

Project management processes drive the realization of growth strategies and competitive advantage.

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Abstract

Firm growth relies on launching new products and services. An interesting question is, what are those unique project management processes that firms need to know in order to implement growth strategies in the form of new products and services. This paper will aim to shed light on what are those specific project management processes that drive the realization of firm growth. There research propositions highlighted on chapter three have been investigated through a case analysis of two large banks. The case findings indicate the organization's ability to prioritize projects, implement those projects using a simulation model and nurture a strong project culture are central towards achieving growth. The findings of this paper build on earlier project, portfolio and programme management disciplines and adds further understanding on competitive advantage. Further research is proposed on innovation project management.

Keywords: Project Management Processes, Growth Strategies and Competitive Advantage

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I declare that this research project is my own work. It is submitted in partial fulfillment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorization and consent to carry out this research.

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Date of Declaration: 7th November 2012

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Table of Contents

	Page
1. Introduction	1
2. Theory and Literature Review.....	3
2.1 Introduction	3
2.2 Growth Strategy and Competitive Advantage.....	4
2.2.1 Growth Strategies Attributes and Determinants	4
2.2.2 Competitive Advantage Attributes and Determinants	7
2.3 Project Implementation, Systems & Process View	8
2.3.1 Project Implementation Management	9
2.3.2 Project Systems Management.....	12
2.3.3 Project Process Management.....	13
3. Research Propositions.....	16
4. Proposed Research Methodology and Design	17
4.1 Introduction.....	17
4.2 Objectives	17
4.3 Case Study Design	18
4.4 Case Study Plan	18
4.5 Sample Design.....	20
4.6 Sample Unit of Analysis.....	21
5. Results	25
5.1 Introduction.....	25
5.2 Enquiry Process	26
5.3 Characteristics of the studied cases.....	30
5.4 Transcriptions and Quotations	35
6. Discussion of Results	39
6.1 Project Management process selection is key in realizing growth strategies growth projects and competitive advantage	40
6.2 An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage	43

6.3	Are there other unique combinations of project management processes that are key in achieving organizational growth strategies resulting into competitive advantage.....	47
6.	Conclusion and Research Limitations	51
6.1	Conclusion	51
6.2	Research Limitations.....	53
7.	References	56

1. Introduction

Organisations generally have two types of projects, namely operational and strategic (Shenhar& Dvir, 2007).Operational projects tend to be delivered through a set of known, repeatable project management processes and activities. The delivery and project management of strategic growth projects, which are a source of competitive advantage, require a set of unique, unknown project management processes. This is coupled by the growing realization that project success, in any given context, is no longer achieved through the conventional project management methods and concepts, such as the management of the triple constraints of quality, cost and time as defined by the Project Management Body of Knowledge (PMI, 2008).The root causes of why projects fail are increasingly becoming less about technical and engineering aspects and more about specific management approaches (Sauser, Reilly, & Shenhar, 2009).

In this paper, we examine the project management approaches, practises and methods of organisations that depend on growth projects to achieve competitive advantage. This paper is primarily located within the project management field and competitive advantage and builds on the two main concepts – the achievement of growth strategies through project management processes. Previous literature has shown that there has been a growing realization that company growth and competitive advantage is increasingly depended on the successful implementation of strategic projects (Doyle, 1998). The strategic implementation of projects is underpinned by effective systems, processes and innovation capabilities (Doyle, 1998).Companies have generally failed to execute strategies due to overreliance on tried and tested management formulas found in existing organisational structures, systems, and procedures (Lord, 1993).

The end result has meant that firms were caught in this downward spiral of pursuing and implementing ill-conceived projects that don't generate any future value and are not aligned to the organisations strategy. Some descriptive evidence proved that top management within these firms could not specify adequately the nature of their business and how to translate the business strategies into actionable projects (Bong & Dastmalchin, 1998).On another end of same spectrum, organisations that demonstrated a systematic planning approach in strategy execution have managed to post positive achievements in their strategic mandates. These firms engaged in a systematic approach to business planning (Paria, 1990).In implementing organisational strategy, executives also had to

grapple with aspects of organisational design in a form of a business model, organisational structures and capabilities and most importantly on-going allocation of resources towards the key processes in order to achieve strategy (Bradley, Hirt & Smit, 2011).

Part of the previous research findings suggested that this challenge could be addressed through a number of competitive advantage attributes spanning a sound corporate culture, management systems such as planning systems, and organisational structures (Flamholtz & Wei, 2003). Designing well integrated organisational structures will partially address the competitive advantage challenge and a stronger emphasis would then need to be placed in the communication systems of the organisations in order to enable better communications, knowledge transfer, cross functional teams engagement required to deliver a mega project sustainable competitive advantage (Lei, Slocum& Pitts, 1999). There other challenge was cited to be the project management ability of firms to carefully prioritize key resource allocation towards decisions related to mega-projects.

This is coupled by the need for firms to innovate and change fast than its close competitors in order to survive and prosper. Accordingly, firms need to change on a number of areas which can be said to be recognising changing customer needs, profitability by differentiation, balancing of organisation design thereby promoting the right kind of innovation and thinking. One of the biggest conundrums facing matured firms is that as they become larger and more successful over time, they tend to implement practises and organisational structures that promote stability at the cost of bold innovation (Lei, Pitts & Slocum, pp1-18,2002). We also know through some studies conducted on that future organisations will be smaller and will operate in chaotic environments. The successful organisations will be those that can embrace the project management way of managing project and survival of organisations will be based on the the ability to master the project management approach (Russell-Hodge,1995).

This leads us to the thrust of the objective of this paper, which argues that competitive advantage is driven by growth strategies which are determined by project management processes. Some earlier studies postulated that project management was a function of tasks and business and project tasks processes were similar, and the ability to complete these project tasks processes was becoming a major competitive advantage (Starr, 1990). Some authors saw great merit in placing emphasis on the qualitative side of the project

management processes meant to control a number of potential fail points throughout the project management lifecycle. This was achieved through a formalisation of a number of key activities conforming to a specific documented procedure (Bryde, 1995).

The current research will seek to determine and answer the research question, are project management processes key in the realization of growth strategies leading to competitive advantage. This research will extend previous work on mainly two areas. Firstly, the primary aim of this paper will extend previous work on strategic growth project implementation through project selection, portfolio management and programme management. This challenge was raised by recent authors, who argued that strategy implementation is depended on projects and roughly 100 billion dollars were wasted in projects that don't add value due to the immature investment frameworks and poor project management practises in selecting and prioritizing projects (Young, Young, Jordan & O'Connor, 2012). This research paper will seek to conduct research on programme management, portfolio management and project governance. Secondly, it will build on understanding what are the unique combinations of project management processes that an organisation needs to follow in order to deliver unknown, uncertain strategies.

In the next chapters of this research paper the focus will be on discussing and contrasting the main literature work within growth strategies, competitive advantage, project management implementation, systems and processes in more detail. This will be followed by key propositions in chapter three (3) followed by the research method description before presenting the case studies which is the focus of this paper. The research findings will then discuss the results in terms of the research propositions and link them with theory base. The paper will finally present main conclusions, implications for future research and research limitations.

2. Theory and Literature Review

2.1 Introduction

This chapter will seek to give an insightful assessment and contrasting views on the main literature in growth strategy (Lindic, Bardaz & Kovacic, 2012., Majumdar, 2010., Chen, Zou & Wang. 2009., Yang 2011., Gumus & Apak, 2011., Kylaheiko, Jantunen, Puimalainen, Saarenketo & Tuppura, 2011., Varkey , Corin, & Slevin ,2011., Young, Young, Jordan & O'Connor , 2012., Thiry&Deguire, 2007, Goedhuys & Veugeler,

2011., Naaranoja, Haapalainen and Lonka, 2007), competitive advantage (Weerawardena & Mavondo, 2011., D'Aveni, Dagnino & Smith, 2010., Bhuijan, 2011., Yuan Li & Liu, 2012., Webb, 2007), and project management (PMI,2008) covering the main research work that was conducted during the past 5 years.

The project management (PMI,2008) literature review undertaken by the researcher can be grouped into three main themes, namely the project management implementation (Srivannaboon, 2009; Collyer&Warren; 2009; Killen&Kjaer, 2012; Zeynek, Arditi, Dikmen, Birgonulet, 2009; Shehu and Akintage, 2010; Petit, 2012.; Ozturkcan & Buyukozkan, 2010; Vidal, Marle, Bocquet, 2011; Young & Anban, 2009), project management systems (Kapsali, 2011; Hallgren, 2012; Liu&Wang, 2011; Shakshi-Niaezi, Torabi & Iranmanesh,2011) and project management process (Harold,Hempel & Srinivasan, 2003; Wadeson, 2005; Browning, 2010; Olsen & Johannessen,2011; Lalonde, Bourgault& Findeli, 2012; Ebert & De Man, 2008; Winter and Szczepanek, 2008; Turner and Simister, 2009; Unger, Kock, Gemunden & Jonas,2012; Barbara Natalie Unger, 2012; Turner , Simister, Gower,2009) themes comprised of main theoretical models.

A discussion of the project management (PMI, 2008) models would be premature without a contextual review and discussion of the growth strategies (Lindic et al, 2012) and competitive advantage (D'Aveni et al, 2010) since the researchers objective is to understand if project management (PMI, 2008) processes (Unger, Kock, Gemunden & Jonas,2012) drive the realization of growth strategies (Lindic et al, 2012) and competitive advantage (D'Aveni et al, 2010).

2.2 Growth Strategy and Competitive Advantage

2.2.1 Growth Strategies Attributes and Determinants

Strategic growth was defined as the company's ability to create and sustain its key markets, which are untapped or unserved by the potential competitors (Lindic, Bardaz & Kovacic, 2012).Some authors attributed the concept of strategic growth to small enterprises who were contextually driven to grow in chosen markets and were influenced by a number of organisational variables such as industry structure, performance and technology (Majumdar, 2010). Park, Cheong and Jang (2010) maintained that an organisations size does not necessarily correlate with firm growth leading to a conclusion

that organisations of different size and makeup can pursue growth at any point. A contrasting view by Gumus & Apak (2011) suggested that companies should consider choosing an optimal size that can drive growth, influenced by external environmental changes. The general view was that these companies took greater risk, experimented a lot and displayed high rates of innovation (Majumdar, 2010).

The research work on what drives growth strategy offered by Goedhuys and Veugeler (2011) established innovation, especially process and product innovation as key drivers of organisational growth. This was in agreement with the concept of growth which found that firm growth was determined by the company's ability to attract new customers and the rate at which it launches new products faster than its closest rivals (Kylaheiko, Jantunen, Puimalainen, Saarenketo & Tuppura, 2011). Another observation by Chen, Zou & Wang (2009) argued that small ventures followed distinct strategies with different resources combinations.

An organisation's growth strategy was identified as dependent on project management strategies by the new product development strategy (NPD) research work (Yang, 2011). The common determinants in project management strategy driving the realisation of NPD (Yang, 2011) was identified as differentiation, operational and the quality strategy which were associated with the project management body of knowledge projects success criteria based on schedule, quality and innovation performance (PMI, 2008). These project strategy elements of the organisation were key in leading to an improved market performance of the company resulting into market share and realised sales goals (Yang, 2011). This view is linked to an observation by Cooper, Edgett, and Kleinschmidt (2004, p50), who maintained that the best performing businesses undertake a higher proportion of more innovative new product development projects, while the worst performers have a timid new product development project portfolio. The concept of linking projects with strategy was also proposed by the project based organisation (PBO) model who found that the organisational wide use of project management standards, practises and methods eventually influenced strategy (Thiry & Deguire, 2007).

Perhaps more enlightening was that earlier studies on the relevance of project management in strategy execution and delivery proved that management executive did not view project management as a strategic asset (Judgev & Thomas, 2002). This was in part

due to the inability of project managers to align project management performance measures and objectives with business measures that contribute towards shareholder value and sustainable competitive advantage (Judgev & Thomas, 2002).

A number of preceding models offered a non-traditional view which in some way shed new light on whether project management drives the achievement of growth strategies. These models aimed to redefine how traditional project management is viewed and offered a departure towards linking business strategy and project management. Winter, Andersen, Elvin & Levene (2006) offered a project management business view by suggesting a radical overhaul of how business views project management by suggesting that projects should be measured based on their contribution towards implementing business strategy, improving the effectiveness of organisations and stakeholder benefits. This view was closely followed and agreed by earlier work on the concept of business projects in which it was suggested that the primary concern of executive management should be pursuing project that lead to value creation and meeting the needs of different stakeholder groups within the organisation (Winter et al, 2006). The strategic thinking in projects was cited as important in driving execution and was paired with project management concepts such as project portfolio strategy, project strategy, scope management and project selection (Naaranoja, Haapalainen, Lonka, 2007). These were cited to be important project management (PMI, 2008) elements for successful growth strategy implementation.

Varkey, Corin & Slevin (2011) maintained that the strategy formation process is normally achieved and paired with forecasting, a project management concept, which results into significant performance improvements for the firm. They contend that the chaotic, ever complex of markets and industries in which companies operate in, can partly be managed through forecasting and long range objective setting which are both project management concepts (Varkey et al, 2011). Perhaps more revealing within the growth strategy school of thought was research work done by Young, Young, Jordan & O'Connor (2012) that showed that over 100 billion dollars invested in organisational projects did not yield the desired results toward the achievement of strategic goals.

This paper concluded that the central reason behind this poor delivery rate of projects was the organisational management capabilities, know-how and knowledge in project management selection (PMI, 2008). The inherent deficiencies were found to be the

systems, and processes that companies use in selecting and managing projects for realising strategic goals and these were found to be specifically be within the project/ programme/portfolio/ governance frameworks adopted by the individual companies (Young et al, 2012). The greatest deficiency was found to be within the programme management, specifically on classification criteria to select projects that will enable the realisation of strategic growth projects (Young et al, 2012). The above authors agree that there's a link between strategy and projects (Thiry & Deguire, 2007; Varkey, Corin, & Slevin, 2011). There's also common agreement that growth strategy is driven by the ability of the organisation to innovate by introducing new products that contribute towards the realization of growth objectives (Yang,2011; Cooper, Edgett,& Kleinschmidt,2004; Winter, Andersen, Elvin & Levene,2006).Lastly, growth projects were identified as driven by innovation, and could be pursued by any organisation with different size and makeup (Park, Cheong and Jang ,2010; Gumas & Apak, 2011; Goedhuys & Veugeler,2011).

2.2.2 Competitive Advantage Attributes and Determinants

The term competitive advantage was defined as a set of internal capabilities that are not easy to emulate and that set the organisation apart from its competitors through a company's capability differential (Weerawardena & Mavondo, 2011).A company's competitive advantage was defined as an internal capability implicit within the organisation (Bhuijan, 2011).A closer look at these capabilities confirmed that these capabilities are technical know-how, managerial competence, organisational efficiency and acute management of strategic assets (Bhuijan, 2011). Perhaps more closely related to this definition, was research work conducted by Yuan Li & Liu (2012) that maintained that the dynamic capabilities of the organisation drove the realisation of competitive advantage and these capabilities were underpinned by the organisation ability to make timely decisions, implement those decisions and changes in an efficient way against compared to its closest competitors (Yuan Li & Liu, 2012).

This comes at a period in which companies find themselves in environments that are increasing the likelihood of getting copied, and competitive advantage becoming less of a sustainable advantage and only a temporal advantage that can be protected for a short period of time (D'Aveni, Dagnino & Smith, 2010).The relationship between a company's growth agenda and competitive advantage was given another impetus through the strategic entrepreneurship (Webb, 2007) school of thought that sought to argue that the

most successful companies are those that can optimally balance their efforts to grow and seize future opportunities through the usage and reliance on current competitive advantages. Organisations are constantly trying to balance the trade-off between growth and maintaining current capabilities and it is those organisations that manage to renew their growth agenda that will eventually remain competitive though the reliance and optimal mix of internal operational, structural and cultural capabilities (Webb, 2007).

Their study is fundamental enough to be a precursor for highlighting the role that the growth agenda plays in strategic management and entrepreneurship as key source of a company's competitive advantage (Webb, 2007). Project management know how and capability resides within the company and drives competitive advantage as competitors cannot comprehend its composition since it is an internal company capability (Browning, 2010). Competitive advantage is thus an internal capability, that needs to be harnessed over time (Bhuijan, 2011; Yuan Li& Liu, 2012). It is based on the degree to which a company differentiates its core activities, that cannot be copied and is driven by the execution of growth strategies (Weerawardena & Mavondo, 2011; Browning, 2010). We now turn to an in-depth review and discussion of the role of project management in driving growth strategies resulting into competitive advantage under the following discussion and review of project management implementation, systems and process elements.

2.3 Project Implementation, Systems & Process View

The project management body of knowledge (PMI,2008) identified a number of key essential project management elements for achieving project success, namely risk, quality, time, procurement, financial, human resources and earned value as the cornerstone of effective project execution (PMI,2008). The focus of this section will review and discuss mainly three (3) essential themes within the project management body of knowledge, namely project implementation (Srivannaboon, 2009; Collyer & Warren; 2009; Killen & Kjaer, 2012; Zeynek, Ardit, Dikmen, Birgonulet, 2009; Killen & Kjaer, 2012; Shehu and Akintage, 2010; Petit, 2012, Cooper, Edgett, and Kleinschmidt, 2004; Buyukozkan & Ozturkcan, 2010; Vidal, Marle, Bocquet, 2011; Young& Anban 2009), project management systems (Kapsali, 2011; Hallgren, 2012; Liu&Wang, 2011; Shakshi-Niae, Torabi & Iranmanesh, 2011) and project management processes (Harold , Hempel & Srinivasan, 2003; Wadeson, 2005; Browning, 2005; Olsen & Johannessen,2011; Lalonde, Bourgault& Findeli, 2012; Ebert & Man, 2008; Winter and Szczepanek, 2008; Turner and

Simister, 2009; Unger, Kock, Gemunden & Jonas, 2012; Barbara Natalie Unger, 2012; Turner, Simister, Gower, 2009). This discussion is guided by the realisation that internal capabilities eventually drive the realisation of growth strategies and it stands to be reasoned that project management processes, systems and implementation are dynamic factors that are largely internal within the organisation (PMI, 2008).

2.3.1 Project Implementation Management

Zeynep, Ardit, Dikmen & Birgonul (2009) research work on the impact the corporate strengths and weaknesses has on project management competencies argued that the implementation process of project management is normally uniform, in that it uses the 9 project management knowledge areas as defined by the Project Management Body of Knowledge (PMI, 2008), across all projects even though each project is unique. Project implementation was subject to the dynamic nature of project contexts and this dynamic view of project management was conceived to be a key driver of project success. Collyer & Warren (2009) research accepted that dynamism is one of an infinite number of project dimensions that managers have to grapple with and that managers struggle to define. Some of the project management approaches suggested to deal with dynamic environments were cited to include environmental manipulation, scope, planning approach, controlled experimentation, lifecycle, controls, culture, communication and leadership style (Collyer & Warren, 2009).

The Plan-Do-Check-Act (PDCA) project management model by Srivannaboon (2009) found that the relative competitive position of organisations determines the content and focus of its project management elements that support the delivery of intended strategy. The key for success was the organisation ability to conceive, develop, and implement relevant project management approaches that support the desired business strategy. This was coupled by the organisation ability to standardize internal project management guidelines on how to adapt the internal project management practises based on the PDCA (Srivannaboon, 2009). It was suggested that the organisation ability to map, standardize and document the matching elements of different strategies and project types would result into a project management scenario based view that could enable organisation to understand the likelihood of project success based on the makeup and fusion of different strategy and project types (Srivannaboon, 2009).

The organisations resources, capabilities, ability to make strategic decisions and its relationships with its external parties, were identified as corporate strengths and weaknesses (Zeynep et al, 2009). The link between project management processes and strategy was determined by Zeynep et al. (2009) to be influenced by corporate strengths and weaknesses, which carries some strong basis and merit as projects are conceived and implemented within the constraints of companies' resources.

In understanding project management dependencies, project culture and process were identified as fundamental in achieving project success by Killen & Kjaer (2012). The findings suggested the influence of culture and process as key drivers of project success. Managers should pay more attention to project culture, tools and processes of project management (Killen & Kjaer, 2012). The findings by Shehu and Akintage (2010) attribute growth project success to programme management during implementation phase, a key requirement for project implementation success. The paper highlight's the common pitfalls on programme management were largely human related aspects such as project leadership, program control and political aspects. Some of the critical stages in programme management were cited to be awareness, understanding, planning, piloting, implementation, consolidation and customisation (Shehu & Akintage, 2010).

Perhaps contrary to the earlier view shared under the growth strategy section, was the finding that the size of the organisation determined how projects were executed in order to deliver products, and implement innovation resulting into organisation growth (Turner et al, 2010). This finding contrasted the common view held by some growth strategies authors who held that company size did not determine the organisations ability to implement its growth strategies (Park, Cheong and Jang , 2010; Gumus & Apak, 2011; Goedhuys & Veugeler, 2011). Perhaps more revealing was a view that project management implementation is less about risk management and more about managing and organising for uncertainty (Petit, 2012).The research findings also indicated that project selection was further complemented by portfolio management which was about creating and refining business processes, creating new business models for managing uncertainty, and implementing structures meant to deliver growth (Petit, 2012). The paper recommended some practical implications for the PMI standard for Portfolio Management (PMI,2008) including additions of new components such as uncertainty vs risk management, and human resource management.

According to Besner & Hobbs (2008), managing unknown, highly innovative projects required different project management approaches compared to managing projects that produce a standard known product. A standard framework defined as a basic toolbox for managing and implementing innovative projects was defined to include 10 essential elements, namely progress reports, kickoff meetings, GANNT Chart, software tools, change request, requirements analysis, milestone planning, scope management, assigned sponsor, constraints and risks (Besner & Hobbs, 2008).

Table1 details the suggested project management elements that distinguishes best practise for managing innovative projects and standard project management.

Table 1: Project management elements for innovation and standard projects.

Elements of Innovative projects	Elements of standard project management
Project Sponsor	Earned Value
Database for cost estimations	Change Requests
Stakeholder Analysis Plans/ Docs	Milestone Planning
Database of historical project off	Project Resource Matrix
Database of projects lessons learned	Projects Acceptance Form
Database of project risks	Project Scope Documents
Project Team development plan	Projects Cost Estimations
Project Work Authorization Templates	Project team Plan
Project Value Analysis	Project Value Analysis
Project Mission Statements	
Availability of skilled experienced manager	

We conclude by looking at project selection as prerequisite for project implementation based on the Decision Making Trial and Evaluation Laboratory (DEMATEL) model (Ozturkcan, 2010). Both DEMATEL and ANP (Analytical Network Process) techniques were found to enable effective project selection thereby ensuring optimal resource utilization and greater contribution of projects towards companies missions, goals and strategies (Ozturkcan, 2010). This model was offered as an alternative to the widely acclaimed Six Sigma, in that it overcame the current challenge of generating and prioritizing critical projects (Ozturkcan, 2010).

The organisational strategic orientations towards defining project management elements and its influence on how project management elements as outlined by the aforementioned authors served to shed light on the fact that there's awareness and empirical evidence that

projects do drive implementation strategy (Kwak & Anbari, 2009). The project management implementation view tends to re-emphasize the underlying assumptions of previous project management research by playing in the realm of the known (Hallgren, 2012).

2.3.2 Project Systems Management

The systems thinking in project management challenged conventional project management theory that suggested a formalised careful project management control by suggesting a flexible approach in planning, communicating and controlling activities (Kapsali, 2011). In uncertain project environments that organisations find themselves operating in, it was found that the degree to which organisations could maintain flexibility in communication and project management processes become important in implementation of projects, which was more significant than approaching projects in formalized way based on specific control mechanisms (Kapsali, 2011). The high failure rates of most project undertakings is evidence that conventional ways of managing are no longer viable hence the systems thinking project management model. The paper raises key questions on the traditional project management conventional emphasis on performance measures such as the Iron Triangle (PMI, 2008) and failure to put emphasis on business measures that are key in the achievement of strategic goals and implementation of innovation growth projects (Kapsali, 2011).

Other recent research work, was conducted by Liu & Wang (2011) who determined a time-dependent resource constraint modelling technique, called constraint programming (CP), based on the project selection and scheduling dilemma that organisations have to deal with in managing the unknown growth strategic projects. Although CP model research is based on validated work across a range of projects within the construction industry, the findings offer a project selection and scheduling model for project planners and how to determine an optimal project management portfolio with specific resource constraints such as time (Liu & Wang, 2011).

On the other hand of the same spectrum, the Monte Carlo model by Shakshi-Niaezi, Torabi & Iranmanesh (2011) proposed a simulation model and framework for project selection challenge in uncertain and resource constraint operating business environments. Although mathematical in its comprehension and design, the research

findings recommend a model for managing project selection within organisations using Preference Ranking Organisation Method for Enrichment Evaluations (PROMEE), which uses a logical model for making calculations on the likelihood of that specific project selection would enable and contribute towards the organisation growth objectives(Shakshi-Niaezi et al, 2011). This PROMEE (Shakshi-Niaezi et al, 2011) finding was also similar and in agreement with a view that systems thinking methods provide the flexibility to manage innovation projects that organisations have to implement in order to remain competitive and achieve growth targets (Kapsali, 2011).

2.3.3 Project Process Management

The conventional definition on project management processes was defined as composed of project start, project controlling, project coordination, management of project discontinuities' and project close down (PMI, 2008; Turner & Simister, 2009). Emphasis on the most important project management processes has gradually identified project objective setting, scope of work, the project schedule or was is commonly held as project plan, project team organisation, project costs, project culture and finally project context (PMI, 2008; Turner & Simister, 2009). This view was generally held is true of project management due to historic project management approaches widely used within project based organisations(Thiry & Deguire, 2007; PMI, 2008; Turner & Simister, 2009).

Earlier work on project selection and process analysis, proved that process management were determined by value judgements as new information arised during project execution (Daniel, Hempel & Srinivasan, 2003). These value judgements were defined to be customer insights, performance measures and management routines (Daniel et al, 2003). This was in agreement to a view that proposed that projects were a set of information collection process which then implied that the conventional schema and knowledge of using tried and tested models might entail that managers in some projects might invest minimal energy on what needs to be done (Wadeson, 2005). Project in natural definition are unique undertakings (PMI, 2008) that require an exploration of different sets of management know how, this challenge increases when organisation have to deliver highly innovative products (Wadeson, 2005).

Part of the project management dilemma is that these project management information processes don't get improved or documented properly within organisations when new

project information presents itself leading to wrong decisions. This challenge can be addressed through a disciplined project management information collection process (Wadeson, 2005). This challenge was given fresh impetus by earlier work on the Purpose View Alignment model, which argued that organisations fail to align the objectives of their business strategies with their purpose of the project (Browning, 2010). This was as a direct result of managers using the incorrect tools for project context analysis and failure to map back the information gathered back to the purpose of the organization project purposes (Browning, 2010). The PVA model argues that project management effectiveness and efficiency is driven by the management ability to utilize the relevant tools and models in the management of large, complex unknown projects (Browning, 2010).

The ability of organization's to turn project management communication processes into a capability was defined as important factor in driving execution of innovation projects (Olsen & Johannessen, 2011). The paper findings suggest that this ability of combining communication processes with traditional project management elements of time, quality and cost should receive the attention of executive management (Olsen & Johannessen, 2011).

The project management practise as an enquiry process shed new insights by suggesting that the project management process was determined by the maturity of interactions within and in between the project personnel (Lalonde, Bourgault & Findeli, 2012). These feedback loops in projects were critical in project implementation of unknown growth projects through an enquiry process based on understanding the external trends impacting project implementation (Lalonde et al, 2012). Accordingly, project management enquiry process was more than tools and methods but the a combination of technical know how, social, cognitive and reflective project management processes that enabled managers to comprehend the project situation and reflect on an ongoing basis in order to cope effectively with project challenges posed by unknown growth strategies(Lalonde et al, 2012). This integration effort on the part of project management proved key in Alcatel-Lucent intergration of engineering processes, tools and people towards an achievement of single goal leading to unparallel growth of one product line (Ebert & Man, 2008)

We conclude this section by looking at work that was conducted by Winter and Szczepanek (2008) who concluded that the classical engineering view of project

management was no longer relevant in managing todays complexity as it ignores the value part of project management. This view has to shift from the classical triple constraints project management approach to a more business strategic value view, in which the primary concern of the project management execution is about creating long term benefits for multiple stakeholder groups (Winter & Szczepanek, 2008). This implied that organisations have to strive towards identifying new frameworks that can help managers think about the value creation drivers of projects and programmes towards implementing growth strategies (Winter & Szczepanek, 2008).

Finally, Unger, Kock, Gemunden & Jonas (2012) hypothesized that a companies strategy is implemented through project portfolios and as such it was found equally important to apply the correct metrics in selecting projects. This could be achieved through a standard selection procedure based on standard metrics within the organisations and the consistent approach towards eliminating projects that don't add any value (Unger et al, 2012). A huge challenge with projects was that managers lacked the ability to proactively terminate projects at a crucial point and this could at least be managed through a structured process with early warning for problematic projects that could fail (Unger et al, 2012).

The main findings of the literature review make reference to a number of important project management approaches which are important in the achievement of growth strategies. Firstly, the project implementation view emphasised a number of important considerations for successful implementation and these were cited to include dynamism as an important consideration for managing projects (Collyer & Warren, 2009), standardization of the measurements on the alignment of various business strategy types and project types (Srivannaboon, 2009), human considerations for effective programme management (Shehu & Akintage, 2010), project culture and process as important attributes of project success (Killen & Kjaer, 2012). Project implementation was also cited as a function of models that enabled management to partially predict the likely outcomes of choosing a combination of project management elements (Buyukozkan & Ozturkcan , 2010).

Secondly, the researcher established from the above literature review that project management systems, were largely a function of thinking systematically in delivering projects (Kapsali, 2011). Perhaps more enlightening was a finding that the logical models

can contribute towards decision making by calculating the likelihood of selecting a specific project and how this selected project would enable and contribute towards the organisation growth objectives (Shakshi-Niae et al, 2011). Finally, the project management process view key findings touched on the important aspect of communication in project management as essential in strategy implementation (Olsen & Johannessen, 2011), and that a company's strategy is implemented through project portfolios based on the application of appropriate project selection metrics and standardized termination process (Unger et al, 2012).

3. Research Propositions

It follows from the above literature review that the emergent themes identified project management as a key driver of strategies and competitive advantage. The organization's ability to implement projects was also identified as dependent on prioritization, selection and effective programme management. Project management was also seen as an impediment in some instances, leading to lost opportunities in implementing projects at faster and effective rate. Growth strategies were equally pursued by organizations of varying size and were the key driver of organization's sales and market growth. Competitive advantage was defined as largely an internal capability and the extent to which an organization's combined its internal capability to match its strategies was seen as a key enabler for achieving an advantage.

Anban and Young (2009) pinpoint that the project management research conducted during the past 50 years contained subjects on Strategy, Portfolio and Operations Management. Specifically, project selection was identified as critical driver of the organizations strategy implementation and further research was suggested on portfolio management, programme management, project governance in respect to strategy (Young et al, 2012).Earlier research by the project based organization suggested that additional research be conducted in the areas of the influence of project approach on organizational structures and optimal strategies (Thiry & Deguire, 2007). The researcher will aim to establish and investigate the below mentioned propositions which were established during the literature review;

1. Project management process selection is key in realizing growth strategies, growth projects and competitive advantage;

2. An organizations portfolio and project management contributes towards the realization of growth strategies and competitive advantage;
3. What are other unique combinations of project management processes that are key in the achievement of organizational growth strategies resulting into competitive advantage?

The above propositions will aim to accept or refute whether project management processes are key in the realization of the organizations growth strategies leading to competitive advantage.

4. Proposed Research Methodology and Design

4.1 Introduction

This chapter will discuss the chosen research method and design that will enable the researcher to understand and answer the problem statement, “Are project management processes key in driving growth strategies and competitive advantage”. The primary focus of this chapter will aim to share the key research objectives and constituents of the case study method and design for answering the problem statement highlighted in chapter one.

4.2 Objectives

As highlighted above, the primary objective of this case study research will be exploratory in nature and will aim to gain new insights (Saunders & Lewis, 2012) and assess the topic, “which unique project management processes are key in the realisation of growth strategies and competitive advantage”. The research approach will follow a case study methodology based on a combination of academic literature review and case studies. The analysis of literature will essentially focus on the main authors within the project management, growth strategy and competitive advantage field. This will be followed by a case research method which is important and essential where theory exists but the research environment context is different in terms of how and why certain research variables behaviour in a specific manner (Yin, 2009).

Three interrelated avenues or phases of investigation will be followed. The first one will be based on the analysis of the secondary data through an indepth review of empirical project management process, growth strategy and competitive advantage academic literature and academic journals. This will be complemented and followed by initial pilot interviews mainly telephonic and desktop website search query in order to confirm existance of

specific project management practises and behaviours. The final process will then graduate into an indepth case study analysis.

4.3 Case Study Design

The main rationale behind using the case study method is based on the researcher's realisation that the case study method offers the researcher an ability to study the research constructs or contemporary phenomena in its natural context (Yin, 2009). The analytical research paradigm is not sufficient for investigating complex real life issues, involving humans and their interactions with the identified constructs such as the project management processes (Soy, 2006). Case study research design offers the researcher the flexibility in coping with the complex and dynamic characteristics of real world phenomena and can potentially build on theory (Yin, 2009).The chosen case study research method and design is comprised of four (4) process steps (Runeson & Host, 2009) namely;

1. **Case Study Plan;**
2. **Procedures for case data collection;**
3. **Elicit and gather relevant evidence;**
4. **Data processing and analysis.**

4.4 Case Study Plan

The focus of the case study plan will aim to analyse relevant research constructs which will help answer the research problem (Runeson & Host, 2009). The case study plan, which forms part of the thrust of this research methodology, will be based on not more than one to five unique case study analysis over a period of not more than 8 weeks by studying the nature of individual organisational project management processes.

Case Study Procedures and Standards

One of the foremost challenges in case study research methodology pertains to maintaining validity during the data collection process, especially construct validity (Saunders & Lewis, 2012). This challenge can be addressed by imposing a procedure for keeping track of changes during the research project through a log or diary where all conducted data collection and analysis is recorded with change decisions that are taken during the case study research process. Table 2 aims to share an example of the relevant logbook fields and how the template might pan out as the research unfolds.

Table 2: Case Study Logbook elements

Case Study version #	Goals and scope	Data Collected	Analysis focus	Interpretation	Key Gaps
1	Initial screening of Organisational Project Management Maturity levels				
2	Case Study Pilot				
3	Archival document				
4	Qualitative data on feature groups				
5	Respondent feedback				

The main idea behind case procedures and standards is to ensure consistency and accurate account of the case study data collection as it changes throughout the research process.

Elicit and gather relevant evidence

An important consideration on the part of the researcher is how the researcher will select the companies and organisations for case study data collection. This poses some unique challenges which can be resolved through a focussed identification, and selection of relevant cases. The standard criteria for selecting the relevant cases for inclusion into the research project will essentially be based on specific elements such as;

1. A corporate company that has a set of defined strategic growth objectives in South Africa, Africa and globally. These could be new market share growth objectives, or any strategic growth agenda that the company needs to attain in order to grow its relative size, customers, markets and sales. It is highly probable that this organisation will be listed and will be seeking new markets in emerging economies;
2. The second criteria for selecting these cases will be an existence of an established strategic project management unit or department that enables these organisations to achieve the growth agenda;
3. The other criteria will be determined as the case study unfolds due to the fact that case study research is flexible and since it's based on observed reality, it can offer more insights on the characteristics of these organizations that can help the researcher answer the problem statement.

The above criteria will be updated as new evidence is gathered, and will be used by the researcher as a basis for choosing cases. The following subsections will give more information on the specifics around sample frame, population, and cases methods.

4.5 Sample Design

The basis data will be derived from the case study (Saunders&Lewis, 2012) analysis. This is to ensure that detailed insights can be arrived at through analysis of project management organisational departments and units. Specific contextual project management process activity will be analysed in order to understand and determine which unique project management process are key for realizing growth strategies. The context is very key and as such extreme diligence will be used in order to ensure consistency across all identified organisations without losing variance.

As outlined earlier on, the case study research approach will focus on organisations that demonstrate experience or have documented practices in using project management approach, methods, and models for implementing strategic growth projects leading to competitive advantage. The main focus areas for data collection phase will utilise a mix method approach composed of academic journal reviews, case interviews (mainly unstructured interviews), analysis of archival information, and direct case observations.

Sample frame and population

As outlined above on the research design and method section, a non-probability sampling method will be considered for this research study. A sample is a subgroup of the whole population that has got relevant attributes for the research topic or problem to be answered (Saunders & Lewis, 2012). The potential sample in this case study method would be users of the project management process, methods and practices for the achievement of some strategic growth agenda within the organisation. The foregoing sections will paint a picture on the relevant characteristics of the identified population and the units of analysis.

Population

The research population will be determined using a non-probability sampling technique based on expert self-selection sampling method. The population will include group members (Saunders & Lewis, 2012) within any small, medium or large organisation that

utilises project management approach, practises, and methods, models to manage and deliver on primarily growth strategies. An initial list will be obtained through desktop research and other website search query. The selected organisations for this research study will be headquartered and be operational in Johannesburg within the Gauteng province in South Africa. The unit of analysis will be the project management units (departments) within these organisations and will be the source of case study analysis and data collection. Table three (3) aims to share a granular view of the population parameters that this research will focus on. The below mentioned parameters will initially serve to guide the first case analysis and will be refined further as new research information presents itself.

Table 3: Companies identified for interviews

Location	Size	Industry	PM Maturity	Nature	Sales Growth
Johannesburg	EFT T C	ICT	HIGH	Banking	
Pretoria	EFT T C	Public S	LOW	Government	
Sandton	EFT T C	Services	MEDIUM	Marketing	
Parktown	EFT T C	Retail	MEDIUM	Retail	
Woodmead	EFT T C	ICT	HIGH	IT Consulting	

Key: EFT= Employee full time equivalent; T= Turnover; C- Capital employed

The size of these organisations will range from medium to large companies that have established project management practises, depend on projects to deliver on their growth strategies and have used these project management practises to achieve the organisational growth objectives during the past five to ten years.

4.6 Sample Unit of Analysis

Case study analysis will target interviews, case analysis and observations of the relevant actors within the project management units which have been defined to include heads of the strategic project management office, project managers, project sponsors, business owners, and project planners. This is largely due to the researchers' realization that the Project Management Office is part of a complex network and relations that links strategy, projects and structures (Aubry, Hobbs & Thuillier, 2007). Table 4 shares a granular view of the characteristics of these respondents.

Table 4: Case Study Sample Characteristics

Case	Respondent	Years of project management leadership, management and experience
A	Executive Sponsor	3-10
B	Project Management Unit /Office Director	3-10

A snowball sampling method (Saunders & Lewis, 2012) will be used in case non response bias presents itself during the research process.

Academic Journals

Academic journals, not more than 5 years, are a strong basis for the research to identify future research questions but also to offer a basis for understanding what other experts in the field of project management, growth strategy and competitive advantage have to say about the research problem statement. To this end, the research could establish the main school of thoughts during the past 5 years including the future research gaps and opportunities for formulating research questions.

Archival Data

The analysis of work products and artifacts will enable the research to gain additional insights and data in relation to the research problem outlined in chapter one. Although this method will expose the researcher on a number of historic records, as outlined earlier on, such project finacnails, minutes, organisational charts etc, it should be stated that upfront that these documents were not orginally developed with the intention to provide data to the research problem of this case study. This means that the document might contain irrelevant parts, with missing information which implies that archival data should be combined with other data collection techniques, such as further interviews with human cases, in order to obtain missing historical factual data.

Measurement

The case study data gathering will be complemented by semi structured telephonic interviews using a standard questionnaire couple with observations and document analysis of project management reports as outlined on the research method and design section.

Instrument structure

a. Questionnaire

The telephonic interviews and face to face interviews will remain largely semistructured, beginning with a set of general questions but also allowing for open –ended responses.

The survey instrument is divided into four major sections;

(1) The **section Company Characteristics** includes items referring to general characteristics of the firm, such as the business sector, number of employees and sales volume. The items in this section are “fact-based”, meaning that most of them can be answered by falling back on annual reports or publicly available company data.

(2) The section **regarding the Work Environment** is mainly about the department in which the participant works. The instrument strictly distinguishes between the enterprise as a whole and the department of the respondent because project management standards are frequently implemented in different ways in different parts of companies. A research and development department, for example, may apply other standards than an IT department.

(3) The **Portfolio/ Programme/ Project Management Knowledge/Application of Standards** section presents participants with a list of project management standards and project management-related standards and asks them to apply these standards. Moreover, a record is made of how the standards are adapted in the enterprise in order to achieve growth strategies.

(4) The section **Benefits and Deficiencies of Standards** was added to examine whether or not standards are recognized as being beneficial to the success of project management. Additionally, the major problems and deficiencies experienced when implementing project management process standards are examined.

The questionnaire will be used for the initial pilot in order to enable the researcher to understand and select the relevant cases based on criteria listed on the research questionnaire. This will then be followed by an indepth case study analysis and will signal the start of data collection.

Case Interviews

The case study interviews (Yin, 2009) will be conducted within the strategic project management unit and will initially target human cases composed of project sponsors,

project managers, team members and other relevant project management respondents in order to obtain different viewpoints. Each case study interviews will be transcribed into specific text and audio memos, and will be a source of primary data. Consent will also be sought for analysis of work artefacts and products such as project documents, files, and relevant records of growth projects. The researcher will initially aim for five (5) relevant cases.

Observations

Case study observations (Yin, 2009) are an ideal secondary way to gather information should the researcher fail to secure direct contact with the human cases. This method will assume the form of observations in meetings, where attendees interact with each and thus generate information about the studied object. Observations may provide a deep understanding of the phenomenon that is studied and prove relevant where it is suspected that there is a deviation between an official view of matters and the real case (Runeson & Host , 2008). Observations will take the form of the researcher observing how and why actors implement project management processes in order to achieve growth strategies.

Data Analysis Method

This phase will primarily focus on qualitative data analysis and will be iterative in nature in that it will be carried out in parallel with the data collection since the case study research approach is flexible and will also allow the researcher to fine tune the analysis as new insights are uncovered during the research process. The researcher will consider to utilise data coding, and analysis of similar patterns in order to decipher the anticipated case study transcripts which can pose difficulty on the part of the researcher when analysing case data.

Data Coding

The data coding approach (Runeson & Host, 2008) will seek to minimise complexity posed by the case study approach in that it will seek to assign certain parts of the text a code representing a certain theme, area or research construct. The coded material can be combined with specific additional researchers comments and reflections recorded in research memos. The other data analysis consideration could be in a form of table 5 showing data arranged in rows and columns in Excel 2010 software tool.

Table 5: Data Coding

Case Interview Subject		
Codes of Interest	Project model	Communication
Codes of Interest	Planning	Follow up
Codes of Interest	Quality	Technical issues

Analysis of Similar Patterns

Another considered approach in order to enhance the data coding analysis, will be identification and analysis of data patterns that are reoccurring , phrases that are similar in different parts of the material, patterns in data, differences between subgroups of subjects. The identified patterns can then be used when further data is collected and analysed leading to an iterative process. Each statement in the transcribed interviews will get a unique code of identification, and transcribed data will then be filled into a table as outlined on table 4, allowing for analysis of patterns in the data by sorting issues found by interviewee role.

During analysis, it is also important to maintain a chain of evidence from the findings to the orginal data.Each interview will be transcribed once the interview is completed.This would be complemented by a detailed summary of each case study and specific notes will be compiled and main points will be made in relation to each of the research questions. Cross case analysis will also be conducted in order to spot any differences and similarities. The researcher would also need to consider applying a formal approach to record all decisions taken, links between data, codes, and memos. An example could be editing and template approaches. There is no burning requirement to conduct statistical analysis due to the case study method chosen which will observe and study organisational practises.

5. Results

5.1 Introduction

The aim of this chapter will be on presenting the case study enquiry process including how interviews were conducted and gap analysis, the attributes of the archival data and lastly an overview of specific feedback supported by case study responses, transcriptions, and relevant quotes. This will include an overview of the internal characteristics of the case study analysis, such as the size of the studied units, the average experience of the personnel. Care was considered and exercised in order to strike a balance between the researcher's duty and goal to publish their results and the respondent companies and individual integrity (Runeson & Host., 2009).This chapter will provide a clear sense of the

studied cases, provide an account of the inquiry process in terms of what was done, by whom and how and lastly provide coded data in terms of transcription of interviews.

5.2 Enquiry Process

The linear-analytical reporting style was used to detail the case study analysis and reporting (Yin,2009).Case interviews, and archival data analysis were used mainly to elicit, and collect research data.

5.3.1 Case Interviews

The first degree (Lethbridge, Sing & Sim, 2005) data collection method was used by the researcher which entailed direct contact with the subjects and collection of data in real time in the form of mainly unstructured, semi structured interviews and analysis of archival data. A semi-structured interview approach was utilised for the bulk of the interviews. This was intentional on the part of the researcher in order to reemphasise the most important aspects of the case study research. The researcher exercised extreme diligence in ensuring consistency at least for the initial two cases. This was intended to allow for exploration and improvisation of the studied cases. The interview process was divided into a number of phases. The initial session sought to present the objectives of the interview and the case study, and explained how the data from the interview will be used. A set of introductory questions around the case background, history and experience of the individual subjects was used to set the case study context.

The main interview questions followed the introduction phase after the rapport had been established with the individual case and were more specific. A digital recording device was used for recording the discussions during the interview. The interview recording was later transcribed into specific insights, themes and codes. In some cases, the notes and transcripts were reviewed by the interview subjects. This was meant to ensure that consistency in terms of what was said and offered the interview subject to point out any interview discrepancies, paraphrasing any comments made, or simply altering statements made during the case study interview. The interviewees were mainly aimed at the project management office leadership and executive level, and excluded interview subjects that worked within the projects, such project managers, and administrators. Tables six (6) and seven (7) will highlight key case findings and gap analysis that served to guide the case study research approach during the process of data collection.

Table 6: Capital Markets Case Study Gap Analysis

Date	Case Study Cycles #	Goals and scope	Data Collected	Analysis focus	Interpretation	Key Gaps
23.07.12	1	Initial screening of Project Management Maturity levels	Project Maturity Levels	Build Pilot model	Relevant scope	Analysis of Capital Markets PMO Top Ten List Process.
20.08.12	2	Pilot	Industry category, size, makeup, sample, prevalence of process elements	Refine case study constructs and questions	Relevant scope	What is the process for selecting, and abandoning of projects that don't value?
20.08.12	3	Archival document	Relevant project management document	Supporting information	Relevant scope and work products	Top Ten list document, Business Case, Resource profiling, Planning Toolkit, Execution and follow up docs.
TBA	4	Qualitative data on feature groups	Interview with relevant cases	Observation, interviews		

Table 7: Infrastructure Case Study Gap Analysis

Date	Case Study Cycles #	Goals and scope	Data Collected	Analysis focus	Interpretation	Key Gaps
13.08.12	1	Initial screening of Project Management Maturity levels	Project Maturity Levels	Build Pilot model	Relevant scope	Group-Wide Selection Process
03.09.12	2	Pilot	Industry category, size, makeup, sample, prevalence of process elements	Refine case study constructs and questions	Relevant scope	What is the process for selecting, and abandoning of projects that don't value?
03.08.12	3	Archival document	Relevant project management document	Supporting information	Relevant scope and work products	PlayPen Outputs / Documents, Business Case, Resource profiling, Planning Toolkit, Execution and follow up docs.
TBA	4	Qualitative data on feature groups	Interview with relevant cases	Observation, interviews		

5.3.2 Archival Case Data Analysis

The main archival data that was collected was composed of strategic material and was project, programme and portfolio management related. The case analysis information included programme wide selection lists, top ten list, strategic portfolio and programme reports. A realization was made by the researcher on the validity of these documents as the original intent in devising these documents was based on a different organisational need and not for the case study analysis.

This challenge was addressed through follow up interviews with respective interview subject in order to understand its general application within the case study. The researcher recognizes the difficulty in assessing the quality of these documents which was partly offset by the document versions or release dates falling within the past 3 months. Table eight (8) shares the details of the archival data that the researcher identified.

Table 8: Archival Data Table

Cases	Capital Markets	Infrastructure
Archival Data	Group Top Ten List	Group Wide Selection
	Business Case	Business Case
	Action Minutes	Schedule
	Project Reports	Risks and issues
	Project method	Scope document
	Project Dashboard	Financials
	Benefits realization	Earned Value
		Team Status
		Resource pool level management

The below diagram shares a summarised version of the key phases of the inquiry process that the researcher undertook during the case study. These phases were essentially used to structure the case study approach. In each case study instance, the researcher evaluated ensured consistency by conducting initial telephonic semi structured interviews, followed by an initial recorded pilot culminating into an in-depth review of archival data. These findings would eventually help the researcher refute or accept the researcher propositions outlined on chapter three. The below diagram aims to depict the pocess flow in simple steps.

Actual events within the case context
(PMO UNIT)

“Linear Structure”

Subjects perceptions based on their
observations and experiences

Case Analysis

Sound
recording of
interview

Transcriptions
of recording

Grouped
terms, quotes

Refute or Accept Research Propositions based on key Case Analysis findings

5.3.3 Observations

The researchers ability to conduct case study observations for both the capital markets and infrastructure case studies did not occur as originally planned due to the timing and occurrence of strategic project portfolio and programme forums that typically took place during the start of the new financial year in early April and happened once every quarter. The data collection for this case research took place during the last quarter of 2012, beginning from mid-July until end of August 2012 which did not correspond with the quarterly reviews within the target cases.

5.3 Characteristics of the studied cases

The cases studied during the research process were selected based on important considerations outlined on chapter 4. These cases contained a well balanced mix of financial companies, consulting, and government. The holistic case study (Yin, 2009) was the basis of identifying the correct context, case and unit of analysis.

Case Analysis 1

Case Context: The initial case study chosen was a multinational niche capital markets bank that specialised in investment products in Treasury, Trade and Lending. The cumulative market capitalization of this bank was in the region of R167 Billion and specialised in high end niche banking clients. It is an international specialist banking and asset management group. It provides a range of financial products and services to a client base in four principal markets: the United Kingdom, South Africa, Australia and Ireland. It is listed on the London Stock Exchange and the Johannesburg Stock Exchange and is a FTSE 250 company. The company is headquarters in Johannesburg, South Africa and has other offices in the UK.

Its product range is in Private Banking, Capital Markets, Investment Banking, Asset Management, Property Activities, Wealth Management and Investment Management. It had gross revenue of £1,955.0 million in 2011, Operating income £410.2 million in 2011 leading to Net income of £407.9 million in 2011. Its full time employee head count equalled roughly 5,951 worldwide in 2009. The organisation is organised as a network comprising six business divisions: Asset Management, Wealth & Investment, Property, Private Banking, Investment Banking and Capital Markets. The head office provides certain group-wide integrating functions and is also responsible for central funding and the Trade

Finance business is organised as a network comprising six business divisions: Asset Management, Wealth & Investment, Property, Private Banking, Investment Banking and Capital Markets. A key challenge within this company was achieving consistent growth in the local and international markets, especially the capital markets side of the business.

Case Attributes: The case analysis studied the Capital Markets project management office and the researchers interviewed the director and head of the Capital Markets project management office. The researcher spent time making the initial screening over desktop analysis that sought to identify the nature of the organisations growth strategy, followed by initial phone calls to ascertain prevalence of specific case elements such as prevalence of the project management unit, years in implementing and using the project management method, staffing of not less than 10 full time employees. The department was structured around specialist functions by business unit in a form of dedicated project teams for each business function in Treasury, Trade, and Lending. The project management department teams comprised of experienced senior project managers, project administrators and business analyst at each functional level supporting the business teams in Trade, Lending and Treasury. This analysis was further complemented by initial interviews mainly focussed on setting a base to build further iterations of the case study analysis. A snapshot of the initial findings based on desktop research and initial semi structured interview with the head of the project management office is depicted on Table nine (9).

Table 9: Initial Desktop search and semi structured interview results

Version	Interview Date	Author	Change Description
0.1	23 rd July 2012	Fana Mazamisa	Initial Draft,
Case study purpose and objectives: The objective of this initial meeting was established along the below mentioned points which are aimed at supporting or refuting the below mentioned propositions.			
1	Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage		
2	An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage		
3	Are there other unique combinations of project management processes that are key in the achieving organizational growth strategies resulting into competitive advantage		
Company Characteristics	Relevant Metrics		
Size by Market Cap	14.89bn		
Sector	Financial Services		
Capital Markets PMO FTE	40 Full Time Equivalents		
Work Environment	Relevant Metrics		
PMO Unit Exits	Yes, 1 dedicated		
Make Up and Size	Matrix structure by functional engagement (Treasury, Trade and Lending)		
# of projects per portfolio	Over 60		
Project team size	40 full time project consultants per 60 business applications		

The researcher essentially focussed on understanding the basic attributes of the project management unit, its model and methods of achieving growth strategies. This initial interview held with the case subjects was also used to establish rapport with the case subjects. The outcome of this initial step enabled the researcher to understand the aspects of case validity and relevance. This initial step also resulted in the refining of a more detailed interview and follow up session that sought to analyse and interview individual cases including work archives.

The cases were strictly limited within the project management unit of this organisation and all interviews were recorded and later transcribed into thematic codes of analysis which will be discussed under inquiry process section. The objectives were explained as part of the initial and subsequent interviews to maintain clarity and focus on the part of the researcher.

Unit of Analysis: The unit of analysis was the project management office and case interviews were held with the director and head of the capital market project management office who carried the overall responsibility for the strategic management, selection, prioritization, implementation and monitoring of all growth projects within the project management department. The individual carried ultimate responsibility for the success of the project management department. They also had over ten (10) years' experience managing projects of different risk profile, complexity and carried budgets of not less than R10 Million in investment terms. The researcher disclosed the names and contact information, explained the purpose of the case study objectives, provided a high level description of what the individual participant would be required to do during the case analysis, such as access to information such as documents that demonstrate how growth projects are delivered and a generic overview of the steps that the researcher will carry out during the these activities. This was also completed by informed consent, confidentially as devised by the company.

Case Analysis 2

Case Context: The second case context was within a large banking company in South Africa headquartered in Johannesburg. Its Market capitalization was R509.7 billion as of 31 December 2009. It primarily focused on a diversified offering of financial services

products and had revenues of about R8.1 billion in 2009 with total assets under management equalling R510 Billion with a full time employee count of about 22,000+. The company increasingly relied on growth projects to defend its market share and grow its customer base. This was further compounded by the fact that the banking industry is increasingly seen as undifferentiated and in this instance the target bank increasingly relied on innovation as an anchor for strategic growth, new business in terms of customers and its global growth strategy in Africa and select markets around the world where it enjoyed operating license. The main driver in this instance as was deep reliance in technological innovation, in terms of new product launches, optimal processes, security, and other Basel III requirements as required by the banking legislation.

Case Attributes: The individual cases were within the information technology infrastructure project management department. The composition of innovation projects initiated by business technology constituted about 80% of all infrastructure projects and programmes with operations accounting for less than 20% of the total annual programmes, portfolios and projects. The project management unit was established over 10 years ago and had established project management standards, models and best practise for achieving growth strategies. The project management unit was organised around a formal structured format with about 100 projects managed annually. The total full time staffing of this department equalled 15 full time employees who were composed of senior project managers, project administrators, business analysts, and other technical related roles. Table ten (10) shares initial findings based on desktop and pilot interviews.

Table 10: Initial Desktop search and semi structured interview results

Version	Date	Author	Change Description
1.0	14.08.12	Fana Mazamisa	Initial drafting
The objective of this report is gathering all relevant information that refutes or supports the below propositions			
1	Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage		
2	An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage		
3	Are the other unique combinations of project management processes that are key in the achieving organizational growth strategies resulting into competitive advantage		
Company Characteristics		Relevant Metrics	
Size by Market Cap		R509.7 billion	
Sector		Financial Services	
Industry Growth		Africa and other global markets	
Infrastructure PMO FTE		15	

Work Environment	Factors That Supported Success
PMO Unit Exists & Years	One, 10 years
Make Up and Size	Structured
# of projects per portfolio	Over 100
Project team size	15

The researcher focussed on firstly understanding the prevalence of the project management unit, including an initial email enquiry on the project management model in use, composition of projects and the total share of growth projects, the basic model for delivering growth projects, maturity levels in using the project management model over the years, budgets managed annually which total roughly R600 Million annually, and if an accurate account of project management records was kept within the organisational premises. The case selection evolved as well due to the learning learned during the first iteration of the case study project. The outcome of this initial step enabled the researcher to understand the aspects of case validity and relevance. This initial step also resulted in the refining of a more detailed interview and follow up session that sought to analyse and interview individual cases including work archives. The cases were strictly limited within the project management unit of this organisation and all interviews were recorded and later transcribed into thematic codes of analysis which will be discussed under inquiry process section. The objectives were explained as part of the initial and subsequent interviews to maintain clarity and focus on the part of the researcher.

Unit of Analysis: The unit of analysis was the project management unit (PMO) within the organisation and interviews were held with the PMO head of strategic infrastructure group operations and head of the infrastructure project management office who's ultimate mandate was the effective conceptualization, selection, leadership, planning, implementation, and monitoring of the banks group wide growth projects. The individual carried over 15 years of working within the banking environment and less than 13 years managing and leading a project management office. The individual carried ultimate authority, accountability and responsibility for the success of the project management department. The total projects under management equalled R600 Million annually to which growth, innovation projects accounted for 80% of the total R600 Million invested annually. The researcher disclosed the names and contact information, explained the purpose of the case study objectives, provided a high level description of what the individual participant would be required to do during the case analysis, such as access to archival information

such as documents that demonstrate how growth projects are delivered and a generic overview of the steps that the researcher will carry out during these activities. This was also completed by informed consent, confidentially as devised by the company.

5.4 Transcriptions and Quotations

Table 11 and 12 shares case findings coupled with research propositions and transcriptions.

Table 11: Capital Markets Case Study

Research Proposition : Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage	
Response	Capital Markets project executive management ensures that projects align with the strategic direction of the company and Capital Markets project management office is responsible for compiling a company-wide Top Ten List that is prioritized. All projects in this top ten lists are selected and prioritized based on the following key metrics; 1 Revenue – the future cash flows that can be derived from implementing a project against the short and long term strategic growth objectives.. 2. Operational Efficiency - minimize all operational waste 3. Risk – the extent to which risk can be managed against the perceived benefits of the pursuing a given project 4. Legal / Compliance – the legal implications of implementing a given project and associated legal costs of implementing that projects
Transcriptions & Quotes	"This process is tightly managed by the divisional management committee (MANCO)" "All project selection conflicts are escalated to the company Chief Operations Officer and Chief Executive Officer, who will make the final decision based on the strategic priorities of the company" "Executive management buy in will then follow" " Strict governance of this selection process is made through the waterfall approach with milestone review gates"
Research Proposition : An organization's Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage	
Response	The Capital Markets PMO process is underpinned by a strong culture which is non-hierarchical, collaborative and faster decision making that is the pinnacle and anchor of this process. The below mentioned project management process steps were identified as central in the delivery of Capital Markets Revenue Projects (Growth Projects); 1. Portfolio Top ten list – a project has to form part of this list which is based on the criteria outlined on 2. Business case conceptualization and approval – shorter time frames entail that projects are approved and selected based on strict business criteria as outlined on point 4 3. Scope generation – a highly collaborative phase that involved internal sourcing of solutions and ideas within other divisions. Includes review by the selected executive management team for decision review. The team utilizes active internal consulting as well and prototyping in order to minimize project costs. 4. Resource onboarding – team composition is by business need and support. Each team is split according to a specific skill set to focus on growth projects within those business units, namely Treasury, Trade, and Lending. The team is composed of 40 project management teams supporting 60 business projects. Project challenges and objectives are the core determinants of which skills to onboard. 5. Planning – Capital markets follows a mixed method approach composed of best practice in project schedule planning, and resourcing. 6. Execution – this phase is managed actively through weekly engagements with business, IT, Steercom teams by using an EPM software tool to track and measure progress. The approach is practical in that it seeks to identify potential risks and issues that might present themselves during execution. Examples of documents would be risk, issues and logs, action minutes and strict governance in order to minimize risks.

Transcriptions & Quotes	<p>"We manage all our portfolios and projects through the top ten list, which is reviewed every month"</p> <p>"Portfolio management is achieved through governance that is based on the waterfall principle "</p> <p>" All projects are tracked through the business benefits tracking mechanism which monitors budget spend based on agreed objectives"</p> <p>"All critical project scope elements are reviewed for consistency"</p> <p>"Over 200 initiatives form part of the organization projects portfolio and programme at a given quarter"</p> <p>" The project management office will routinely check for projects that don't add any value, and roughly 20-50 initiatives are stalled"</p>
Research Proposition : Are there other unique combinations of project management processes that are key in the achieving organizational growth strategies resulting into competitive advantage	
Response	<p>Unique attributes of the PMO process</p> <p>1. Culture – greater accountability and decision making by executive management, coupled with sponsor buy in</p> <p>2. Peer Review – strong, agile approach that relies on collaboration within the company. Peer network linked globally for similar projects</p>
Transcriptions Quotes	<p>" We believe in strong collaboration and consultation within the company"</p> <p>" Our leaders are fully engaged"</p> <p>" We ensure cross functional alignment before we proceed with any project"</p>

Table 12: IT Infrastructure Case Study Findings

Research Proposition : Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage	
Response	<p>Project selection is based on a flexible group wide process that is based on the following key steps.</p> <ol style="list-style-type: none"> 1. Strategic alignment – projects are essentially initiated by business based on a need to achieve a specific strategic agenda, such as financial, compliance or other banking licensing objective 2. Clustering – each division or cluster within the bank then devises a specific plan based on the overarching objective of the bank, that translates into specific cluster objectives 3. Business Initiative – this is then translated into specific business case within a cluster 4. PlayPen Simulation – information is then fed into an online project simulation tool that gives a high-level view of project resource constraints such as cost, time and resource. This tool runs on MSP 5. Group Prioritization Forum – the cluster project lists are then submitted to a Group wide list, which is worth an estimated 600 Million in terms of project value, for prioritization at a group level. This list is published for organization wide visibility and is driven by business. This forum meets once every quarter and is driven by the PMO. 6. Pre-Execution – this phase then details the granular aspects of the chosen projects and project teams provide details on cost, time, resources, business requirements specifications, high-level designs, benefits 7. Business Case approval – 8. Execution – projects are essentially monitored in terms of financial risk, data complexity, process impacts, people and resourcing impact, compliance. A Call Centre facility plays a crucial role in guiding execution efforts such as required work products per phase in terms of plans. This includes detailed designs on the solution as well. Project Execution is made up of the Detailed Design, Build test and Fix, Implementation and Benefits tracking phases

Transcriptions & Quotes	<ol style="list-style-type: none"> 1. It starts with Group Strategy, so Group Strategy is defined and agreed by business. 2. Then each of the business clusters define and identify initiatives that are going to enable these strategies and they then come up with strategic projects. 3. We go through a process, called PlayPen, which is an offline application, that results into a high level cost and benefit analysis. All strategic projects are loaded onto a PlayPen application. 4. When projects are loaded into PlayPen, the projects are modeled in that simulation environment using a tool called project office toolkit which has been perfected over ten (10) years within the company. 5. This solution was developed internal staff. 6. The outcomes are high level cost, resource requirements for executing projects. 7. They then play back the high level outcomes back to business and ask of this fits back to your business resources. 8. They then go through a business case process defining process defining each project that will deliver on their strategy. 9. Once those business case projects are defined, they there project goes into what we call, pre-execution, so it moves from this Play-Pen environment into a proper programme, project schedule. It is during pre-execution that we have more certainty around the cost, time, resourcing and planning goes into granular level (detailed business case). The preeexecution defines all the requirements before execution. 10. While that is happening, they start with their business requirements which are detailed. 11. They (clusters) then go and refine the cost and time variables against the business case 12. Execution will follow after approval 13. Once all planning is done, they (projects) are fed back into a Group-Wide list. They are put into a group list and then that list in every quarter sits in excess of a billion rand. 14. They then go through a Group-prioritization list, and get all the clusters bosses/ heads into a room and they go through the list end to end and question what is number one priority on the list based on strategic project observations. 15. They come up with a published Group Wide prioritized list that contains approved projects for execution and implementation. 16. They then execute against that group prioritization list and they track project progress against the commitments. 17. They are held accountable for the bad planning around the business cases, because all planning sets budget commitments against business cases.
Research Proposition : An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage	
Response	Through a Group Wide Selection Process that prioritizes projects at an enterprise level.

Transcriptions & Quotes	<ol style="list-style-type: none"> 1. Between 600-700 Million rand worth projects are delivered annually and 80% of that budget goes towards the implementation of growth, revenue projects 2. When we do the planning, we tend to give lower priority to the remaining 20% of the projects 3. The way we prioritize projects is based on the strategic importance of the project and its legal and compliance importance 4. We have a standard artifacts for everything, there's a standard schedule that when new projects start, there project managers take schedule template and tailor out from the schedule the relevant parts for execution. 5. When we load projects on the project office toolkit, there a number of strategic dimensions that we look for and approve project on. These are <ul style="list-style-type: none"> • Complexity – how many systems, divisions is the project impacting • Resourcing – how many resources will the project require • Financial – how much will it cost and the expected investment benefits • Strategic alignment – does this project fulfill the strategic mission and dimension 6. All projects are loaded into a project office toolkit and then based on these dimensions, they get filtered and a decision is made on which projects are strategic, of compliance nature, internal or operational. 7. Senior executives will then agree on which projects important are based on the above criteria. 8. The project office toolkit uses a dynamic model that makes initial calculations and prioritizations of the projects and it then applies this logic which is mainly based on the organization strategic risk appetite. 9. So if a project adheres to one strategic dimension then it is held or if it fulfills one out of 10 of the required strategic dimension, then it will be prioritized lower. 10. The group wide prioritization committees take place once every quarter through the following key steps or processes <ul style="list-style-type: none"> • Initiate – once every quarter • Validate – every quarter, check priority and swap projects on the group wide list based on strategic importance • Contextual – review the market execution conditions and swap priority based on that. 11. All the above project executive control processes are driven and managed by the Project Management Office.
Research Proposition : Are there other unique combinations of project management processes that are key in the achieving organizational growth strategies resulting into competitive advantage	
Response	Call Centre process support for project management and playpen simulation
Transcriptions & Quotes	<ol style="list-style-type: none"> a. We go through a process, called PlayPen, which is an offline application, that results into a high level cost and benefit analysis. All strategic projects are loaded onto a PlayPen application. b. When projects are loaded into PlayPen, the projects are modeled in that simulation environment using a tool called project office toolkit which has been perfected over ten (10) years within the company. c. This solution was developed internal staff d. A Call Centre facility plays a crucial role in guiding execution efforts such as required work products per phase in terms of plans. e. We have a standard artifacts for everything, there's a standard schedule that when new projects start, there project managers take schedule template and tailor out from the schedule the relevant parts for execution.

We conclude with a set of common themes that emerged during the case study interviews, and analysis. These themes are reflected on the below Table 13.

Table 13: Common Case Themes

Common Themes in all Case Interviews		
Codes of Interest	Project model	Communication
Codes of Interest	Planning	Follow up
Codes of Interest	Agile	Financial
Codes of Interest	PMBOK	Steering Committees
Codes of Interest	Risk	Change
Codes of Interest	Strategic alignment	Business Case
	Prioritization	Group List
Codes of Interest	Commitments	Ownership
Codes of Interest	Learning's	Training
	Simulation	Execution

6. Discussion of Results

This research has examined the project management processes within two financial organizations with established project management units. Although this research was set in two distinct project management organizations, one capital markets and one a large South African Bank, the findings from this research indicated that in all participating cases, the project management processes were essential in delivering the strategic growth projects. Furthermore, it was found that these organizations intentionally devised project management process approaches that were relevant to their individual competitive environments and the demands of growth strategies. The researcher noted that these companies had established project management practices that were in practical use for more than ten years. The aim of this chapter will discuss and link the research study question, which are the specific project management processes that drive the realization of growth strategies and competitive advantage through the below research proposition outlined in chapter three .

1. Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage;
2. An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage;
3. What are other unique combinations of project management processes that are key in the achievement of organizational growth strategies resulting into competitive advantage?

The researcher will link the above propositions with main authors discussed in chapter two and the research problem raised in chapter one.

6.1 Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage

Organisation project management selection ability was cited to be a key driver of strategy implementation (Young et al, 2012). Project selection was also seen to be behind why companies fail in execution strategy. We found that in both cases this ability to select and prioritize projects was conceptualized and implemented in a disciplined approach within the studied cases. The research findings on both the capital markets and bank case studies confirm this important aspect of project management selection. A review of both case findings will follow.

a. Capital Markets Case

"We use a non-hierarchical structure underpinned by a strong focus towards projects that will enable us to deliver on revenue building projects". "The capital markets project management office process of project selection uses the portfolio top ten list which is the basis of projects selection".

The findings within the capital markets project management unit confirmed that there organisation followed a disciplined approach in selecting and implementing projects. The selection of these projects was based on strict a criterion that was a standard project management process for achieving growth strategies and competitive advantage. This criterion was firstly based on the strategic alignment of selected projects with Capital Markets project executive management. The key mandate of this leadership group ensured that projects align with the strategic direction of the company. This finding is in line with the concept of linking projects with strategy which was initially proposed by the project based organization (PBO) model which found that the widespread adoption of a project management approach within organization's that depend on project management practices and methods had come to gradually influence strategy (Thiry & Deguire, 2007). The Capital Markets project management office compiled a companywide Top Ten List that was prioritized. All projects in this company wide top ten lists were selected and prioritized based on the following key metrics;

1. Revenue – the future cash flows that can be derived from implementing a project against the short and long term strategic growth objectives;

2. Operational Efficiency – the extent to which a project minimize all operational waste;
3. Risk – the degree to which risk can be managed against the perceived benefits of the pursuing a given project;
4. Legal / Compliance – the legal implications of implementing a given project and associated legal costs of implementing that projects.

The above criteria served to support the view that there success of the company wide top ten list model was depended on the project management maturity levels within the organisation, the level of authority given to project managers, the level of precision of the project definition and availability of competent personnel (Besner & Hobbs, 2008). This ability to select project in time was also underpinned by the Capital Markets project management office strong culture which is non-hierarchical, collaborative and had faster executive management decision making that is the pinnacle and anchor of this process.

b. Infrastructure Case Study

“It starts with Group Strategy, so Group Strategy is defined and agreed by business”

“Then each of the business clusters defines and identifies initiatives that are going to enable these strategies and they then come up with strategic projects.”

“We go through a process, called PlayPen, which is an offline application, that results into a high level cost and benefit analysis. All strategic projects are loaded onto a PlayPen application”.

“When projects are loaded into PlayPen, the projects are modelled in that simulation environment using a tool called project office toolkit which has been perfected over ten (10) years within the company”.

Perhaps similar in some ways to the Capital markets case findings was the realization made on the infrastructure case study that proved that managing projects selection using a number of approaches was treated with equal formality and discipline. The researcher established that project selection is based on a flexible group wide process that is based on the following key steps.

1. Strategic alignment – projects are essentially initiated by business based on a need to achieve a specific strategic agenda, such as financial, compliance or other banking licensing objective;
2. Clustering – each division or cluster within the infrastructure then devises a specific business plan based on the overarching objective of the bank, that translates into specific cluster objectives;
3. Business Initiative – this is then translated into specific business case within a cluster;
4. PlayPen Simulation – information is then fed into an online project simulation tool that gives a high-level view of project resource constraints such as cost, time and resource. This project cost and benefits modelling and simulation runs on Microsoft Project Toolkit;
5. Group Prioritization Forum – the business cluster project lists are then submitted to a Group wide list, which is worth an estimated 600 Million in terms of project value, for prioritization at a group level. This list is published for organization wide visibility and is driven by executive business. This forum meets once every quarter and is driven by the project management office.

The above findings confirm that there group-wide prioritization forum played a critical role of ensuring that projects could support the overall revenue objectives of the organisation. A huge challenge with projects was that managers lacked the ability to proactively terminate projects at a crucial point and this could at least be managed through a structured process with early warning for problematic projects that could fail

(Unger et al, 2012). The researcher established that the group-wide prioritization forum quarterly meetings focussed on selecting projects that enabled the organisation to implement the strategy through project portfolios and focussed on using the correct metrics, such as complexity of the project, resourcing, financial and strategic alignment in selecting projects by rigorously resorting to a strict selection routine and standardized termination process which lead to transparency and thus better decisions and ultimately to adequate allocation of resources. This view was supported by earlier work conducted by Unger et al. (2012).

The researcher found that the group-wide prioritization forum played specific roles during the critical stages in programme management which were strategic awareness, understanding, planning, piloting, implementation, consolidation and customisation of all group-wide project initiatives within the organisation (Shehu & Akintage, 2010). The

resulting outcome of these group wide prioritization forums was a group wide list, which is worth an estimated 600 Million in terms of project value, for prioritization at a group level. This list contained all project per business cluster that will be implemented for growth. This active project management selection process led to the implementation of between 600-700 million rand worth projects delivered annually. This is because there way we prioritize projects is based on the strategic importance of the project and its legal and compliance importance. Their research findings confirm that project selection is an important project management process element that organisations have to master in order to deliver short, medium and long term strategic growth.

This was confirmed by Ozturkcan & Buyukozkan (2010) who endorsed the importance of project selection thereby ensuring optimal resource utilization and greater contribution of projects towards companies missions, goals and strategies. The playpen simulation model that the banking company used in project selection supported the Preference Ranking Organisation Method for Enrichment Evaluations (PROMEE), which uses a logical model for making calculations on the likelihood of that specific project selection would enable and contribute towards the organisation growth objectives (Shakshi-Niae et al,2011).

The researcher established that the PlayPen simulation helps in executive management decision making by revealing simulated information with regards to a projects highlevel cost and benefit analysis. The starddization of this project management process within the organsiation meant that all strategic projects were loaded onto a PlayPen application for simulation on a consistent basis.

6.2 An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage

The research findings on both the capital and infrastructure cases confirmed that both organisations had a well-documented practice of managing growth projects using specific project management processes. The researcher could clearly establish there existence of these processes which were linked with the organisational strategic growth objectives. Further in both cases, the researcher could determine how these processes were used in order to deliver strategic growth projects. In most instances, the mix of these processes was used for both strategic growth and operational projects. This was due to the increasing realisation by the executive project management personnel that projects would eventually become operational once implemented.

This finding agrees to two authors that were covered during chapter two who confirmed that the scales for managing project complexity were identified to address many issues regarding decision-making and project complexity starting with project prioritization within a portfolio in order to focus on the most complex projects, comparison of present projects with past projects, and one on one mapping and detailed comparison of two projects which exists in the same portfolio in terms of project complexity (Vidal et al, 2011). This is because, the learning's of implementing project management processes for strategic growth projects was turned into a know-how that was documented and archived as part of the organisation best practise. Further, there execution discipline behind the organisation portfolio and project management indicated that executive management treated individual projects as key enablers for strategic growth project. This agrees to the research view that there's awareness and empirical evidence that projects do drive implementation strategy (Kwak & Anbari, 2009). The researcher will now share key findings in terms of the problem statement and key propositions outlined in chapter three.

Capital Markets

"We manage all our portfolios and projects through the top ten list, which is reviewed every month"

The below mentioned project management process steps were identified as central in the delivery of Capital Markets Revenue Projects (Growth Projects) and also in portfolio and programme management of companywide projects;

1. Portfolio Top Ten list – a project has to form part of the this list before it can be form part of the portfolio and programme list;
2. Business case conceptualization and approval – shorter time frames executive approval entail that projects are approved and selected based on risk complexity, potential revenue, operational efficiency and legal and compliance;
3. Scope generation – a highly collaborative phase that involved internal sourcing of solutions and ideas within other divisions. Includes review by the selected executive management team for decision review. The team utilizes active internal consulting as well and prototyping in order to minimize project costs;

4. Resource onboarding – team composition is by business need and support. Each team is split according to a specific skill set to focus on growth projects within those business units, namely Treasury, Trade, and Lending. The team is composed of 40 project management teams supporting 60 business projects. Project challenges and objectives are the core determinants of which skills to onboard;
5. Planning – Capital markets follows a mixed method approach composed of best practice in project schedule planning, and resourcing;
6. Execution – this phase is managed actively through weekly engagements with business, IT, Steercom teams by using an EPM software tool to track and measure progress. The approach is practical in that it seeks to identify potential risks and issues that might present themselves during execution. Examples of documents would be risk, issues and logs, action minutes and strict governance in order to minimize risks. This findings further attest to the purpose view alignment, which suggested that project management effectiveness and efficiency is driven by the management ability to utilize the relevant tools and models especially in the high-stakes management of large, complex projects (Browning, 2010). The findings for the bank case study contained some key findings as well which will follow.

Infrastructure Case

“There way we prioritize projects is based on the strategic importance of the project and its legal and compliance importance”.

“We have a standard artifacts for everything, there’s a standard schedule that when new projects start, there project managers take schedule template and tailor out from the schedule the relevant parts for execution”.

“All projects are loaded into a project office toolkit and then based on these dimensions, they get filtered and a decision is made on which projects are strategic, of compliance nature, internal or operational”.

“Senior executives will then agree on which projects important are based on the above criteria”.

“So if a project adheres to one strategic dimension then it is held or if it fulfills one out of 10 of the required strategic dimension, then it will be prioritized lower.”

“The group wide prioritization committees take place once every quarter through the following key steps or processes Initiate – once every quarter, Validate – every quarter, check priority and swap projects on the group wide list based on strategic importance, Contextual – review the market execution conditions and swap priority based on that.”

"All the above project executive control processes are driven and managed by the Project Management Office".

The case findings for the infrastructure portfolio and programme management confirmed that the project management processes that were followed for growth projects covered the below steps;

1. Strategic alignment – projects are essentially initiated by business based on a need to achieve a specific strategic agenda, such as financial, compliance or other banking licensing objective
2. Clustering – each division or cluster within the bank then devises a specific plan based on the overarching objective of the bank, that translates into specific cluster objectives
3. Business Initiative – this is then translated into specific business case within a cluster
4. PlayPen Simulation – information is then fed into an online project simulation tool that gives a high-level view of project resource constraints such as cost, time and resource. This tool runs on MSP
5. Group Prioritization Forum – the cluster project lists are then submitted to a Group wide list, which is worth an estimated 600 Million in terms of project value, for prioritization at a group level. This list is published for organization wide visibility and is driven by business. This forum meets once every quarter and is driven by the PMO.
6. Pre-Execution – this phase then details the granular aspects of the chosen projects and project teams provide details on cost, time, resources, business requirements specifications, high-level designs, and benefits
7. Business Case approval –
8. Execution – projects are essentially monitored in terms of financial risk, data complexity, process impacts, people and resourcing impact, compliance. A Call Centre facility plays a crucial role in guiding execution efforts such as required work products per phase in terms of plans. This includes detailed designs on the solution as well. Project Execution is made up of the Detailed Design, Build test and Fix, Implementation and Benefits tracking phases.

A number of observations can be offered based on the literature review. The first one is about a consistent approach towards managing the complexity and conflict posed by managing portfolio programmes. It is evident from the capital markets and infrastructure case study findings that both organisations made huge investments in building optimal

project management process models for managing complexity. This is in full alignment with the findings that constraint programming, such as project selection and scheduling, offered project planners an optimal project management portfolio to manage complexity with specific resource constraints such as time (Liu & Wang, 2011).

The research findings further confirm that growth project success is a result of sound programme management practises that organisation follow in managing portfolio and programme management during growth strategy implementation. The case findings underline the importance of human collaboration in terms of project leadership, and program control, which were identified by Shehu and Akintage (2010) as common pitfalls in programme management. The researcher will now turn to discussing the final proposition, which shed new insights on the project management processes. The importance of utilising a standard programme and portfolio management was further emphasised by Turner (2010) who identified pproject management processes as consisting of sub processes project start, project controlling, project coordination, management of project discontinuities' and project close down (Turner & Simister, 2009). These considerations were evidenced in both cases, as executive management in both cases focussed on project objectives, the scope of work, the project schedule and the project costs, as well as the project organisation, the project culture, and the project context (Turner & Simister, 2009) as important drivers of portfolio and programme management.

6.3 Are there other unique combinations of project management processes that are key in achieving organizational growth strategies resulting into competitive advantage

The final discussion will share case study findings on other unique project management processes that were key in achieving growth strategies. Both studied cases revealed that these unique project management processes were used in conjunction with the above project selection, portfolio and programme management approaches for managing growth projects. Case study research findings indicate that these unique project management processes did not fit the conventional definition of project management and were meant to complement the standard project management. These processes did not fit the standard definition of project management (PMI, 2008) in some instances. This concept of managing for uncertainty was suggested by Petit (2012), who found that successful

organisation in growth strategies, did not manage risk on its own. Managing project portfolios involved creating structures, introducing new processes, introducing new business models within organisations which goes beyond project selection. (Petit, 2012).

Capital Markets Case Study

“We believe in strong collaboration and consultation within the company”

“Our leaders are fully engaged”

“We ensure cross functional alignment before we proceed with any project”

Some of the cited unique attributes of the capital markets project management processes were reported to be human and leadership. These included a greater awareness on the culture built and founded on the principles of greater accountability, rapid decision making and follow up coupled with executive sponsor buy in and support. Collyer & Warren (2009) cited culture, leadership style and communication as essential factors for managing the unknown, dynamic project management environments. This is further confirmed by the finding that the link between project management processes and strategy is determined to be influenced by corporate strengths and weaknesses, which carries some strong basis and merit as projects are conceived and implemented within the constraints of companies' internal resources (Zeynep et al, 2009).

Another interesting aspect was the level of engagement and awareness on driving collaboration within the organisation. This was achieved through peer review structures that were built on an agile approach that relied on collaboration within the organisations. These networks extended to other global parts of the organisation and served as key networking links for implementing projects of similar risk and context profile.

This was raised by Killen & Kjaer (2012) who found that, project culture and process were fundamental in achieving project success. Their research findings highlighted the importance of both culture and process, and suggested that the culture factors may have more influence than the process factors on an organisations understanding of project interdependencies in achieving project success.

Infrastructure / Bank Case Study

“We go through a process, called PlayPen, which is an offline application, that results into a high level cost and benefit analysis. All strategic projects are loaded onto a PlayPen application”.

“When projects are loaded into PlayPen, the projects are modelled in that simulation environment using a tool called project office toolkit which has been perfected over ten (10) years within the company”

“This solution was developed internal staff”

“A Call Centre facility plays a crucial role in guiding execution efforts such as required work products per phase in terms of plan”

“We have a standard artefacts for everything, there’s a standard schedule that when new projects start, there project managers take schedule template and tailor out from the schedule the relevant parts for execution”

The case findings within the infrastructure confirmed the existence of some unique project management processes. The call centre facility helped with project management execution, especially for growth projects. This ensured standardisation across the organisation for faster execution of growth projects. Communication as a key project management process was redefined to suit the contextual challenges of implementing growth strategies. This capability meant that the project as a communication processes and systems was transformed into a project management capability by combining a number of project aspects with traditional project value drivers such as time, quality and cost were integrated. This again supports work by Olsen & Johannessen (2011) concluded that an important success factor for projects is to transform communication processes into communication capabilities (defined as communication systems which combine economic/technical communication, management communication, social communication and cultural communication).

This strategic project management awareness is further testimony towards the project management practice as an enquiry process (Lalonde, Bourgault & Findeli, 2012). This practice within the infrastructure case study confirmed that an essential project management process was to devise means in which project actors, in this instance managers, could interact in faster way and drive decision making. The call centre feature

facilitates active engagement between project actors and provides a live platform for sharing know how, information, decision making, and other project related information. This was also found to be an instrumental project management support within the organization, which enabled cross departmental standardization of project management processes. This approach supports Lalonde et al. (2012) work which suggested that the project management inquiry process is key in the project context and is composed of two categories based on trends shaping the physical world and the what of the project situation.

The PlayPen simulation model, served to differentiate the infrastructure case study. It is a model that is based on the strategic risk makeup of the organisation, its individual growth objectives, the total composition of the projects that are planned or completed, the financial standing and budgetary requirements and finally the legal implications of implementing a given project. The simulation model runs on a standard software platform that has been perfected over a ten year period. This model is one of the internal staff innovations. This unique project management process agrees with the view by Kapsali (2010) that says that the systems thinking methods provide the flexibility to manage innovation projects that organisations have to implement in order to remain competitive and achieve growth targets(Kapsali, 2011). Another view is that the logical models for making calculations on the likelihood of that specific project selection would enable and contribute towards the organisation growth objectives helps with better project management (Shakshi-Niae et al, 2011). This is the case with the PlayPen simulation tool, which meant that the infrastructure unit could plan and implement growth projects easier through project management information that enables decision making and profiling of projects based on the probability and likelihood to succeed.

We conclude this chapter with a table 14 that lists and maps the results of this study against the findings of the Young et al, 2012; Thiry, 2007, Shehu & Akintage, 2007; Besner & Hobbs, 2008; Shaksi et al, 2011; Turner & Simister, 2009; Vidal et al, 2011; Liu & Wang, 2011; Unger et al, 2012; Kapsali, 2011; Olsen & Johannessen, 2011; Lalonde et al, 2012; Collyer & Warren, 2009 coupled with research propositions , and the final case study research findings.

Table 14: Main Findings

Research Propositions	Main Authors	Key Case Study Project Management Process Findings
Project Management process selection is key in realizing growth strategies, growth projects and competitive advantage	Young et al, 2012; Thiry&Deguire, 2007; Besner & Hobbs, 2008.; Barbara Natalie Unger, 2012; Unger, Kock, Gemunden & Jonas ,2012; Shakshi-Niaezi et al,2011; Shehu & Akintage, 2010; Shehu & Akintage, 2010; Ozturkcan, 2010; Srivannaboon, 2009.	Organisation Wide Project List Strategic Alignment Selection Criteria Prioritization forum
An organizations Portfolio and Project Management contributes towards the realization of growth strategies and competitive advantage	Vidal, Marle, Bocquet, 2011; Kwak & Anbari, 2009; Browning, 2010; Liu & Wang, 2011; Shehu and Akintage,2010; Turner,2010; Turner & Simister, 2009;	Company-wide standards Models for complexity Project leadership Project culture Communication
Are there other unique combinations of project management processes that are key in the achievement of organizational growth strategies resulting into competitive advantage	Petit,2012; Collyer & Warren,2009; Zeynek et al,2009; Killen & Kjaer,2012; Olsen & Johannessen,2011; Lalonde, Bourgault & Findeli, 2012; Kapsali, 2011; Shakshi-Niaezi et al,2011; Besner & Hobbs, 2008.	Managing for uncertainty Peer review structures Communication processes Enquiry process Project Simulation Support structures

7. Conclusion and Research Limitations

7.1 Conclusion

The aim of this research case study was to establish if project management processes lead to the achievement of growth strategies and competitive advantage. This was investigated in a cross case study of two large organisations, both having established project, portfolio and programme management practises. These practises were perfected over a long period, in some instances over ten years. This research paper found that the project management processes do drive the realization of growth strategies and these were devised differently but contained similar elements of importance. The suggested project management processes were found to be: (a) organisation wide projects lists that are aligned with the strategic direction of the organisation. A selection criteria that is the basis of adding projects onto a group-wide list and the ability to prioritize effectively when external and internal factors change, (b) standard companywide project management practices that deliver repeatable results underpinned by strong project management culture, leadership and communication, and (c) managing for uncertainty which is built on strong internal peer review networks that are facilitated by communication process and support structures. The findings from this research demonstrate that the project management processes are not fully agile to capture the dynamic environment that businesses operate in.

(a) Organisation wide projects lists that are aligned with the strategic direction of the organisation and selection criteria.

It follows that organisations eager to influence achievement of their individual growth strategies need to formalise a process for collating projects into a visible company-wide project list. This list must be the basis for selecting and prioritizing projects based on strategic criteria. The criteria should include strategic growth criteria based on the company's business objectives, financial risk, skills sets, legal considerations and other inherent capabilities that the company needs in order to deliver its growth mandate using projects. The findings were both consistent in both cases.

(b) Standard companywide project management practices that deliver repeatable results underpinned by strong project management culture, leadership and communication.

The research findings emphasised the need for standardisation of project management processes that were repeatable and produced repeatable results for strategic growth success. This was dependent on the company's ability to institutionalize these project management processes and offer corresponding support for inexperienced project managers. The extent to which a company could turn these processes into a management culture supported by strong leadership that could take decisions in a group-wide prioritization forum determined its growth project success. Effective project communication across a different stakeholder base formed part of the research findings. Project communication was found to be an important driver of executive decision making and was essential within the company wide group prioritization forums. The communication served to provide early warnings for executive management decisions, especially with failing projects and those that needed funding. We conclude findings on

(c) Managing for uncertainty which is built on strong internal peer review networks that are facilitated by communication process and support structures.

The process of internal peer review networks were identified as other unknown unique project management processes that enabled project information sharing for decision making. These networks served to aggregate decision making and were used as sounding board for effective project management decision making. Some of these decisions pertained to unknown project management challenges posed by implementing growth strategies. These networks were global in nature as evidenced within the capital markets case study.

Other unique project management processes uncovered by the research, pertained to the call centre support structure. The call centre structure was intentionally setup to provide project management execution guidance within the infrastructure organisation. The benefits abound, as rework was minimised in some instances, and project managers could reuse insights gained within other departments leading to crosspollination of ideas instantly. The researcher identified this practise as unique as the literature review did not identify the call centre support structure as an essential project management process for supporting implementation.

Finally, the unique practise of having prepopulated project management templates stored online for faster execution caught the attention of the case study research. Each growth project work artefact was stored in a specific folder for access during and after working hours. This came with necessary identification security for highly restricted strategic growth project information.

The above findings were not exhaustive in nature but helped the researcher to understand the project management processes that drive implementation of growth projects leading to competitive advantage. The contribution of the research was an improved understanding of the essential processes for managing growth strategies and the overall conclusion is that organisations need group-wide projects lists that is prioritized and aligned with the strategic direction of the organisation. It was further established by the researcher that implementation of growth strategies was due to standard companywide project management practices that deliver repeatable results underpinned by strong project management culture, leadership and communication and finally managing for uncertainty is built on strong internal peer review networks that are facilitated by communication process and support structures selection criteria.

7.2 Research Limitations

The research findings in this paper were found to be mainly three (3) areas. Firstly, on the role and importance of organisation wide projects lists that are aligned with the strategic direction of the organisation and are based on selection criteria. Secondly, the significance of the organisation ability to standardize companywide project management practices that deliver repeatable results underpinned by strong project management culture, leadership

and communication and thirdly the need to manage for uncertainty through strong internal peer review networks that are facilitated by communication processes and support structures. However, the research reported is limited by mainly three (3) factors, namely;

- Time frame;
- Sample size and external validity;
- Case Study Observations.

The researcher will briefly expand on the above limitations. The timeframe in which this case study research was conducted spanned roughly eight (8) weeks, which meant that the researcher did not have ample time to explore in deeper detail the relevant research constructs beyond the project management unit which could have potentially include the strategic units of the organisation as well. This limitation links well with the second one. There was not the time to more thoroughly investigate and explore beyond the two large organisations to establish if project management processes drive the realisation of growth strategies. There researcher initially aimed to cover five(5) case studies spread across government, retail, consulting, banking and information technology. There initial selection of these cases could not establish the prevalence of project management established practises and methods. This meant that researcher isolated about three (3) of potential cases based on this realisation. This challenge could have been resolved successfully had the researcher had enough time.

The other limitation that closely follows the time limitations pertains to the external validity based on the selected cases. The researcher mainly had an opportunity to study the information technology project management units primarily within the banking industries. Further research could potentially aid in answering if there research findings of this paper were applicable in other project management context in government, retail and consulting.

The case study research method plan mentioned on chapter four (4) stated that case study observations (Yin, 2009) were an ideal secondary way to gather information should the researcher fail to secure direct contact with the human cases. This method was aimed at complementing interviews and archival data analysis in the form of observations in meetings, where attendants interact with each and thus generate information about the studied object. Furthermore, the case study research observations were conceived to take

the form of the researcher observing how and why actors implement project management processes in order to achieve growth strategies. This was the fundamental challenge of time frame as the two case studies that the researcher covered did not provide the researcher with an opportunity to observe the cases. This limitation was primarily due to the business planning cycles of the relevant case studies, which fell during the January to April period. Some of the group-wide prioritization forums had already completed the planning and review cycles. This inability to observe case studies meant that research findings were not based on a full case study method as planned and highlighted on chapter four (4). The considerations for future project management research work could touch on risk and uncertainty, specifically what are the project management processes for implementing innovation projects. This future research could specifically cover constructs such as the management of strategy and stakeholders, mastering of technology, effective teams and project management practises in innovation projects.

8. References

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