria mooted by different authors.

According to Agarwal and Rathod (2006: 358), project success differs "in the minds of people who evaluate the project performance". Stakeholders external to the project organisation will use cost and time for judging project success, while those internal to the project tend to favour the attainment of scope as an indicator of success (Agarwal & Rathod, 2006: 358). Until the 1980s project success was often measured by using a narrow range of financial metrics, such as profit, return on investment and productivity (Bryde, 2005: 199). This was followed by the development of performance measurement systems (PMSs) that introduced additional criteria, but unfortunately, also complexity. Bryde (2005: 200) lists several sources (Feurer & Chaharbaghi; Walters; Kald & Nilsson; De Toni & Tonchia, all cited by Bryde, 2005) that reported on the use of different PMSs, often with mixed success.

Bryde concludes that the move away from the triangle of cost, time and quality to define project success, although a positive step, is constrained by both the practical difficulties of assessing success by using more subjective measures, as well as the inherent complexity introduced by these models.

**Project success and project management success**

The casually implied relationship between project management and project success requires greater clarification. Apart from a few sources (De Wit, 1988: 164; Munns & Bjeirmi, 1996: 84-85; Bryde, 2005: 120-121) which clearly distinguish between project success and project management success, most authors use the terms arbitrarily. Munns and Bjeirmi (1996: 84-85) distinguish between the scope of project success and the scope of project management success in terms of the time domain (Figure 1).

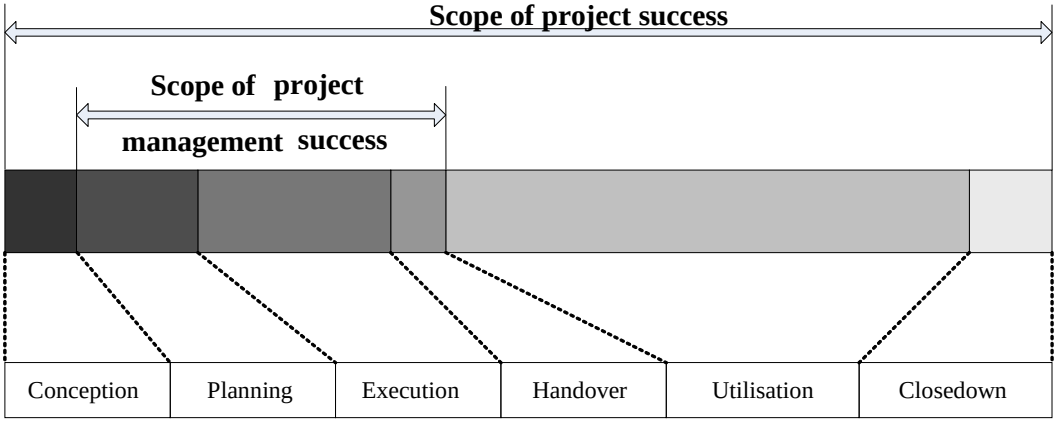


**Figure 1: Project success and Project Management success**
Source: Reproduced from Munns and Bjeirmi (1996: 84)

Using the construct of Munns and Bjeirmi (1996: 84), it is possible to contemplate a successful project, even though the project management process may have failed. Conversely, it is also possible to conceive a project perfectly managed to handover, yet failing in the utilisation phase (Bryde, 2005: 121).

De Wit (1988: 166) defines the difference as follows:

- **Project success** is the achievement of the overall objectives of the project. The degree to which these objectives are met determines the success or failure of a project.
- **Project management success** is the traditional measure of performance against cost, time and quality.

Based upon the definition for project success above, it would be irresponsible for organisations to hold project managers accountable for project success - a function for which they are neither responsible nor have the mandate to execute.

The distinction between project management success and project success **is not merely a debate about terminology;** it is central to the conducting of this research. Determining how the success of a project is to be defined is an essential precursor to the establishment of clear management responsibilities to ensure project success.

## MANAGEMENT ROLES IMPACTING ON PROJECT SUCCESS

Although Shenhar, Tishler, Dvir, Lipovetsky and Lechler (2002: 113) state that researchers have laboured on the "managerial variables critical to project success" for two decades, they fail to tie these variables to management roles. According to the study performed, each concept, viz. project management, program management, enterprise project management (EPM) and project portfolio management (PPM) – all common in project management literature – contributes to project success. In order to assign the responsibility for project success to each of these managers, it is necessary to define each of these concepts clearly.

Since it has been argued in Figure 1 that utilisation through operations plays an important role in achieving project success, the role of operation management was investigated. The role of strategic (executive) management required scrutiny since the alignment of project objectives with organisation strategy was frequently mentioned in the literature (Table 1).

## Program and project manager

According to Grundy and Brown (2002: 248), program management refers to the coordinated management of a group of related projects. Other authors (Cleland, 1999: 69; Dai & Wells, 2004: 524) refer to a programme as a complex project that consists of various sub-projects. Lycett, Rassau and Danson (2004: 289) support the above-mentioned definitions, but add that program management entails the "integration and management of a group of related projects with the intent of achieving benefits that would not be realised if they were managed independently". The aforementioned authors assert that program management requires basically the same skills, abilities and techniques as does the management of a project, albeit a very complex project. As a result, various texts use the terms 'program management' and 'project management' interchangeably (PMI, 2000: 10).

Although programs entail more complex and challenging deliverables than projects do, the responsibilities of a program manager resemble those of a project manager, as the same tools, techniques and processes are used. Figure 1 shows that it is the role of the project (program) manager to ensure project (program) management success.

## Project portfolio management

No internationally accepted standard for PPM currently exists within the project management body of knowledge (Marnewick & Labuschagne, 2004: 288). Although the authoritative *Guide to the PMBOK* refers to portfolio management, it is primarily concerned with projects in isolation (Wideman, 2005). The other mainstream source of project management standards, the *APM guide*, prefers the term portfolio management (APM, 2006: 3) and defines this as the management of a number of projects that do not share a common objective. The PMI's *Standard for Portfolio Management* (PMI, 2006) describes project portfolio management as the "centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing and controlling projects, programs, and other related work, to achieve strategic business objectives."

The earliest references to the word 'portfolio' in project management literature refer to the project selection process, entailing the selection of the correct portfolio of projects (Archer & Ghasemzadeh, 1999: 207-216). Although neither of the authors refer to 'project portfolio management' or 'project portfolio selection' in their discussion of this topic, both Badiru and Pulat (1995: 397-424) and Shtub, Bard and Globerson (1994: 45-162) emphasise the importance of project selection and describe various project selection techniques. The term 'portfolio management' is used by Pennypacker and Cabanis-Brewin (2003: 1-3), who regard such management as a strategic level intervention focused on project selection and staffing.

The essential elements of portfolio theory, extensively used in the investment industry, were developed by Markowitz in the early 1950s (Sharpe, 1970: 3). Portfolio theory, the most likely root of the term 'project portfolio management', consists of three core elements, namely preferences (i.e. priorities), portfolio analysis, and portfolio selection. If PPM is to remain true to its most plausible root, portfolio management, it entails much more than mere project selection. PPM is also about the setting of project priorities and a continuous analysis of the portfolio to determine priorities that assist organisations when assigning limited to resources.

From the literature reviewed, PPM may be defined as the selection and monitoring of, and active intervention in project and program objectives, for both related and unrelated projects, aimed at establishing project priorities and ensuring alignment of project objectives with the organisation's strategic intent.

**Enterprise project management**

The term enterprise project management is a fairly recent entry into project management literature and neither the PMI Guide to the PMBOK (2000: 1-184) nor the APM guide to project terminology (2006: 1-20) defines, references or even glosses EPM. It is likely that the term EPM was derived from Enterprise Resource Planning (ERP), a term coined by the IT industry, like EPM. Wei and Wang (2004: 161) define an ERP system as "an integrated enterprise computing system to automate the flow of material, information, and financial resources among all functions within an enterprise on a common database."

EPM is often confused with PPM, as authors tend to group a fair number of management responsibilities loosely together under either PPM or EPM, depending on which term they prefer (Vandersluis, 2004). Archibald (2003: 11-13) illustrates the difference between EPM and PPM on four dimensions, namely purpose, focus, planning emphasis and responsibility. According to Archibald, PPM is clearly a strategic management task to ensure that project objectives are aligned to strategic intent, while EPM is an operational level responsibility to ensure that resources are optimally allocated.

Engwall and Jerbant (2003: 403-409) identify resource allocation as the prime challenge for organisations faced with multiple projects sharing resources typical of enterprise projects, and Spinner (1992: 91) concurs that planning the effective use of resources is a complex task. EPM is construed as the management activity responsible for the optimal assignment of organisational resources to the various projects, on an ongoing basis. Recognising that multiple projects in an organisation will often have conflicting resource requirements (Spinner, 1992: 91), this seemingly mundane task has a direct impact on project success through the efficient utilisation of an organisation's resources.

For the purposes of this study, EPM can be defined as the combined management of all the resources that are used to staff projects within an organisation. EPM strives for optimum resource allocation between conflicting requirements, based on the project priorities determined by PPM. EPM and PPM are clearly different, but complementary functions, which require different management level interventions.

**Operations management**

While enterprise projects deliver components of products or services, operations drive the benefits derived from the goods or services to the advantage of the entire organisation (Cooke-Davies, 2002: 187). Figure 2 indicates the relationship between projects and operations and indicates that the success of a project is ultimately determined by the benefits arising from the product as delivered by the project and exploited by operations.

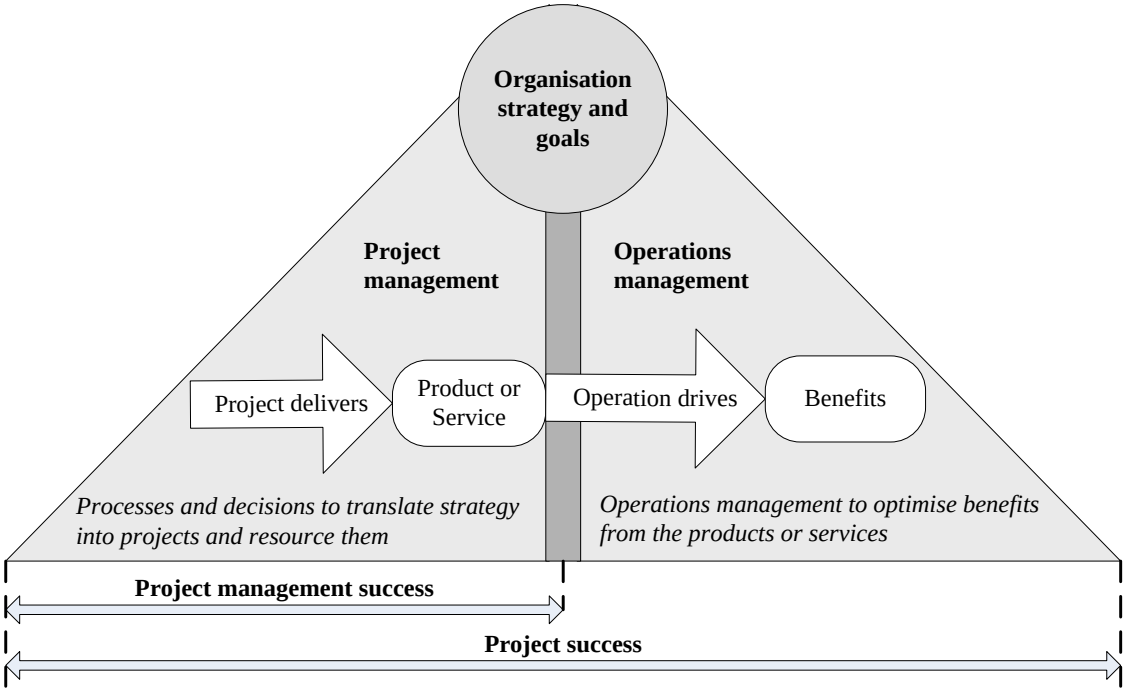


**Figure 2: PM and operations management**
Source: Adapted from Cooke-Davies (2002: 187) and Munns and Bjeirmi (1996: 84)

Using the framework presented in Figure 2, project closure takes on a new importance. Project closure can be seen as the critically important activity that partially **transfers** the responsibility for project success from the project process to the operations function.

## Strategic management

Greasley (2005: 26) defines strategy as the long-term direction and scope of the organisation. According to Greasley, strategy ideally matches the organisation's resources to its **changing** environment and, in particular, its markets, customers or clients, in order to meet stakeholder expectations. Grundy and Brown (2002: 62) stress the importance of clearly setting a project's key objectives to support strategic intent. Defining project objectives can be extremely complex when objectives have to satisfy different, and often even conflicting, requirements (Grundy & Brown, 2002: 62).

The benefits of a project's deliverables, to be realised by operations (Figure 2), will not materialise if the project objectives are not aligned with strategic intent – the role of PPM. Grundy and Brown (2002: 105-132) and Johnson (2004: 3-5) support the view that defining objectives is not the responsibility of the project manager, but rather forms part of the parameters presented to the project manager to use in preparing a project plan.

Defining organisation strategy, which must ultimately be supported by projects, clearly falls within the ambit of executive (strategic) management. Organisation strategy is in turn critical to defining project objectives correctly, and ultimately project priorities for resource consumption. The role of PPM indicates a close management interaction between strategic management and PPM.

## FRAMEWORK FOR ACCOUNTABILITY

The roles of line (operational), project (program), EPM, PPM and strategic management were all shown to contribute on various levels towards project success. Only when these different contributions are properly understood can responsibility be appropriately assigned to ensure accountability for project success at specific organisational roles. Figure 3 provides a diagrammatic presentation of the various management roles impacting on project success and was constructed from the definitions presented in this study.

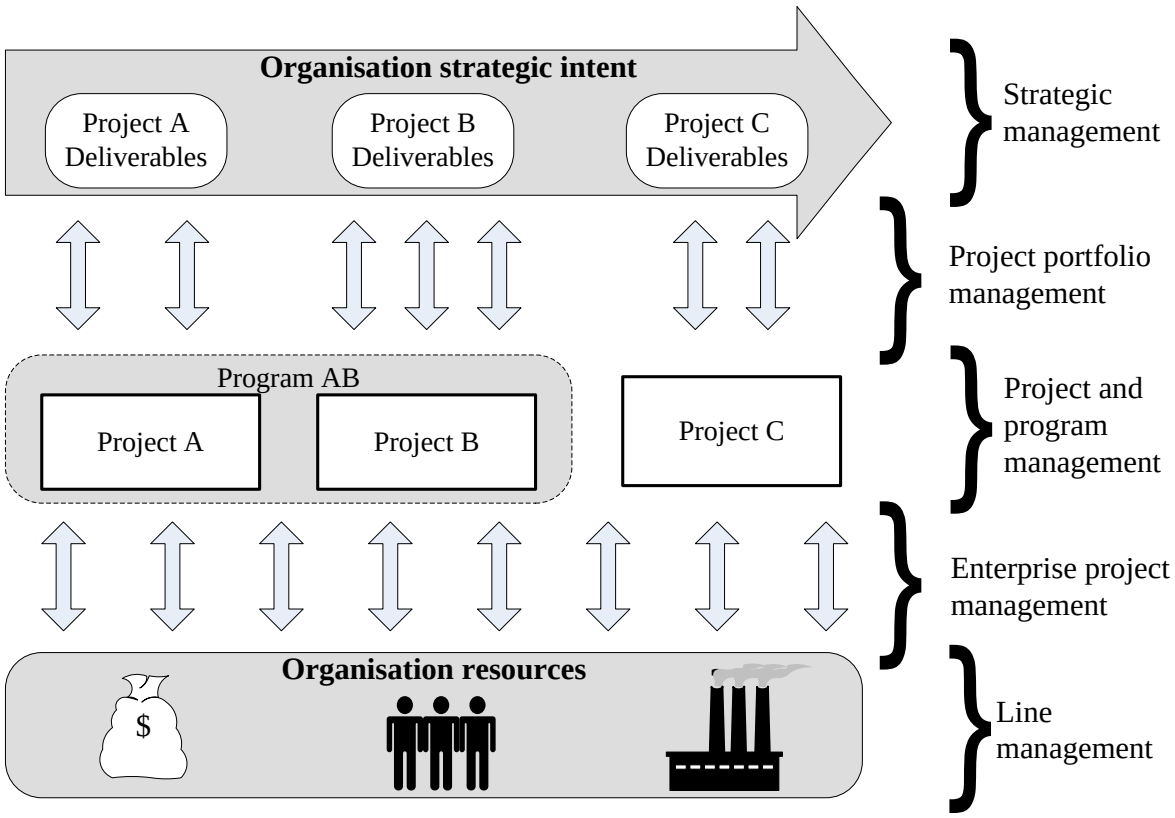


**Figure 3: Management roles impacting on project success**

The responsibilities for each of the management roles in Figure 3 can be summarised as follows:

- **Strategic management** determines the strategic intent of the organisation and identifies projects that can deliver the various components of the organisation strategy.
- **Project portfolio management** uses the strategic intent to initiate the correct projects required to deliver the strategy. PPM ensures that all current projects are correctly prioritised for resource consumption, based on their contribution to strategy, measured on a continuous basis.
- **Project/program management** manages the project, using all the tools at the manager's disposal in order to deliver the scope of the project within the set time and budget limitations for the quality defined.
- **Enterprise project management** uses the priorities defined by PPM to allocate organisational resources optimally for current and future projects. EPM ensures a consolidated view of resource requirements and availability for the entire organisation.
- **Line management** is the normal line function, including operations, that manages organisational resources, including allocating the resources to projects and driving benefits from products.

## CONCLUSION

Project managers have an important role to play in achieving project management success, but if they are not supported by other management roles within the organisation, project success for enterprise projects will never be achieved. In order to deliver an **improved collective effort,** it is crucial to segregate the various management roles and responsibilities that have an impact on project success.

This paper presents a **high level framework of management accountability** for project success in organisations. The literature review found limited but well founded sources that argue a solid case for **distinguishing between project management success** and **project success** (Figure 1). Using this distinction as point of departure, it was evident that different management roles impact on project success, as indicated in Figure 3. Together, the management disciplines form a chain in which all components contribute to project success. Neglecting any component thereof will thus weaken the entire effort chain.

The contribution from each management discipline is crucial to ensure the **optimum utilisation of organisational resources to achieve strategic intent**, the ultimate goal of any modern organisation. It is the responsibility of these management roles to ensure that they become students of literature in their fields to fully comprehend their contribution towards project success.

The author suggests that future research should focus on mapping the vast array of success factors against the management roles presented, in order to make the framework more robust.

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