



University of Pretoria

RESEARCH REPORT

**The use of project portfolios in effective strategy execution to
improve business value**

by

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**A thesis submitted in the fulfilment of the requirements for the
degree of**

Doctor of Philosophy – Engineering Management

in the

**GRADUATE SCHOOL OF TECHNOLOGY MANAGEMENT,
FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND
INFORMATION TECHNOLOGY,
UNIVERSITY OF PRETORIA**

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November 2020

Abstract

A business exists to create value for its stakeholders. The desired value is articulated and realised through the implementation of the corporate strategy. It was observed and identified as a gap from the review of the literature that there is a need for a tested model on how to use project portfolios in effective strategy execution to realise business value. Furthermore the intent was to also identify salient factors that contribute to the realisation of the corporate strategy through the use of project portfolios.

The objective of the research was to gain insight on how project portfolios are used in effective strategy execution to improve the value of a business. The primary question was *“How could companies use project portfolios to effectively implement and execute corporate strategy to create business value?”* The study sought to answer the following sub-questions:

Sub-question 1: What are the reasons why companies do not execute corporate strategy effectively to create business value?

Sub-question 2: What are salient factors that enable effective strategy execution through project portfolios that enable an enterprise to create value for its stakeholders?

Sub-question 3: How could project portfolios be used to drive the effective realisation of strategic objectives?

The research followed a multiple case study method in order to conduct an exploratory and descriptive study that involves the use of qualitative data to formulate a view on how sustainable businesses execute their strategy effectively through project portfolios. Four case organisations were explored which use project portfolios to execute their corporate strategy. Eighteen executives and senior managers were interviewed during the study. Their roles focused primarily on strategy execution and management of project portfolios. The case organisations are in the freight, research and development, mining and telecommunications industries.

The review of the literature indicated that organisations need a framework that incorporates project portfolios in strategy execution and implementation in order to realise business value in response to the first sub-question of the research study. The first research question sought to understand why companies do not execute corporate strategy effectively to create business value and the insights gained from the review of the literature indicated that there was a lack of an understanding on how to implement a strategy. The tested conceptual model provides a defined, structured and controlled manner in which strategy could be executed effectively by using project portfolios.

The analysis of the data gathered during the research resulted in twenty five (25) factors that are key in the execution of strategy through project portfolios to realise business value, which is in response to the second research question.

A proposed conceptual model was tested against four case organisations during the study and it was found that all four case organisations applied a similar approach in executing corporate strategy through project portfolios to realise business value. However, the extent to which the proposed conceptual model was applied differed from one case organisation to the other. It was observed that the case organisations applied an approach that is aligned to the proposed conceptual model in using project portfolios to execute corporate strategy to realise business value.

The results of the study showed the importance of a link from corporate strategy to results obtained from the execution of strategic objectives attained through project portfolios. The key link was a flow-through from the corporate strategy, through the strategic objectives, the measurable targets (KPIs), to the projects used to deliver the strategic objectives. The performance measured by the business enabled organisations to determine whether they are achieving expected results or not. It was noted that projects create a controlled environment through which the corporate strategy is executed. Business value was self-defined by the respondents since it meant different things to different stakeholders. It is also recommended that future research should explore and define business value since it is a concept that is central to how organisations measure performance. Furthermore, future work on salient factors for effective strategy execution through project portfolios should also consider the degree to which certain factors are key to organisations in a particular industry in order to help business leaders to hone-in their efforts. It is also recommended that future research should consider developing a strategy execution maturity model to enable organisations to assess their level of maturity in strategy execution through the use of project portfolios as the corporate strategy evolves over time.

Keywords: Project portfolios, strategy execution, effective strategy execution, business value, business model, strategy execution approach, strategy execution maturity.

List of Published Papers by the Candidate

Effective Strategy Execution to Realise Shareholder Value: A Proposed Framework for Measurement, IAMOT2015, Cape Town, South Africa

A Literature Review on the use of Project Portfolios in Effective Strategy Execution: A Proposed Approach to Improve Business Success. IAMOT2016, Orlando, Florida¹

A literature review on the use of project portfolios in effective strategy execution: a proposed approach to improve business success. IAMOT2018, Birmingham, UK²

A literature review on building assets of value: What are the indicators of business success? IAMOT2018, Birmingham, UK

¹ The paper focused on the findings from the review of the literature, the proposed conceptual model and the salient factors for effective strategy execution through project portfolios.

² The paper focused on the flow through of business value from strategic objectives to the measured performance.

Acknowledgements

I would like to thank God for giving me the fortitude, strength and guidance to complete this research. It was an undertaking that was balanced with so many demands and was completed at the end. Indeed to God be all the Glory!

I am also indebted to my supervisors, Prof. Tinus Pretorius and Prof. Herman Steyn. Your support, guidance, assistance, contributions and candid feedback were invaluable in completing this study. Thank you very much for all the time and suggestions you offered during the research. I greatly appreciate all your efforts!

I would have not achieved the results in this study if it were not for the four case organisations that offered me immeasurable support during the data gathering phase of the research. Thank you very much for your invaluable contribution towards the insights gained from the study.

Last but not least, a big thank you to my family, friends and colleagues. You shared the load in ways I cannot begin to articulate. I certainly am where I am because you rallied around me during this taxing chapter of my life.

Lastly, I want to dedicate this degree to my Dad who passed on as I was finalising the research report. May your soul rest in eternal peace Papa!

Table of Contents

Abstract.....	ii
List of Published Papers by the Candidate.....	iv
Acknowledgements	v
Table of Contents	vi
List of Figures.....	ix
List of Tables.....	xi
List of Acronyms/Definitions/Abbreviations.....	xii
1. Background to the Research.....	1
1.1. Effectively executing strategy	1
1.2. Problem statement	5
1.3. Research objectives	7
1.4. Research question	7
1.5. Importance of the research.....	8
1.6. Limitations and assumptions of the study	9
2. Literature survey.....	10
2.1. Introduction	10
2.2. Strategy execution for effectiveness	11
2.2.1. Strategy and strategic management	11
2.2.2. Strategic governance and leadership.....	15
2.2.3. Strategy formulation.....	19
2.2.4. Strategy planning.....	20
2.2.5. Strategy execution	21
2.2.6. Models for executing strategy	29
2.2.7. Effective strategy execution	35
2.3. Project portfolios in strategy execution	40
2.3.1. The value of project portfolios in strategy execution.....	42
2.4. Project portfolio success.....	49
2.4.1. The role of projects in strategy execution.....	52
2.5. Business value	56
2.5.1. Strategy evaluation	56
2.5.2. Evaluation of performance	62
2.5.3. Benefits realisation management to achieve business value	65
2.5.4. Value creation and management	69
2.6. Salient factors for effective strategy execution.....	73
2.7. Conclusion from the review of the literature.....	76
2.7.1. Project portfolio management as an enabler of strategic alignment	76
2.7.2. Effective strategy execution	77
2.7.3. Value creation.....	77
2.7.4. Approach and framework for effective strategy execution to realise value	77
2.8. Developments in the research of strategy execution through PPM.....	78
2.9. Gaps and deficiencies identified during the review of the literature.....	80
2.10. Envisaged contribution to the body of knowledge	83

3. Conceptual Model	85
3.1. The proposed conceptual model	90
3.1.1. Strategic intent.....	96
3.1.2. Project portfolios approach	97
3.1.3. Project portfolio success approach	99
3.1.4. Business value	100
3.1.5. Salient factors for effective strategy execution	102
3.2. Proposed propositions for the research	102
3.3. Conclusion	104
4. Research Design and Methodology	105
4.1. Case study research.....	105
4.2. Case study application	107
4.3. Logic of designing a case study.....	108
4.4. Criteria for judging the quality of research design	111
4.5. Research questions.....	113
4.6. Selection and review of case organisations	115
4.7. Approach during research	116
4.8. Field procedures.....	118
4.8.1. Document review (archival, published and company based).....	118
4.8.2. Semi-structured interviews.....	118
4.8.3. Observations	119
4.9. Data analysis techniques.....	119
4.10. Data and information storage	119
5. Summary of case organisations	121
5.1. Freight.....	123
5.2. Research and Development	132
5.3. Mining	137
5.4. Telecommunications.....	148
6. Results.....	154
6.1. Profile of the participants	154
6.2. Leadership and governance	156
6.3. Strategic intent	162
6.4. Project portfolios approach.....	169
6.5. Project portfolio success approach.....	185
6.6. Business value	194
6.7. Salient factors.....	206
7. Conclusions and Recommendations.....	211
7.1. The value of the selected case organisations	211
7.2. The quality of the corporate strategy	213
7.3. Key leadership roles	213
7.4. The importance of purposeful management of the business model	213
7.5. The strategy execution enablers.....	214
7.6. The use of project portfolios in strategy execution	214

7.7.	Proposed approach in the use of project portfolios in effective strategy execution	
	222	
7.8.	Recommendations	222
7.9.	Contribution to the body of knowledge.....	225
7.9.1.	Tested conceptual model.....	226
7.9.2.	Salient factors in the use of project portfolios in effective strategy execution	
	226	
References		227
Appendix 1 – Ethics clearance		237
Appendix 2 – Research consent letter		238
Appendix 3 – Research field procedures		240
Appendix 4 – Research questionnaires		242
Appendix 5 – Code family structure and codes grounding		255

List of Figures

Figure 1:1: The conceptual model (Meskendahl, 2010).....	3
Figure 2:1: The overall research concept.....	10
Figure 2:2: The missing link between business strategy and the project plan (Srivannaboon & Milosevic, 2006)	20
Figure 2:3: The strategy implementation framework (Okumus, 2003)	31
Figure 2:4: The strategy implementation model (Kazmi, 2008)	33
Figure 2:5: Balanced Scorecard strategy map (Kaplan, 2005)	58
Figure 2:6: Framework for measurement development (Flitman, 1996)	59
Figure 2:7: The Deloitte's method of articulating value (Lukac & Frazier, 2012)	60
Figure 2:8: The model linking strategic maps to shareholder value (adapted from Lukac & Frazier, 2012)	61
Figure 2:9: Effective Execution Framework (Cocks, 2010)	73
Figure 2:10: The evolution of strategy execution.....	80
Figure 3:1: The model on effective strategy execution through project portfolios	88
Figure 3:2: The proposed conceptual model	94
Figure 3:3: Integrated framework for project portfolio selection (Archer & Ghasemzadeh, 1999)	98
Figure 3:4: The proposed conceptual model including propositions	103
Figure 4:1: Structure of research questions to cover the conceptual model	117
Figure 5:1: Approach in the evaluation of project portfolios in strategy execution.....	121
Figure 5:2: Corporate's strategy evolution between 2005 and 2017.....	124
Figure 5:3: Corporate's strategy evolution between 2011 and 2017.....	132
Figure 5:4: Corporate's strategy evolution between 2007 and 2017.....	138
Figure 5:5: Corporate's strategy evolution between 2011 and 2017.....	148
Figure 6:1: Profile of the participants in the study.....	155
Figure 6:2: Rank of participants in their organisations.....	155
Figure 6:3: Turnover of the Board Chairperson, CEO and CFO at case organisations...	156
Figure 6:4: Summary of the leadership and governance traits	158
Figure 6:5: Effectiveness of an articulated business model (degree to which it is defined)	160
Figure 6:6: Effectiveness of an articulated business model (level of effectiveness).....	161
Figure 6:7: Outcome of the literature review on key aspects of strategic intent	162
Figure 6:8: Code grounding and density for literature review and interview questionnaire for Strategic intent.....	163
Figure 6:9: Prevalence of the Strategic Intent component of the conceptual model	164
Figure 6:10: Strategic outlook at case organisations.....	167
Figure 6:11: Outcome of the literature review on key aspects of project portfolios approach	169
Figure 6:12: Code grounding and density for literature review and interview questionnaire for Project portfolios approach	171
Figure 6:13: Prevalence of the Project portfolios approach component of the conceptual model.....	171

Figure 6:14: Effectiveness of project portfolio management evaluation criteria (degree to which it is defined)	174
Figure 6:15: Effectiveness of project portfolio management evaluation criteria (level of effectiveness)	174
Figure 6:16: Age of project portfolio management framework in case organisations	176
Figure 6:17: Number of years in applying the concept of benefits realisation at case organisations	178
Figure 6:18: Effectiveness of the use of benefits realisation criteria (degree to which it is defined).....	179
Figure 6:19: Effectiveness of the use of benefits realisation criteria (level of effectiveness)	180
Figure 6:20: Prevalence of the refinement of long and short term measures of success	181
Figure 6:21: Prevalence of the use of automated reporting tool	182
Figure 6:22: Effectiveness of the automated reporting tool (level of effectiveness)	183
Figure 6:23: Outcome of the literature review on key aspects of portfolio success approach	186
Figure 6:24: Code grounding and density for literature review and interview questionnaire for Project portfolio success approach	187
Figure 6:25: Prevalence of the Project portfolio success approach component of the conceptual model.....	187
Figure 6:26: Effectiveness of the average single project success at case organisations (degree to which it is defined	189
Figure 6:27: Effectiveness of the average single project success at case organisations (level of effectiveness).....	189
Figure 6:28: Outcome of the literature review on key aspects of business value.....	196
Figure 6:29: Code grounding and density for literature review and interview questionnaire for Business value	197
Figure 6:30: Prevalence of the Business Value component of the conceptual model.....	197
Figure 6:31: Prevalence of consistent and formal definition of business value	198
Figure 6:32: CPI and PPI between 2009 and 2018	199
Figure 6:33: Financial performance of case organisations	200
Figure 6:34: Effectiveness of evaluation of economic success in terms of business value (degree to which it is defined)	201
Figure 6:35: Effectiveness of evaluation of economic success in terms of business value (level of effectiveness)	202
Figure 6:36: Prevalence of the link of corporate performance to strategic intent	203
Figure 6:37: Effectiveness of consideration long term vision in business performance (degree to which it is defined)	204
Figure 6:38: Effectiveness of consideration long term vision in business performance (level of effectiveness).....	204
Figure 7:1: Proposed strategy execution maturity model.....	225

List of Tables

Table 2:1: Pertinent contribution towards the field of strategy execution	78
Table 3:1: Comparison of the conceptual model developed by Meskendahl (2010) to the proposed conceptual model	91
Table 4:1: Research sub-questions, propositions and objectives	113
Table 5:1 Table of projects used in strategy execution.....	122
Table 5:2: Strategic project portfolios between 2011 and 2017	126
Table 5:3: Strategic project portfolios between 2011 and 2017	135
Table 5:4: Strategic project portfolios between 2010 and 2017	141
Table 5:5: Strategic project portfolios between 2011 and 2017	150
Table 6:1: Prevalence of defined strategic intent.....	165
Table 6:2: Prevalence of project portfolio formalisation.....	173
Table 6:3: CPI between 2007 and 2018.....	199
Table 6:4: Leading practices noted from annual reports published by case organisations	207
Table 6:5: Source of salient factors during the study.....	209

List of Acronyms/Definitions/Abbreviations

AMD	Acid Mine Drainage
BI	Business Improvement
BRM	Benefits Realisation Management
BSC	Balanced Scorecard
BU	Business Unit
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditure
CEO	Chief Executive Officer
CPI	Consumer Price Index
CSF	Critical Success Factors
DEA	Data Envelopment Analysis
DMR	Department of Mineral and Resources
DST	Department of Science and Technology
DPS	Dividends per share
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Dividends and Amortisation
EPS	Earnings per share
ERP	Enterprise Resource Planning
EVA	Economic Value Added
FDEA	Fuzzy Data Envelopment Analysis
GLT	Group Leadership Team
IoE	Intensity of Engagement
IoT	Internet of Things
IS	Information System
JV	Joint Venture
KPI	Key Performance Indicator
KSF	Key Success Factors
LOM	Life of Mine
M&A	Mergers and Acquisition
MEAAP	Middle East, Africa and Asia Pacific
MOP	Monthly Operations Plan
MSP	Managing Successful Programmes
MVA	Market Value Add
NDP	National Development Plan
NPV	Net Present Value
OGC	The Office of Government Commerce
Opex	Operating Expenditure
OPM3	Organisational Project Management Maturity Model
PPI	Producer Price Index
PPM	Project Portfolio Management
P3O	Portfolio, Programme and Project Offices
PBO	Project Based Organisations

PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project Management Office
PMS	Performance Management System
PSO	Project Support Office
RDP	Resource Development Plan
R&D	Research and Development
RAG	Red, Amber and Green
ROI	Return on Investment
SMART	Simple, Measurable, Achievable, Realistic, Time based
SOC	State Owned Company
SOP	Standard Operating Procedure
SPF	Strategic Performance Factors
US	United States
VPN	Virtual Private Network
VSP	Voluntary Separation Package
WBS	Work Breakdown Structure

Chapter 1: Background to the research

1. Background to the Research

Shareholders entrust a business to a Chief Executive Officer (CEO) in order for him or her to develop and grow it into an asset of value. The CEO is therefore measured on how well he or she has executed the company strategy. Organisations are subjected to pressure and strain, given the factors in the business environment that must be managed to ensure the realisation of strategic objectives. Such an environment presents a challenge as organisations operate under stringent conditions and are expected to deliver on the expectations of stakeholders that encompass shareholders, employees, communities which they operate in and other vested parties.

However, the critical element that management must maintain is the sound understanding of the strategy of the organisation, and what it seeks to achieve in the long term. This can prove to be difficult under conditions that change constantly thus requiring organisations to re-invent themselves to remain competitive. Despite the ever-changing business environment, management cannot lose focus of the mandate given by stakeholders, which is articulated in the form of the company strategy.

It is therefore incumbent upon senior management in an organisation to determine and set the course that must be followed by the organisation to realise its corporate strategy and achieve growth targets. The importance for organisations to realise their strategic objectives and create value are central to effective strategy execution.

1.1. Effectively executing strategy

It is important that business managers should be able to articulate the corporate strategy clearly and to indicate how it is going to be achieved. This will enable the organisation to participate meaningfully in the process of realising the strategic objectives. Friis, Holmgren & Eskildsen (2016) say that many organisations have experienced that developing a strategy is time-consuming; the strategy becomes outdated rapidly or will not be implemented at all. This highlights one of the main contributors to failed strategies since the delayed decision making process may lead to the organisation missing the window of opportunity in the market. Furthermore Friis, Holmgren & Eskildsen (2016) highlight the need for management to not only understand their strategy but to also define how they are going to implement it. Townsend (2009) concur that a firm's strategy determines the course it will try to pursue over several years; strategy guides the allocation of resources – financial, physical, and human. There is a need as noted from the review of the literature to gain insight on how organisations could execute their corporate strategy better by using project portfolios in order to realise value, which is the objective of this study.

The conditions such as changing business capabilities, market conditions and expectations from stakeholders under which strategy is executed change constantly due to internal and external factors. Akhtar & Sushil (2018) shared that “globalisation

Chapter 1: Background to the research

and liberalisation have increased the turbulence in external business environment and consequently high degree of uncertainty and business risks.” This has led to a dynamic environment which requires management to become vigilant of factors that may affect their business and thus erode the value they seek to create. These create a complex environment under which an organisation executes its strategy. It was noted by Bernardo *et al.* (2017) that “unfavourable economic factors have contributed to increased business market volatility and complexity, increasing competition between companies.” It is therefore important to have a guiding framework or approach that will enable the organisation to navigate these changes without eroding commercial value. It is tragic that when leaders are asked to implement strategy, they do not know what to do, even though successful strategy implementation provides a competitive advantage (Speculand, 2014). According to Getz and Lee (2011) management do not realise that managing strategy execution requires well-orchestrated management processes and need to thoughtfully manage the way the strategy is implemented. Getz and Lee (2011) say that “a key cause for missing strategy goals is that leaders do not invest the same amount of time, energy and resources in managing the implementation of the strategy as they do in setting the strategy”. Maddalena (2012) shared that executive leaders can increase the effectiveness of their organisation’s strategic planning processes and improve accountability by incorporating project management principles during the implementation phase of the strategy.

A number of gaps were identified during the review of the literature that informed the research as the research question is explored. Speculand (2014) lamented that it is tragic that when business managers are asked to implement the strategy, they do not know what to do, even though successful strategy implementation provides a competitive advantage. This pointed out to the need for a systematic approach that business managers could use to guide and inform their efforts during the strategy execution process. It was noted that Young and Grant (2015) reported that the contribution on the link between strategy execution and project management is smaller than expected and more research is required to explore how projects can contribute more to strategy. In addition Young *et al.* (2012) highlighted and shed light that the way projects are selected and managed limit the capability to realise strategic goals thus recommended future research to develop programme management, portfolio management and project governance to increase the likelihood that strategy will be implemented. Further review of the literature indicated that the use of project portfolios in strategy execution is an area that needs to be understood. Researchers Martinsuo and Killen (2014) found that project portfolio management presents a complex set of challenges to decision makers in that multiple projects must be configured and managed in a way to enhance the long-term strategic value of the portfolio while considering multiple criteria and interdependencies while portfolio management has paid scant attention to value management concepts.

Chapter 1: Background to the research

The following gaps were thus identified and are the focus of this research in the quest to answer the research question:

- A tested conceptual model that could be used to guide the strategy execution process through the use of project portfolios to create business value;
- A list of salient factors that are key in the use of project portfolios in effective strategy execution to create business value;

However, the question is how should business managers execute strategy, drive the process of realising strategic objectives and what are the key aspects which they need to control during strategy execution? Following an expansion of existing theories in project portfolio management and contributions made by different researchers, Meskendahl (2010) proposes the conceptual model depicted in Figure 1.1 on the relationship between strategic orientation, project portfolio management and business success. This conceptual model was selected since it looked at how project portfolios could be used to execute strategy selected by an organisation.

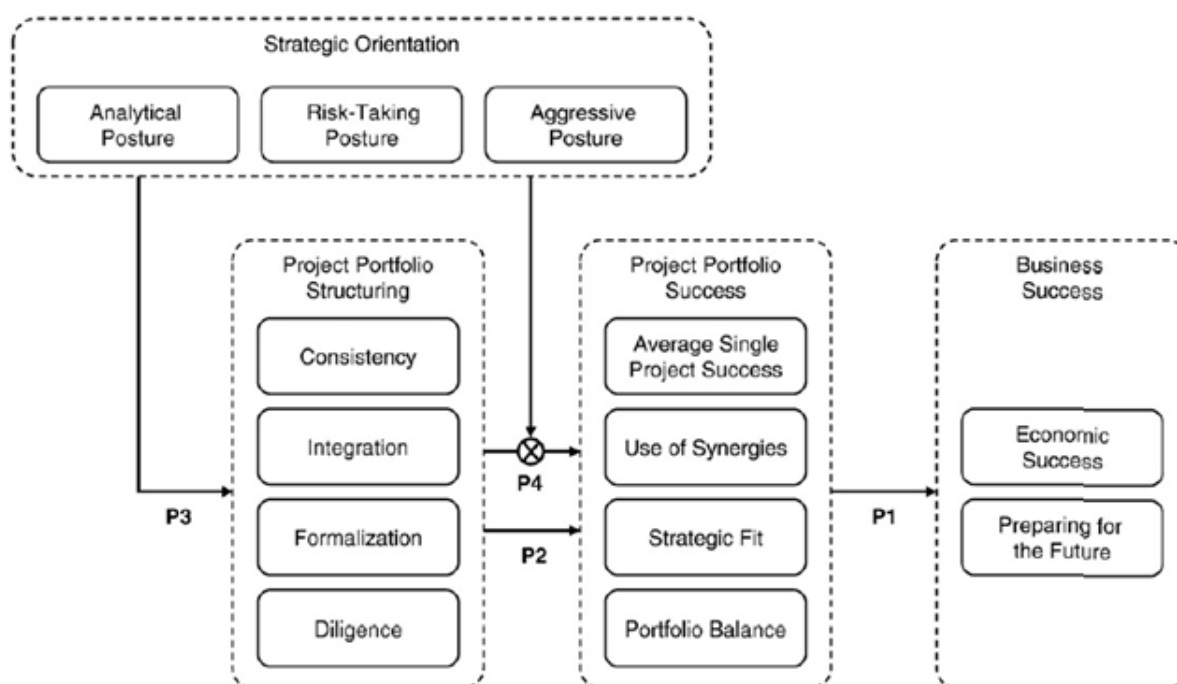


Figure 1.1: The conceptual model (Meskendahl, 2010)

It is noted from the conceptual model proposed by Meskendahl (2010) that the Strategic Orientation which comprises Analytical Posture, Risk-taking Posture and Aggressive Posture influences Project Portfolio Structuring and regulates Project Portfolio Success. It is presented that Project Portfolio Structuring considers elements of Consistency, Integration, Formalisation and Diligence. On the other hand Project Portfolio Success considers elements of Average Single Project Success, the Use of Synergies, Strategic fit and Portfolio Balance. The conceptual model presents that Project Portfolio Structuring influences Project Portfolio Success while considering the regulation of Strategic Orientation. It is further presented that Project Portfolio Success

Chapter 1: Background to the research

influences Business Success which comprises of Economic Success and Preparing for the Future. The value of the conceptual model is that it illustrates the link between the corporate strategy and project portfolios as well as how business success is derived from project portfolios. It alludes to project portfolios as a conduit in which the strategic orientation is translated into business success.

The conceptual model proposed by Meskendahl (2010) closely resembles what this study seeks to research since it integrates project portfolios in strategy execution. The framework and its propositions have not been tested by Meskendahl (2010) yet. It is proposed from the framework that where project portfolios are effectively managed, the portfolios enable the successful delivery of projects that then contribute positively towards the achievement of business success.

The key is therefore to ensure that the link between the company's strategic intent and project portfolios is well defined. Unger, Kock, Gemünden and Jonas (2012) say that project portfolios are vehicles for strategic implementation since making decisions to pursue appropriate projects is the key task in project portfolio management in order to sustain competitive advantage and thus prolonged business success. They therefore recommend that senior management should terminate projects that no longer contribute to corporate strategy in order to ensure strategic fit. Unger *et al.* (2012) re-enforce that ensuring strategic fit is one of senior management's core mandate in project portfolio management. They clarify that the challenge of strategic fit arises out of too narrowly defined goals of individual projects. They advocate that bad and troubled projects affect portfolio effectiveness and recommend the use of a concept called project termination quality as a means for decision-making. They indicate that there is a recognised demand for more quality in deciding and executing single project termination in project portfolio management. Project termination quality hereby considers how well the decision-making and termination process is executed, characterising the effectiveness of the abortion process of single projects (Unger *et al.*, 2012).

Strategy is about designing and driving the journey that the company must take while remaining profitable. It is about maintaining a sustainable business in the midst of changing market conditions. The board of directors, as a representative of stakeholders, and the executive team - who are the managers of the day-to-day business activities - are required to provide comfort to shareholders that the company is sustainable and will continue to be profitable in the long term. It is therefore imperative that there is an approach or framework on which the executive team as well as the board of directors can report to demonstrate that they understand the state of the business and that there is a roadmap for a growing, profitable, and sustainable organisation.

Chapter 1: Background to the research

1.2. Problem statement

The starting point in strategy execution is a clear vision of where the organisation is going. Once clarified, strategic objectives with measurable targets need to be defined to guide how business is conducted in order to achieve its strategy. The effective execution of strategic objectives is expected to enable the realisation of the value created by the organisation. However, Friis, Holmgren & Eskildsen (2016) report that strategy execution and innovation are areas which management face the greatest challenges in. The review of the literature points out that organisations fall short of realising their strategic objectives thus dwarfing their growth. The following performance measures were observed from the review of the literature:

- Meskendahl (2010) reported that sixty six (66) percent of corporate strategy is never implemented.
- Okumus (2003) reports that organisations fail to implement more than seventy (70) percent of their new strategic initiatives, hence the shift in focus from strategy formulation to its implementation.
- Allio (2005) highlighted that fifty seven (57) percent of firms were unsuccessful at executing strategic initiatives, based on feedback provided by executives.
- Meskendahl (2010) said that firms realise only sixty three (63) percent of their strategies' potential value.

The statistics above suggest that there is a need to improve how organisations execute their strategy to realise value. This requirement is echoed by Monauni, (2017) who said that “obstacles consisting of employees’ insufficient understanding of the strategy or success factors and the implementation of performance measures, which are not aligned with the strategy” impact on how well strategy is executed. The cited statistics may also indicate that the strategic management process is not efficient and inadequately defined to improve the effectiveness of the strategy execution process to realise strategic goals. This may be appreciated in that formulating of strategy is a complex and difficult task, making strategy work – executing or implementing it through the organisation – is even more difficult (Hrebiniak, 2008). Executives and the board of directors are required by shareholders to report on how well organisations are doing in realising the set strategy. There is therefore a need for a guiding framework which management may consult to improve their effectiveness in executing the strategy.

There are contrasting views in literature on the link between the corporate strategy and the value of project portfolios in the execution of corporate strategy on the value of project portfolios in strategy execution (Kazmi, 2008; Patanakul, 2015; Maddalena, 2012; Crawford, Hobbs & Turner, 2006; Kaiser, El Arbi & Ahlemann, 2015; Longman & Mullins, 2004). Researchers noted that the execution of corporate strategy could be done through project portfolios while others did not find the link between corporate strategy and projects. Furthermore there is limited understanding on how projects are used to execute corporate strategy (Kock & Gemünden, 2016; Young & Grant, 2015; Martinsuo & Killen, 2014). Kock and Gemünden (2016) cites Meskendahl (2010) and

Chapter 1: Background to the research

say that innovative portfolios are important vehicles for strategy realisation. They report that extant research concentrates on the strategy process and rather neglects the actual content of the strategy that they attribute to the project portfolios that are used to realise the strategy. They state that there is empirical evidence that firms with a strong innovation orientation have more innovative portfolios that in turn leads to higher success. They caution that little is known about how successful innovative portfolio management practices actually differ for these firms. They report that no empirical study investigated whether portfolio management practices have different performance effects under different strategic orientations.

In theory, it appears as though project management could bring value to enable business managers to deliver the company strategy. Aubry, Sicotte, Drouin, Vidot-Delerue, and Besner (2012) state that the concept of project management as a function has been brought into organisational project management to answer the need for alignment to strategy. They further add that the function should be explored using three complementary facets:

1. Translating strategy into portfolios, programmes and projects;
2. Creating synergy in the management of interconnected projects; and
3. Preparing for the future.

Alsudiri, Al-Karaghoul & Eldabi (2013) highlight that there is a point of transition from strategy to project, considered as a weak point, that prevents the implementation of business strategy. They clarify that strategic objectives are translated into project objectives and furthermore, into an overall project start-up process. They emphasise that the missing link between strategy and projects should be eliminated as this creates unclear business strategy that causes the project manager to plan the project without an apparent link to business strategy. The link is described in their research as the project strategy that translates business objectives into project objectives. Alsudiri, Al-Karaghoul & Eldabi (2013) caution that literature related to business and project management lacks empirical evidence to describe in more detail the process of achieving this alignment. They add that organisations should focus on aligning project management with business strategy in order to have a successful overall direction of both the strategy and projects. They acknowledge that such alignment is challenging due to the objectives of business strategy not being clear or well communicated between business strategy and project management or consistent with the project management actions. They acknowledge that understanding the alignment (having common agreement) may be one of the major challenges to an effective project management process.

Other researchers have done work to provide guidance on how managers can better manage strategy execution. Khadem (2008) says that the most effective way to successful business strategy execution is through alignment and following up. He clarifies that alignment is achieved when everyone from the executive team to the front line workers are sharply focused on making the strategy work. He further adds that this

Chapter 1: Background to the research

is the state of alignment where everyone understands the strategy, buys into it, knows how to make a real contribution and strives to contribute to the realisation of the strategy. A systematic follow up of these commitments is essential to making the strategy successful (Khadem, 2008).

Young & Grant (2015) conducted a study examining the effectiveness of project management frameworks and shared that in a normal, environment (using private sector managerial techniques) projects contribute little to the realisation of strategic goals. They had a promising new finding that in some environments with stable strategies and central oversight, projects make some contribution to the realisation of strategic goals. They caution that the contribution is smaller than expected and more research is required to explore how projects can contribute more to the realisation of corporate strategy.

Literature suggests that effective strategy execution may be achieved through the use of project portfolios to implement strategic objective. However, there is a need to clearly define how this could be done. There is a need to clearly define the link between strategy and the execution of project portfolios as a mechanism for realising strategic objectives. It is the objective of this study to gain insight on how project portfolios could be used to improve the effectiveness of strategy execution.

1.3. Research objectives

The successful execution of strategy is key to the success and sustainability of an enterprise. It is anticipated that the use of project portfolios provides the necessary structure and control that is key to effectively execute the corporate strategy to create value for the business. The overall objective of the study is to gain an understanding of the reasons why companies do not execute strategy effectively and how this process could be improved. Furthermore, the study seeks to identify salient factors that are key to executing the strategy better. It is also necessary to gain an understanding on how project portfolios are used in strategy execution.

1.4. Research question

Business is continually searching for ways to improve the value that is derived from executing its strategy. The aim of this study is to establish how companies could effectively execute on their corporate strategy through the use of project portfolios. The research question is therefore:

How could companies use project portfolios to effectively implement and execute corporate strategy to create business value?

Chapter 1: Background to the research

The study aims to go beyond reporting on the corporate performance metrics and seeks to develop a framework or model for evaluating the effectiveness of strategy execution. It seeks to answer the following sub-questions:

1. What are the reasons why companies do not execute corporate strategy effectively to create business value?
2. What are salient factors that enable effective strategy execution through project portfolios that enable an enterprise to create value for its stakeholders?
3. How could project portfolios be used to drive the effective realisation of strategic objectives?

The study seeks to test a conceptual framework that could be used to improve the extent to which business value is created when executing strategic objectives through project portfolios. Furthermore, to identify salient factors which management need to consider during the strategy execution process in order to improve its effectiveness.

1.5. Importance of the research

Strategy execution is complex and demanding from the different levels within an organisations. It is critical for organisations to not only execute their corporate strategy well but realise the business results which are expected from projects used to execute the strategy. However, it was noted from the review of the literature that there are a number of frameworks that have been developed on strategy execution but there is a need for an integrated framework, supported by salient factors, which could be used to guide the execution of strategy to realise business value.

Furthermore, the review of literature indicates that there are a number of frameworks that are available to provide guidance in strategy execution, however the one that incorporates project portfolios was not tested. The expected contributions of the study are thus:

- To propose a tested framework which organisations could use to effectively execute their strategy through project portfolios in order to realise business value.
- To indicate salient factors that contribute to effective execution of strategy and thus enhance the strategy execution process.
- To develop an improved understanding of key requirements for effective strategy execution through project portfolios.

The intention of the study is to assist organisations to develop the ability to realise better business value and therefore achieve superior business growth.

Chapter 1: Background to the research

1.6. Limitations and assumptions of the study

The study did not evaluate the correctness of the corporate strategy adopted although it is an important input into the strategy execution process. The aim of the study was not to assess the correctness of the strategy developed and adopted by an organisation, although it is critical that this strategy is sound. The appropriateness and correctness of the strategy are key starting points for effective strategy execution. The study noted and observed the effect of the quality of the strategy during execution and its bearing on the realisation of value from the business.

The study focused on the use of project portfolios in effective execution of corporate strategy to realise value. It therefore, did not explore how well projects are managed within an organisation. It assumed that case study organisations have matured in their application of project management and the execution of selected projects. The selection and prioritisation of projects into the project portfolio was not reviewed although the project selection criteria, which is derived from strategic objectives and measurable targets, was tested to ensure that the projects selected would yield the maximum possible business value. The research has no control over which projects are selected due to its backward looking effect, although the selected projects are critical to the realisation of the corporate strategy.

The study therefore focused more at the strategic and tactical level of an organisation and to a lesser extent at the operational level. It was assumed that there is strategic fit from projects that were executed within the organisation as a result of the use of project portfolio management.

2. Literature survey

2.1. Introduction

The management of strategy is an area that has been researched and improved over a long period. Theories and models have been designed, developed and refined to improve how strategy is formulated, executed and evaluated. The study explores the use of project portfolios during strategy executions, since project management provides a structured and controlled approach, which is critical to the strategy execution process. It is important to consider why organisations are unable to execute strategy effectively so that these aspects could be mitigated against in order to improve success. It emerged that there is a need for “companies to improve their performance in relation to the discipline of execution, improving the success rate of their strategic plans and achieving the desired results” (Bernardo *et al.*, 2017).

It is also acknowledged that the area of strategy and strategy execution is complex. It is further complicated by the fact that no two organisations could be viewed and treated the same. The practical purpose of strategy is to provide a plan that employs multiple inputs, options and outputs to achieve a company's policy goals and objectives (Davies, 2000). In order for management to realise the company strategy they need to have a firm understanding of which resources are key to the realisation of the strategy as these will have the effect on how effectively they are able to realise the defined plan. There are three criteria that take precedence over simplicity in business decision making: 1) the solution must be implementable, 2) it must not produce unacceptable adverse consequences and 3) it must allow for flexibility (Davies, 2000). Furthermore, there is a need for management to consider the following five process factors during strategy execution: 1) resource availability, 2) operational planning, 3) people, 4) communication, as well as 5) control and feedback (Obeidat *et al.*, 2017).

The complexity of the research was delineated to enable the researcher to carefully select aspects that are material to the study and note those that contribute but are not significant. A research approach was thus developed to guide the review of the literature, structuring of the research tools and reporting on the outcome of the study. Therefore, the use of project portfolios in effective strategy execution, given the targets in strategic objectives to achieve business success, is researched following the approach depicted in Figure 2.1 below:



Figure 2:1: The overall research concept

The ability to properly assess the components of the study requires a well-defined context which allows one to visualise salient aspects that make up the area of research. The following section seeks to define the scope of the study succinctly including the

Chapter 2: Literature survey

contribution of the different aspects that are studied so that the research question could be answered adequately.

Executives follow the strategic management process (strategy planning, execution and evaluation) to achieve the strategic intent while managing the expected benefits from projects to realise business value. It is therefore imperative that the strategic management process is supported by a performance management processes to account for the achievement of the objectives and targets set out during strategic planning. Project portfolio management is a critical link between strategy planning and execution as it enables the translation of strategic objectives into project objectives. Furthermore, executives direct and manage (governance and oversight) the activities carried out by the organisation based on their mandate. The objective is to derive value through the execution of the strategy, which could be evaluated against the strategic intent to assess how effective the organisation is at realising the corporate strategy.

The subsections below reflect the outcome of the review of the literature to gain insight on the different elements that needs to be managed to effectively execute the strategy through project portfolios in order to realise business value.

2.2. Strategy execution for effectiveness

Business strategy involves the process of making business decisions in terms of where management is taking the organisation. This is what defines the reason for the existence of the organisation and the areas it chooses to focus on. Davies (2000) defines policy (which could also be viewed as mandate) as a company's principal goal and objective that includes the company's operational domain. He also defines strategy as the design or plan for achieving a company's policy goals and objectives and further adds that strategy determines what resources will be needed to achieve the company's goals and objectives as well as how these resources will be acquired and used. He clarifies that resources are the material and methods that provide the components of corporate and business unit strategies. Kock and Gemünden (2016) say that company performance is largely dictated by gestalts comprised of strategic choices, organisational structure and environmental requirements.

2.2.1. Strategy and strategic management

Business managers are often faced with a dual challenge where on the one hand they need to demonstrate to the market that their enterprises are creating value for their stakeholders while on another hand their effectiveness hinges on identifying and explaining differentiated ways of serving customers faster, better and cheaper compared to competitors (Lukac & Frazier, 2012). They also state that senior executives face this challenge very much in the public eye, in that:

Chapter 2: Literature survey

- Investors want to see how their investment can pay off.
- Lenders want to know how their funds will be used and returned.
- Analysts want to assess one company against another.
- Customers want a reason to buy and the assurance that their needs will be met.
- Employees want to know they will continue to have interesting work that pays the bills.
- The board of directors wants to know the enterprise is prudently run while competing aggressively.

Management is expected to formulate a vision of where they are taking the organisation and then apply judgement on how they are going to steer the organisation to reach the desired vision. The formulation of the course and action that the organisation is going to take to achieve the desired vision results in its strategy. In order to formulate the set course and actions, management needs to have a clear view of what they are set to achieve. This would be the mission that the organisation needs to achieve. In addition, it is necessary for management to have a sound understanding of the capability of the organisation. It is through its capabilities that an organisation would achieve its mission. In addition to capability, management need to appreciate the external factors such as market forces, statutes, regulations and competitor actions that have a bearing on the ability to realise the mission of the organisation.

Strategy is one of those areas which are misunderstood to a large extent because the word 'strategy' is commonly used and can mean different things to different people. MacLennan (2011) states that there is confusion in the definition of the word 'strategy' due to the meaning of the term and how it is applied in different entities such as corporations or business units. He further adds that strategy is conceptual since it relates to patterns of interactions. He defines strategy as the pattern of resource and market interactions an organisation has with its environment in order to achieve its overall objective.

There are other definitions of strategy in the literature that seek to bring clarity to this concept, which is perceived differently by different individuals. Carroll (1982) defines strategy as a statement of important actions to be taken to improve relative performance by allocating limited resources, which reflects an understanding of the principal economic forces affecting the business, of the external changes to the business requiring a response, and of the role played by competitors.

The challenge with applying a concept that is widely used and misconstrued, due to the perspective of the user, is that its meaning is diluted or confused. Ford & Wang (2014) explain that the lack of consistency in strategy and business policy terminology is due to the absence of agreed upon taxonomy. They further share that other disciplines, such as economics and medicine, have well developed classifications schemes to track and access literature. They then recommend that management science in general, and strategy in particular, would benefit greatly if a taxonomy was

Chapter 2: Literature survey

available as this gap makes it difficult for the strategic management field to truly achieve the legitimate status of normal science.

However, when the playfield is wide and the landscape is not well defined, it helps to eliminate areas in which the concept does not apply. In so doing, a bit of clarity is brought about to narrow the scope to help improve the intended meaning of the concept. In light of the confusion about the meaning and definition of the word 'strategy', Yavits and Newman (1982) shared the following things which strategy is not:

- "A statement of pious intentions or optimistic wishes. Instead, strategy must be feasible in terms of resources that will be mobilised and it must identify ways by which at least some form of superiority over competitors is to be achieved".
- "A cluster of ideas in the minds of a few selected leaders of the company, ideas labelled strategy when they are voiced because they come from key individuals. Rather, the concepts are disseminated and understood by all managers to at least the middle levels of the organisation and perhaps below".
- "A set of numbers merely projected out three to five years; it is not an extrapolation exercise based on this year's balance sheet and income statement. Rather, the emphasis in strategy is on the quality and texture of the business".
- "A response to short-term fluctuations in operations or the environment, nor is it the response to the frequent short-term reports on, for example, sales, staff turnover, weekly output or competitors' prices that every manager receives. Instead, strategy deals with the predetermined direction toward which these quick responses are pointed. It is concerned with the longer-term course that the ship is steering, not with the waves".
- "The rationalisation of what was done last year or of what appears in next year's budget. An actual strategy, in contrast, is a longer-term plan that sets the direction and tone of the shorter-term plan that sets the direction and tone of the shorter-term plans".
- "A functional plan, not even a long-run one, such as a five-year marketing plan or a seven-year production plan. Rather, strategy involves the integration of all these functional plans into a balanced overall scheme".

It is therefore concluded that strategy is about leaders of an organisation gaining an understanding of the environment within which the organisation is operating, identifying opportunities that could be exploited for commercial purposes, determining the capability of the organisation to take advantage of available market opportunities and steering the organisation through external factors that may deter the organisation from realising its intended commercial objective without eroding business value.

It is equally important to clarify the concept of strategic management, as this would be how leaders would provide the necessary guidance (leadership, directing and oversight) for the realisation of commercial objectives. Certo, Peter and Ottensmeyer

Chapter 2: Literature survey

(1995) define strategic management as a continuous, iterative, cross-functional process aimed at keeping an organisation as a whole appropriately matched to its environment. This is achieved by managing a series of steps that include formulating organisational strategy, implementing organisational strategy and exercising strategic control (Certo, Peter and Ottensmeyer, 1995). Dandira (2012) cites David (2003) who defined strategic management as the art and science of formulating, implementing and evaluating cross-functional decisions that enable an organisation to achieve its objectives.

It is understood that strategic management is both a science and an art. This is what adds to the complexity of strategic management. The science aspect of strategic management is that part which is structured and defined. However, the art part is the response mechanisms which are intuitive and are hard to clearly communicate and thus lead to uncertainty among members of an organisation. Dandira (2012) cautions that “there is a knowledge vacuum since most top managers do not really know what they are supposed to do with the strategic plan; generally they lack knowledge about strategic management as a whole given that they only have fragments of information”. He further adds that “what most of them know is that they have to go to a strategic planning workshop with a consultant and reviews are done after some time, but the documents (strategic plans) are left to gather dust in the executive’s shelves and employees do not even have access to them”. He adds that “organisations cannot solely rely on formal prescriptive systems to develop and implement strategy and that an integrated approach is required to act strategically and increase the chances of success”.

Ghezzi (2013) states that firms operating in many industries have to cope on a daily basis with a paradoxical condition that change is a constant highlighting that a firm’s success, sooner or later, would pass. He says that business strategy and its quest for sustainable competitive advantage and success is challenged by external and internal change, which increasingly takes the form of radical discontinuity. He further adds that the adequacy of existing business strategy models to cope with discontinuity should be then subject to further research in order to resume and potentially redesign traditional strategic planning and strategy analysis. He also adds that emergent strategy models are rising as concepts and constructs, possibly impacting on advancements of strategic management theory and practices: these tools are the business model, the value network and resource management.

It is observed from the review of the literature that business strategy is about sustainable competitive advantage and this come as a result of a sound strategy planning process. The realisation of value from strategy execution rests on how well the corporate strategy is formulated and executed. The need for a guiding framework to reduce the unstructured aspect of strategic management is growing given the turbulent and unpredictable nature of the environment that organisations function in. The complexities surrounding strategy management leaves management with a lower

degree of control and a lower level of predictability. It is acknowledged that one cannot define the strategic landscape to a large extent due to the need for flexibility and to enable organisations to be agile. However, management and control are enhanced when one has a guide on key areas that must receive attention in order to maximise the effectiveness of the actions taken to keep the organisation on course.

2.2.2. Strategic governance and leadership

The senior management (executives) and the board of directors have a fiduciary duty to lead and direct the effective execution of the company strategy to create value. It is their responsibility to govern the enterprise so as to protect the investment made by shareholders. Schmidt & Brauer (2006) propose proxies for the evaluation of board effectiveness in guiding strategy execution:

- Strategy consistency;
- Measuring the consistency between a firm's resource allocation and its announced strategy; and
- A set of related strategy consistency measures.

It is good market practice for members of the board to share their experience and industry knowledge with management in order to improve the chance of successfully implementing strategic objectives. However, their contribution needs to be forward looking since their focus is on the future. Casal and Caspar (2014) encourage that directors should spend a greater share of their time shaping an agenda for the future instead of reviewing past experiences. They say that rather than seeing their job as supporting the Chief Executive Officer at all times, directors of companies should engage in strategic decisions, form independent opinions and work closely with the executive team to make long-term goals to ensure that they are not only formulated but also subsequently met. Furthermore, they add that the best boards act as effective coaches and sparring partners for the top team.

Rothschild (2013) says that business managers and employees make the real difference between success and failure of a company, thus suggests that people and the leader must fit the strategy of the organisation. He adds that it is prudent to select a leader to implement a predetermined strategy, as the leadership style must fit the strategy since there is no leader for all seasons. He clarifies that as the organisation goes through its business lifecycle, there are strategic decisions that must be made which influences the type of strategic leader that is required, as well as the type of team an organisation must have in place to be successful. He cautions that leaders must be matched to strategy since when the leader and the strategy are incompatible, then the strategy is likely to fail, and even if the strategy is creative. He refutes the basic assumption that leaders can lead anything.

Chapter 2: Literature survey

Corporate governance requires that the management of the company must be structured with clearly defined roles and responsibilities to ensure accountability. The board of directors have a duty to the shareholders for directing the company in a manner that not only drives its commercial agenda but generate sustainable profits. Certo *et al* (1995) argues that in a corporation, a board of directors, elected by shareholders, exercise ultimate authority and responsibility for the organisation. The board guides the affairs of the corporation and protects shareholders interest (Certo *et al*, 1995).

Ramakrishnan (2012) concurs that boards are formed to oversee performance and ensure that stakeholder expectations are met or exceeded while complying with the legal, statutory and regulatory norms of the society where they operate. He defines performance as the ability of an organisation to deliver results at or beyond stakeholder expectations. He, in addition, defines performance governance being about setting the direction for the firm based on meeting an array of expectations that requires alignment of the firm's competencies to deliver according to market expectations, linking the actual results to the desire of customers based on feedback, in real time. He adds that boards must ensure the firm is not only legally compliant, but also delivers on performance. He further adds that as part of effective strategic management and planning for performance, boards must understand the market, customers, employees, supplier, environmental and societal expectations.

The perceived danger of the executive and the board of directors focusing primarily on compliance issues is that they miss the opportunity to do business and influence the profitability of the enterprise. Davis (2013) says that boards that really add value to a company are an inimitable asset, serve in close coalition with their company's senior executives and further adds that these highly effective boards work in partnership with the executive team to develop the company's strategic direction. He confirms that the link between a board actively partnering with management on strategy development and company's success has been known for some time and points out that effective boards are "strategy active". It is when boards and executives are proactive in their role that they are more effective in mitigating potential risk that might impair the realisation of the company strategy.

The senior managers and the board of directors have a critical role to play within an organisation as they are the conscience of the organisation. They are in a better position to take a step back and evaluate the direction that the organisation is taking. This enables them to assess whether what is happening is the intended action or came as a result of reacting to market forces. Early (2006) supports that effective engagement of the board of directors is not only likely to create better strategies but it also establishes a context for on-going performance monitoring and for adapting strategy to anticipate changes during strategy execution. He suggests the following appropriate level of involvement of the board and the executive management team in the strategy process:

Chapter 2: Literature survey

- **Strategic thinking:** “collecting, analysing and discussing the situation analysis including consideration of the broad business design alternatives”.
- **Strategic decision-making:** “making the fundamental set of decisions about the business portfolio and business design”.
- **Strategic planning:** “translating critical decisions into a set of priorities, objectives and resource allocation actions to execute strategy”.
- **Strategy execution:** “understanding the various initiatives and actions consistent with the strategic plan, including adjustments to account for environmental changes and different outcomes”.

It is because of their fiduciary duties that the board of directors and the executive team should not only see to the effective execution of the company strategy, but to monitor how well this is done. It is therefore the role of executives to put mechanisms in place to enable them to understand what is going on within the business. Brauer & Schmidt (2008) say that board members' involvement in strategy implementation is a precondition to perform their fiduciary monitoring duties. They cite (Zahra, 1990) who said that an engagement of board members in strategy implementation seems to be beneficial since they are often industry experts and operate at the interface of the firm's internal and external environment. There are numerous reasons that suggest that the board could meaningfully fulfil their role in corporate governance if they focused on assisting corporate management in detecting strategic divergences at an early stage and by proposing ways of how to manage such strategic divergences (Brauer & Schmidt, 2008).

The board of directors and the executive team are responsible for establishing the governance policy and procedures. In addition, they are responsible to ensure that potential risks are identified and managed. They need to go beyond understanding the mitigating strategies developed for risks but to also provide the resources that are necessary for the mitigation of the business risks. It was reported by Soltanizadeh *et al.* (2016) that there is a significantly positive correlation between enterprise risk management and organisational performance. This bodes well for governance bodies that apply risk management effectively since their efforts contribute positively to the performance of the organisation. Governance processes allow management to communicate how well they are doing in realising the company strategy, mitigate risks that threaten the achievement of the strategy and obtain required resources to ensure that they are able to meet or exceed performance targets.

The area of governance has received attention to improve how it functions and is managed. Senior management and board of directors have a range of information at their disposal on how to better manage the effectiveness of their enterprise. Townsend (2009) cites Cadbury (2002) who described the forces in play at the top levels of an enterprise as the basic governance issues that involve power and accountability. He urges that there is a need for corporate boards to play a more substantial role in the

Chapter 2: Literature survey

strategy-setting process. He outlines a five step process for effectively engaging a board of directors on strategy:

1. **Map out the strategy agenda with the board:** “a key beginning point is for the Chief Executive Officer (CEO) to work out, in collaboration with the chairman and other directors, a year-long agenda of strategy topics for board meetings”.
2. **Description of the strategic planning process:** “CEOs with strong, positive board relationships keep their directors informed about both the “how” and the “why” of strategy to further their dialogue”.
3. **Emphasise the external environment and competitive pressures:** “Chairpersons and CEOs who have forged an effective and collaborative path with their boards of directors focus considerable attention and board time on looking outward”.
4. **Be clear about the required resources:** “Clarity around the resources required to execute a strategy helps the board have confidence in management and helps management develop the discipline to actually execute its strategy”.
5. **Know the warning signs of trouble and tell the board:** “part of contingency planning is knowing the early warning signs that a strategic initiative is falling short”.

The emerging theme from literature is the importance of a thorough understanding of what must be done and how it is going to be achieved. Mezger & Violani (2011) say that a sound strategy is a prerequisite for success, central to creating superior value. They challenge senior management by asking how management know whether their company has a winning strategy or one that is herding the business toward stagnation or worse. It is understood that a sound plan with clearly defined objectives is an important requirement for effective execution of the company strategy. These strategic objectives must be clearly defined with appropriate measures to enable executives to track progress made and where necessary identify potential risk factors that may deter the execution of the strategy.

It is the view of the author that although the members of the board have a wealth of knowledge and experience, their limited involvement and thus the level of understanding of the business their organisation is in, hampers their effectiveness. Furthermore, members of the board have limited engagement with the organisations they serve thus inhibiting how much value they may add to drive effective strategy execution. Another point to consider is the understanding that the members of the board have about the intricate factors that drive the performance of the organisation. Lastly, the cohesion of the board members due to the limited interaction they have with each other may have a limiting effect on how well they are able to lead and direct the realisation of the company strategy.

Chapter 2: Literature survey

2.2.3. Strategy formulation

The starting point in corporate strategy is its formulation given the vision of the organisation, its positioning in the market and strategic direction. Srivannaboon & Milosevic (2006) state that “corporate strategy describes a company’s overall direction in terms of its general attitude towards growth and the management of its various businesses and product line, while business strategy occurs at the business unit or product level and it emphasises improvement of the competitive position of a corporation’s products or services”. Cocks (2010) promotes that strategy formulation should not end at executive level but needs input from the operational level to bring reliable insights into organisational capabilities and resource constraints. He advocates for this to encourage meaningful participation of operational people as a result of the understanding of why the strategy is implemented the way it is thus gaining support and buy in.

Literature indicates that strategy formulation should not be done in isolation of execution. Cocks (2010) adds that skills for strategy formulation and execution are important. He however points out that it is unusual to find people who are able to integrate both strategy formulation and execution to become successful general managers. Lukac & Frazier (2012) shared that formulating strategy is a difficult task and add that making strategy work is even more difficult thus highlighting the need for better support for business leaders in this area. They also say that successful implementation of strategy takes more time than its formulation which may overwhelm management which might end up being destructed due to the lack of guidance on the path to follow. The danger of the distraction is that the organisation may take longer to realise its objectives and some of the expected benefits from the strategy may be eroded.

Communicating the strategy - and how it will be executed - to role players across the organisation is an important activity. This sentiment is echoed by (de Salas & Huxley, 2014) reported that what is “required is a process that provides a holistic understanding of an organisational strategy, and clear links between the elements of the strategy and the organisational processes that will be central to its execution”. It is equally important for management to ensure that the visual communication tools are developed to speak to different players across the organisation. Cocks (2010) highlights that execution of strategy is extremely broad and complex, creating a need for structured ways for management to lead the implementation of strategy while bearing in mind the changes in the market that may negatively or positively impact the organisation. He therefore recommends three important drivers that are required for effective strategy implementation:

- Focused leadership of the right people.
- Communication through visible management systems.
- Use of project management techniques.

Chapter 2: Literature survey

Cocks (2010) offers advice that “effective strategy execution, like project management, needs regular and structured meetings and communication. People issues and resources should head the agenda at review meetings. Assuming the plan is clear and has been communicated, the next step is to allocate the best people with the right skills to the right jobs. If execution is still not proceeding to plan, it is likely that inadequate resources have been allocated or people need different skills to get the job done”. The complexity of strategy execution is not only as a result of a lack of an appropriate framework to guide the efforts of managers but also due to the soft elements that need to be managed in organisations. These dynamics create a fluid environment which is difficult to fully comprehend which then pose a challenge to the management team.

2.2.4. Strategy planning

Literature indicates that there is a need to integrate strategic planning and implementation (Cocks, 2010). The starting point of strategy execution is a plan to guide the actions that will be taken by the organisation (Lukac & Frazier, 2012). The plan requires resources to be executed and Lukac & Frazier (2012) point out that to execute the strategic initiatives requires business capabilities which is something an organisation has in terms of either knowledge or know-how. They say that “to achieve strategic objectives, an organisation must develop short-term measurable objectives that relate logically to strategy and how the organisation plans to compete”. The understanding of how an organisation is going to execute on its strategy as well as defining how it is going to measure progress enables it to adopt a focused approach. In the case where an organisation executes its strategy through projects, it is important to create a link between strategy and the project through defining the project strategy (Srivannaboon and Milosevic, 2006) as illustrated in Figure 2.3 below.

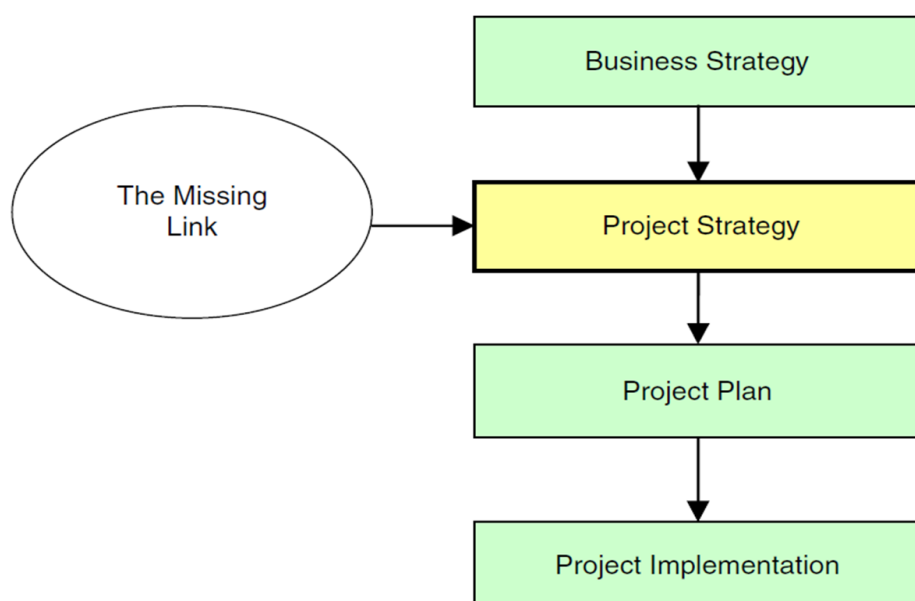


Figure 2:2: The missing link between business strategy and the project plan (Srivannaboon & Milosevic, 2006)

Chapter 2: Literature survey

It is worth noting that by nature, strategy implementation will require more role players compared to formulation and therefore the process of execution must be dynamic and adaptive, responding to unanticipated events (Lukac & Frazier, 2012). It is therefore necessary to define roles and responsibilities for role players in a clear manner through the use of a tool such as a responsibility matrix (Lukac & Frazier, 2012). Lukac & Frazier (2012) caution that “without this clarification of roles and responsibilities for critical tasks, decisions, and outcomes, making strategy work is difficult, at best.” The different activities and role players need to be well coordinated with governance oversight in order to overcome resistance and achieve strategic success (Lukac & Frazier, 2012). It was noted during the review of the literature that management use tools such as strategic maps, balanced scorecard and management by objectives in the execution of corporate strategy. One tool which is structured that is at management’s disposal is project management techniques. Cocks (2010) encourages management to adopt project management techniques in order to assist them to deploy the strategic plan.

2.2.5. Strategy execution

Literature indicates that the knowledge area of strategy planning and execution is developed and is undergoing a process of continual improvement. Most organisations have matured to a point of being able to plan and craft a sound corporate strategy. Albeit, a badly crafted strategy can impede the strategy execution process. MacLennan (2011) defines strategy execution or implementation as the action that moves the organisation along its choice of route towards its goal – the fulfilment of its mission, the achievement of its vision, strategy implementation is the realisation of intentions. It is thus important to note that the test of how well the corporate strategy was planned and developed shows in how well it can be executed.

It is therefore expected that the quality of strategy planning sets the tone for strategy execution. When a plan is well defined and the scope of execution is set, it provides a sound platform for the execution team to implement the directive while seeking support where there is a lack of clarity. Hrebiniak (2005) concurs that strategy execution is critical to success although it represents a formidable challenge to management since making strategy work is more difficult than the task of strategy formulation. He clarifies that execution represents a disciplined process or a logical set of connected activities that enables an organisation to take a strategy and make it work. Research was done to identify obstacles for strategy execution and Hrebiniak (2006) presents the following critical obstacles:

- Inability to manage change effectively and overcome resistance to change;
- Poor or vague strategy;
- Not having guidelines or a model to guide strategy implementation efforts;

Chapter 2: Literature survey

- Poor or inadequate information sharing among individuals/units responsible for strategy execution;
- Trying to execute a strategy that conflicts with the existing power structure; and
- Unclear responsibility or accountability for implementation decisions or actions.

The review of literature indicates that there is a consensus that strategy execution or implementation is a demanding task. However, there needs to be a way in which this phase of the strategic management process should be enhanced to realise the expected benefits and commercial results. Hrebiniak (2005) attributes the difficulty with strategy execution to the lack of a model, blueprint or template that could be used to shape execution decisions or actions. This is the main area in which this study seeks to contribute. MacLennan (2011) concurs by saying that strategy is not only difficult: it is poorly understood, intertwined with many organisational processes, takes a long time, involves lots of stakeholders, and often must reflect the decisions made by others. The work done in this study aims to bridge this gap. MacLennan (2011) says that strategy execution requires discipline, persistence, and patience. Unfortunately, in many organisations in which this is not recognised, there are quicker and easier ways to achieve personal recognition and success (MacLennan, 2011).

Strategic management by nature demands managers to think strategically about the business by reflecting on past experience, thinking about what is happening at present and assessing how they can better shape the plan going forward. Speculand (2011) recommends that leaders should take time to learn from what has happened before in their organisation and as such before they start executing a strategy they need to:

- Assess to establish why previous strategies have failed;
- Examine what happened in both the planning and the implementation of the strategy;
- Identify lessons that can be shared;
- Understand what works and what does not in the organisation's culture;
- Identify the critical success factors for moving forward; and
- Constantly review the new implementation to ensure that old mistakes are not repeated.

It is tragic that when business leaders are asked to implement the strategy, they do not know what to do, even though successful strategy implementation provides a competitive advantage (Speculand, 2014). He argues that it is critical for organisations to bridge the strategy implementation skills gap through training programmes that focus on areas such as collaboration and learning the skills of strategy implementation. Speculand (2014) emphasises that strategy is about making the right choices while implementation depends on people taking the right actions. He made five recommendations for successful strategy implementation:

1. "Focus on both crafting and implementing strategy – pay equal attention to both".

Chapter 2: Literature survey

2. “Oversee and stay committed to the implementation – constantly be involved by sharing information, communicating with employees and checking the current status often”.
3. “Adapt and amend the strategy and implementation as required – whatever was agreed to in the boardroom rarely happens in the implementation so adjustments must be made”.
4. “Create the right conditions for implementation – ensure you have set up a culture that supports the execution of the strategy”.
5. “Follow up – to achieve a successful implementation, follow up is the number one best practice for leaders to focus on”.

The need for an iterative strategic process emerges as one of the ways in which the rate of successful strategy execution could be enhanced. A poor strategy cannot deliver good results and conversely a good strategy that is poorly implemented is unlikely to produce sustainable competitive advantage (Getz, Jones & Loewe, 2009). They learned from experience that strategy is normally poorly executed due to the following five critical challenges:

- “Synchronising the long-term horizon of strategic thinking with the short-term focus required for action planning”.
- “During business planning, distinguishing between strategic ‘fit’ and what’s most important to do next”.
- “Maintaining the distinction between strategic ends and tactical means”.
- “Balancing constancy of purpose with the reality of business cycles and market perturbations”.
- “Coping with the fact that strategy implementation is both deterministic and emergent”.

It appears as though conceptually the areas of the strategic management process has gained a lot of insight over the past years. One wonders why despite the effort and hard work that has gone into improving this critical area of business management, success is still eluding leaders of organisations. Getz, Jones & Loewe (2009) state that most strategies don’t deliver the results that are promised because they lack a critical link, which they call migration management, between long-term strategy and the actions needed to achieve it. This is another area in which the study seeks to contribute. Getz *et al* (2009) explain that migration management improves on conventional strategy implementation approaches in a number of ways:

- “It focuses on making stepwise progress toward a strategic destination”.
- “It utilises a future-back approach to identify gaps that must be closed to reach the future state that is aspired towards”.
- “It identifies the actions that must be taken to close the identified gaps”.
- “It sequences the actions over time, highlights long lead-time actions and explicitly recognises interdependencies”.

Chapter 2: Literature survey

- “It makes it easier to respond to unanticipated environmental changes, such as severe economic downturn, without abandoning a sound strategy”.
- “It makes the assumptions and beliefs underlying the execution path visible so that implementation vulnerabilities can be monitored and managed”.

It appears that the result of the collective view of researchers is that although strategy formulation and planning are important, execution is where the greater focus needs to be due to the complexity of the process and its susceptibility to market forces. There is a need for a paradigm shift to investing more effort into strategy execution without weakening strategy planning. Speculand (2009) suggests mind set shifts, which should take place for successful implementation of the organisation's strategy, with the old mind set, noted in quotation marks:

1. “When crafting strategy is complete, the hardest part is over.” No, implementation is twice as difficult as creating strategy.
2. “Most people resist change.” No, most people are open to change when it is communicated in the right way.
3. “It is all about taking actions.” No, it is about taking the right action.
4. “Communication is all about making sure people understand the strategy.” No, staff members also must know exactly what actions they need to take.
5. “What worked yesterday will work tomorrow.” No, new strategies are needed every two or three years.
6. “Strategy must be reviewed twice a year.” No, it must be reviewed twice a month at least!

Getz and Lee (2011) say that “a key cause for missing strategy goals is that leaders do not invest the same amount of time, energy and resources in managing the implementation of the strategy as they do in setting the strategy”. They also add that management do not realise that managing strategy execution requires well-orchestrated management processes and letting existing business processes run the course will not drive the transformation required. They further add that in order for companies and business units to reach the audacious ambitions stated in their strategies, they must thoughtfully manage the way the strategy is implemented.

Resistance to change to adapt and the need to maintain the current state of affairs is one of the major challenges facing business managers. Business managers are gradually learning that sustainable change requires a change management process that does not only communicate the strategy but also encourage employees to play an active role by taking ownership for realising the strategic objectives. Getz and Lee (2011) provide the following four reasons why existing strategy management processes do not work:

- “Very little leadership dialogue with each other and the rest of the organisation in order to guide the organisation to make different choices and therefore take

Chapter 2: Literature survey

different actions. The objective is to determine new and different ways of driving the achievement of strategic objectives”.

- “No plan for managing the migration – a well-developed strategy includes long-term ambition and a migration path to get there. The migration path is written from the leaders’ perspective, while the path prescribes the tactics for closing key strategic gaps”.
- “Unclear link between organisational structure and strategic objectives – too often companies define new targets and goals without implementing consistent support systems to reinforce and direct everyday activities”.
- “Lack of employee engagement measures – engagement helps to speed results, increase quality and mobilise the organisation”.

In the quest to improve how things are done, Getz and Lee (2011) share that organisations seeking to reach the ambitious goals stated, their strategies require the following three things:

1. Direction – “a roadmap for where to go, getting specific with strategy to the point where it is relevant for everyone and everything in the company”;
2. Structure – “a holistic description for how work will be conducted, creating an organisational architecture that shadows the strategic architecture”; and
3. People – “resources for doing the work, engaging and mobilising employees for sustained commitment”.

Business risk management is critical in strategy execution. It is thus imperative that it is embedded in how things are done within the organisation. It is when business practices are well defined and integrated that maximum value is derived from execution. In addition, Sheehan (2006) advised that to encourage employees to make decisions leading to the successful implementation of strategy, managers must achieve four related objectives:

1. “Persuade employees to buy into the firm’s belief system”;
2. “Define activities that may place their firm in jeopardy and declare these off-limits to the employees”;
3. “Communicate strategy to employees by developing metrics, setting targets and aligning incentives”; and
4. “Become personally involved in decisions relating to strategic threats and opportunities in order to shape the firm’s direction”.

It is observed from above that once the road map has been communicated and the organisation is geared up for change, there is a need for management to sustain the process. Getz and Lee (2011) provide three pillars for effective strategy execution:

- “Get specific with strategy by making it relevant for everyone – by doing this executives ensure that the strategy is effectively propagated until it can be

Chapter 2: Literature survey

executed in a decentralised and consistent manner. This is achieved through making strategy and expected results clear, real and ensuring that they stick”;

- “Create an organisational structure that shadows and evolves with the strategy – the goal is to align the organisational structure to fit the requirements of the strategy. Building a winning organisational architecture begins with a set of organisational imperatives that describes what the organisation is and is not to be across multiple dimensions”; and
- “Engage and mobilise employees for sustained commitment – the solution is to pull in key stakeholders, gain their commitment to action and launch their active involvement. Engaging key stakeholders can be achieved through communication, pilot employee engagement, applying lessons from pilot, deploying skill-building, tools, and supporting processes in waves”.

The nature and complexity of strategy implementation is widely acknowledged, where all the energy and resources invested in the pursuit of the perfect strategy, it is surprising to consider how little effort is directed towards implementation (Allio, 2005). He cautions that “the six weeks that immediately follow the strategy development session are pivotal since this is when implementation programs are crafted, expectations set and targets identified”. He proposes a proven five step process that is aimed at improving the rate of success of strategic initiatives:

- **Step 1 - refining vision and strategy:** “Good implementation naturally starts with good strategic input, the soup is only as good as the ingredients. The critical output from the annual strategy session is a transcript capturing a draft vision statement, a set of broad strategies; and preliminary performance measures”.
- **Step 2 - craft individual programmes:** “implementation only works when there’s a clear and shared understanding of who does what, when and at what cost. In this case, strategy managers collaborate with their colleagues and staff to put meat onto the bones of each strategy, track down missing data, resolve dangling issues, and begin to shape general goals into actionable, measureable next steps”.
- **Step 3 - integrate implementation programmes:** “once each strategy manager has fleshed out his or her respective programmes, the strategy managers convene to compare notes. This critical juncture involves rolling up the programmes, resources required, performance metrics and issues as well as assessing the overall shape of the sum: is it all feasible? Can we afford it? Are we keeping our eyes on the original, strategic goals? Can the firm manage the timing or sequence of activities described?”
- **Step 4 - ratifying the strategies and implementation programmes:** “the strategy team reconvenes to present their plan to the Chief Executive Officer (CEO) and the board of directors for discussion, debate and ratification. When ratified, the managers are ready to roll”.
- **Step 5 - Implementation:** “immediately following the formal ratification of the firm’s vision and set of strategies, implementation can begin in earnest”.

Chapter 2: Literature survey

The objective of this study is to take the above mentioned steps to the next level by addressing how they should be implemented while considering the following market leading practices for implementing strategy provided by Allio (2005):

1. **Keep it simple:** “implementation of even the most straightforward strategy tends to be a complex affair, requiring the intricate and dynamic interplay of people, resources and market forces. An important first step is to break down the basic logic of how a broader strategy is to be implemented into shorter-term actions, each with a defined start, middle and end. This is followed by a step of identifying specific metrics that managers will invoke to monitor progress / success in implementing the strategy as good metrics help focus the team and provide early warning system if implementation goes awry. The last step is to exert discipline in the way implementation is communicated – a streamlined template that compels managers to update each other in a single page goes a long way towards sustaining momentum. In the implementation game, less is more: teams that flawlessly and thoroughly execute a small set of plays put far more points on the board than those struggling to wield a thick playbook”.
2. **Establish a common language:** “it is important to note that words have different meaning to different people, one man’s ‘market’ is another man’s ‘industry’, one group’s ‘customer’ can be another group’s ‘supplier’, ‘partner’ or ‘co-worker’. Different interpretations of the language used to describe strategy hopelessly confound implementation efforts”. Before implementation starts, strategy managers should carefully define and review the key terms used to drive implementation to help ensure that everyone is on the same page:
 - a. **Strategy:** “the longer-term, broader set of actions undertaken to secure competitive advantage”.
 - b. **Programs:** “the shorter-term set of actions required to implement the strategy”.
 - c. **Metrics:** “the yardsticks employed to measure progress or success in implementation”.
 - d. **Milestones:** “the major events that punctuate significant advances in implementation (typically no more than five)”.
 - e. **Resources required:** “the incremental human, capital, equipment and expenses required to implement the strategy, beyond normal operating expenses”.
 - f. **Critical issues:** “the primary risks, vulnerabilities or concerns that may impact the implementation of strategy and therefore deserves scrutiny and surveillance”.
3. **Delineate roles, responsibilities and timeframes:** “implementation often calls for cross-functional support and collaboration. It’s not unusual, therefore, to find the same programme appear within several strategies or to assign programme managers from other functions or departments”. Teamwork lies at the heart of successful implementation. Each programme should also have a clearly

delineated time span (sequencing is clearer when managers expand this column to incorporate start and end dates).

4. **Devise straightforward quantitative and qualitative metrics:** “it is not unusual to find that a firm’s sole format measurement system is the budget and forecast, but strategic programmes may deliver results that are not immediately quantifiable or that are not captured by the firm’s financial systems. The metrics section of the implementation worksheet is designed to capture the financial and strategic yardstick by which the team monitors progress. Metrics should be as specific as possible. Wherever possible, ‘soft’ targets should be converted into measurable units. In general, the sharper the metrics, the easier it is to monitor performance and justify investment”.
5. **Balance short term with longer term:** “healthy implementation plans balance the short with the longer term, and strive to portray the full arc of the implementation process. If the strategy is expected to take three years to implement overall, for example, programmes, milestones and resources required should reflect that span of time”.
6. **Be precise, use action verbs:** “strategy and implementation programmes describe what we ‘do’ so it is not surprising that we advocate the use of action verbs. All too often, imprecise language obfuscates implementation, confuses the rest of the team and unnecessarily prolongs work sessions and documentation. It may also rob the management team of opportunities to springboard off each other’s efforts”.
7. **Use a common format to enhance clarity and communication:** “insisting on a common implementation format does wonders to streamline communication and pinpoint emerging issues. It makes communicating within the team or unit easier and greatly enhances comparison or collaboration with other teams, senior management and the board of directors. A consistent set of templates and exhibits also enhances adaptability: the strategy managers can present programmes side by side and make systematic changes in emphasis without losing time translating or transposing conflicting documents. At the highest level, simple, single-page templates serve as the common script for monitoring performance”.
8. **Meet regularly but in structured, time-limited sessions:** “implementation plans are destined to change: customer and competitor responses, technological advances and resource allocation shifts will influence the timing and in some cases the scope of implementation of programmes. Firms that establish a concrete framework for implementation and empower managers to modulate in order to keep their teams on track, generate the best results. A well-defined time limit encourages managers to prepare their presentations in advance, honing their messages. Consistent communication is one weapon in the strategic arsenal but care must also be taken to avoid the ‘analysis paralysis’ syndrome, the monthly meeting that chews up hours and hours of valuable operational time. The manager’s challenge is to oscillate between the big picture and the corroborating details without losing momentum and focus”.

9. **Anchor implementation activities in the firm's financial infrastructure (budget, metrics, and rewards):** "once strategy has been developed, high performing firms recalibrate their managerial systems to support and encourage implementation. When the metrics used to judge a department or a manager are fine-tuned to track and reward strategic behaviour, for example, implementation accelerates. Conversely, when the strategy is at odds with the rewards or metrics, implementation is jeopardized. Good implementation hinges on identifying and deploying a small set of performance metrics that encourage the kind of focus and behaviour the firm seeks and rewarding employees for meeting or exceeding strategic targets".
10. **Be prepared to consistently manage the implementation process:** "implementation can be segmented into three phases: kick-off (programme ratification), mid-stream implementation and finale. Senior managers achieve better results when they manage their teams' expectations and activities through each of these distinct phases".

The emerging message from the work that was done on strategy execution, is that it is complex, there is limited understanding of what must be done due to the lack of a guiding framework or model and that it is a collaborative effort between executives, managers and the people at the operational level. This is thus an area in which the study seeks to contribute in by providing guidelines on both a framework and salient factors for effective strategy execution. Furthermore, literature has guidelines which management could adopt to improve the successful implementation of strategy. It is the objective of this study to contribute in demonstrating how strategy could be executed effectively given the guidance provided by researchers in this area of work.

2.2.6. Models for executing strategy

The need for models in strategy execution has been emphasised by researchers. The importance of strategy execution models is in that it prevents the mismanagement of the strategy execution process (Galpin, 2018). He furthermore emphasises that "companies need a repeatable process that provides an integrated and actionable approach to inform the effective execution of the strategy". It is therefore appreciated why researchers have created value in developing models to support managers in their efforts to implement corporate strategies. The focus of corporate performance reports covers financial and non-financial performance based on the reports provided by management to executives. Executives provide performance reporting on progress made against strategic initiatives through these reports. However, it is the experience of the author that the focus of the performance report is on strategy execution and very little if any is reported on the effectiveness of strategy execution. Srivastava (2013) states that effective strategy execution is about the measurement and management of strategic focussed performance measures. There is a lack of strategic performance factors and their role in effective strategy execution, which turns out to be a barrier to

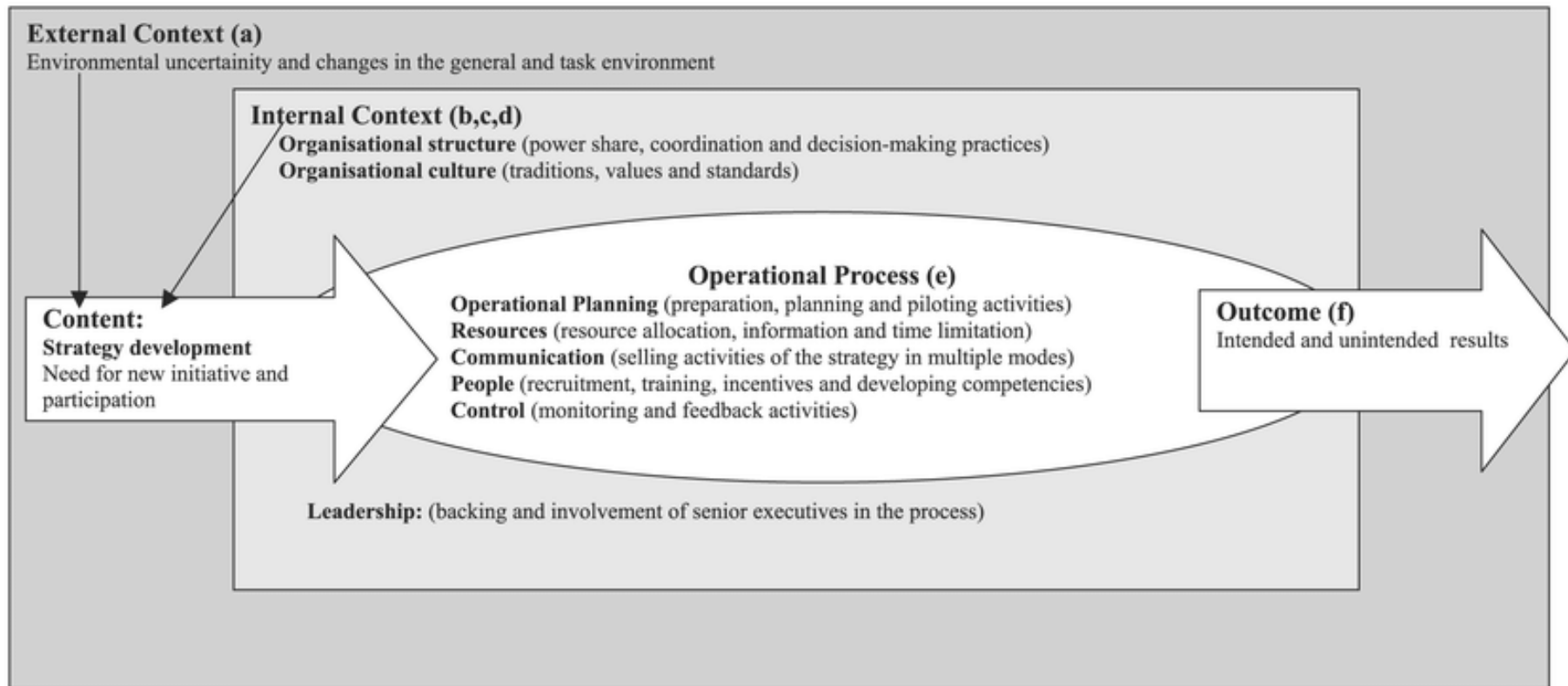
Chapter 2: Literature survey

the successful execution of strategy (Srivastava, 2013). It is the aim of this study to contribute to this area.

The challenge with effective strategy execution could be due to the lack of appreciation and due consideration for measures that will indicate whether the enterprise is creating value. It is reported in literature that strategy execution is a complex and dynamic process and Safdari Ranjbar, Akbarpour Shirazi & Lashkar Blooki (2014) say that management should realise that managing strategy implementation requires well-orchestrated management processes that need to go beyond the routine course of business processes to realise the strategy. It is important that business leaders need to understand the difference between strategy execution and effective strategy execution. It is when the business leaders are able to translate corporate performance into value for stakeholders that they would not only understand the capability of the organisation but have a clear understanding of what the key drivers of strategy realisation are. Okumus (2003) reports that organisations fail to implement more than seventy (70) percent of their new strategic initiatives, hence the shift in focus from strategy formulation to its implementation. He provides shortcomings on three groupings of strategy implementation frameworks based on his review of literature:

- **Group 1:** “Frameworks in the first grouping developed by Hambrick and Cannella (1989), Hrebinaik and Joyce (1984) and Waterman, Peters, and Phillips (1980) tend to simply list and describe the implementation factors”.
- **Group 2:** “Frameworks in the second grouping by Vasconcellos e Sa (1990) and (De Feo and Jansen (2001) suggest rational step-by-step implementation models that are often difficult to follow in complex situations of implementation”.
- **Group 3:** “Frameworks developed by Pettigrew (1987), (Pettigrew and Whipp (1991) and Dawson (1997) emphasise the importance of context and process but do not provide detailed explanations and discussions about which implementation factions are important, what their specific roles are and their impact on the implementation process”.

In lieu of the gaps identified above, Okumus (2003) proposes a strategy implementation framework depicted in Figure 2.4 that emphasizes the importance of content, context, processes and outcomes as well as explains the potential role and importance of each factor in the process. It is the objective of this study to expand on the proposed framework to include other key elements for effective strategy execution to realise value that have been identified from the review of the literature.



Key

- a Changes in the external environment influence the strategic context and force organizations to deploy new initiatives.
- b Problems and inconsistencies in the internal context require new initiatives.
- c The strategy is implemented in the internal context, and the characteristics of organizational structure, culture and leadership influence the process factors.
- d Having an organizational context that is receptive to change is essential for the successful implementation of strategy.
- e The process factors are primarily used on a continuous basis to implement the strategy and manipulate the internal context.
- f The characteristics of the context and process factors and how they are used directly influence the outcomes.

Figure 2:3: The strategy implementation framework (Okumus, 2003)

Chapter 2: Literature survey

The strategy implementation framework presented above does not suggest an implementation model that is linear and prescriptive, nor does it view strategy formulation and implementation as different phases (Okumus, 2003). He says that this is because strategy implementation is far too complex to be explained by prescriptive linear models but provides a holistic approach to viewing the formulation and implementation of strategy including the interaction of implementation factors as well as their impact on the process. He further asserts that the proposed framework allows managers to view strategy formulation and implementation together.

Some of the models developed by researchers have been well received in the market and were thus adopted. This has enabled the models to be improved and to enhance their benefits to industry. One such model is the balanced scorecard, which has been aligned to the McKinsey's 7-S model as noted by Kaplan (2005) to improve its effectiveness. Kaplan (2005) conducted a study of the McKinsey 7-S framework and the Balanced Scorecard (BSC), alignment model and learned that they share many features. The Business Scorecard enables the organisation to define in a balanced way four perspectives which are customers, financial, internal business processes, including learning and growth. The McKinsey 7-S framework enable an organisation to articulate its strategy, structure, systems, style, skills, staff and shared values.

The frameworks that have been presented so far needs to be integrated somehow so that the aspects that are common are streamlined and new elements are embedded to create a single enhanced model which management could use to direct their efforts. The survey of the literature revealed that Kazmi (2008) conducted research to expand on earlier frameworks of the popular McKinsey's 7-S model by (Waterman, Peters and Phillips (1980) and the work done by Okumus (2003) and starts by clarifying the different components that make up the framework proposed by Okumus (2003) which articulates:

- **“Strategic context** that refers to why and how strategy is initiated”.
- **“External context** that refers to the degree of uncertainty and changes in the task and general environments of the organisation”.
- **“Internal context** which refers to the configuration of organisational structure, culture and leadership”.
- **“Organisational process** which refers to the configuration of operational planning, resource allocation, people, communication, control and feedback as well as outcome”.

In retrospect, Okumus (2003) strategy implementation framework is comprehensive as it attempts to take into account an array of variables and binds them into a compact model, however, as always there could still be scope for improvement (Kazmi, 2008). He expands that using comprehensive framework proposed by (Carpenter and Sanders (2007) in the context of strategic management, one needs to look at implementation levers since strategic leadership involves making lever and resource allocation decision that allow communicating the strategy to stakeholders. He further

Chapter 2: Literature survey

proposes three main suggestions to overcome the barriers to strategy execution, which are:

- **Adopting a clear model of implementation:** “often implementation activities take place according to the abilities and initiatives of managers involved in them, and those that are important enough to be done. What is required is a clear model of strategy implementation process that can provide unambiguous guidelines to the managers implementing the strategy”.
- **Effective management of change in complex situations:** “implementation usually creates the need to manage change in complex organisational context. Many of these areas of change are behavioural in nature and are therefore multifaceted and messy, no wonder managers fail to manage these complex organisational issues satisfactorily creating conditions for sub-optimal implementation of strategies”.
- **Setting down clear measures of effectiveness:** “many of the failures in implementation of strategies can be attributed to the lacunae in setting down clear measures of effectiveness. If there are clear measures of effectiveness, the likelihood of implementation succeeding is enhanced”.

Progress has been made in the integration of practices used to direct the effective execution of company strategy. Figure 2.5 presents a model of strategy implementation that attempts to capture the major themes in strategy execution and the activities that make up each theme (Kazmi, 2008).

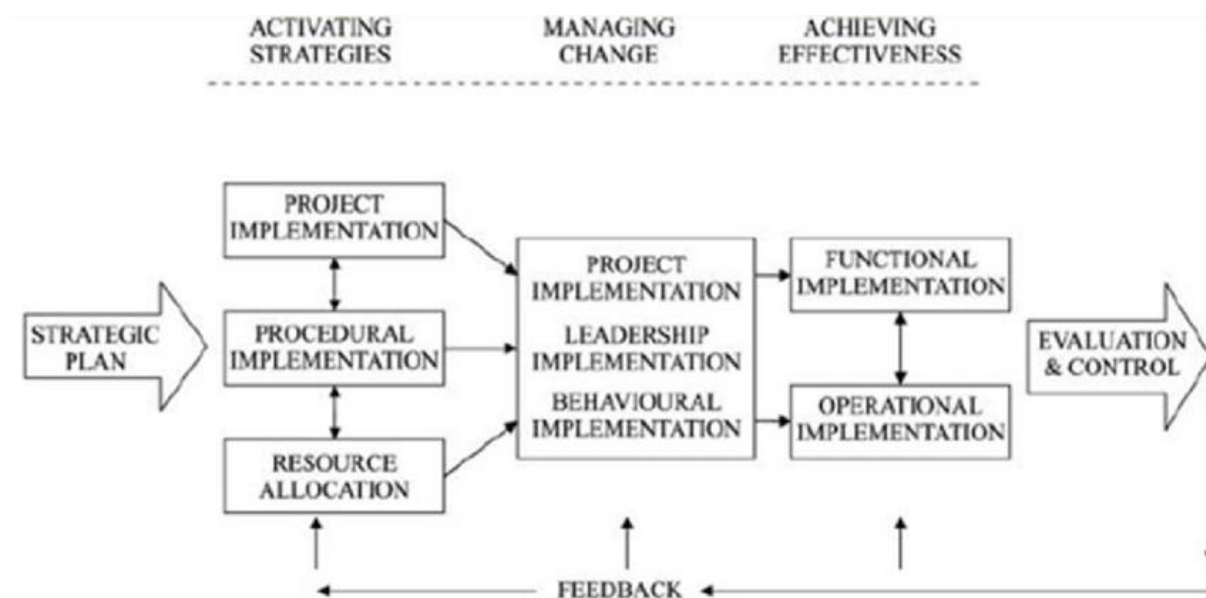


Figure 2.4: The strategy implementation model (Kazmi, 2008)

To aid in the understanding of the model depicted above, Kazmi (2008) explains that the forward linkage from strategic plan guides the implementation process and connects it to the preceding phase of strategy formulation. He adds that the feedback flowing in reverse from the following of strategy evaluation and control moves through

Chapter 2: Literature survey

the implementation phase and goes back to strategy formulation, establishing the backward linkage.

In lieu of the understanding of the strategic management process and its iterative nature, the question that comes to mind is how could the process be managed in order to effectively achieve the desired objectives? Kazmi (2008) indicates that project management is of utmost importance in strategy implementation, a fact that has been curiously neglected in most of existing frameworks. He cites work that was done by Morris and Jamieson (2005) that suggest this neglect may be corrected. They further highlight the danger of strategy implementation models that have an underpinning of an exclusive top management point of view which assumes the executive management to be passive implementers of strategic direction. They also add that the proposed model gives due recognition to the interrelatedness of the different issues in strategy implementation, with effective results emanating from the continual interaction of implementation taking place at the functional and operational levels.

The evaluation of frameworks for effective strategy execution has focused largely on the technical and “hard” side of strategic management. It is important to realise that strategy execution focuses on bringing about the changes that would create value. Part of the process involves people and their aspirations. Sheehan (2006) warns that many brilliant strategies fail due to poor execution and advises that to be successful, managers need to provide guidance so that employees can make decisions leading to implementation. He provides four strategy execution levers which improve a firm’s strategic implementation capabilities when used in concert, and these are:

1. “Diagnostic controls – by adding targets and rewarding their achievement, diagnostic controls become a powerful tool to communicate strategy as well as motivate and hold employees accountable for their actions”.
2. “Boundary controls – clearly delineate which employee actions are not allowed”.
3. “Belief controls – getting employees to buy into what the organisation is trying to accomplish is a powerful, positive control tool”.
4. “Interactive controls – if companies are to win in the long term, they need to monitor and proactively respond to threats and opportunities”.

The review of the literature found a framework by Meskendahl (2010) that encapsulates strategy execution through project portfolios. The advantage of the study conducted by Meskendahl (2010) is that he proposed a linkage between business strategy, project portfolio management, and business success to close the gap between strategy formulation and implementation. It is therefore important that one understands the factors and elements that make up the strategic management process and how they contribute to the effective execution of strategy. Furthermore, there are enabling processes such as project portfolio management, value management, change management and performance management that need to be integrated effectively into the strategic management process in order to enable the realisation of strategic objectives of the organisation.

Chapter 2: Literature survey

Meskendahl (2010) conducted a review of the literature where he discovered a poor connection between strategy execution and the management of projects to achieve business success. He realised that there is little guidance about how strategy gets translated into projects during execution. He proposed a conceptual model that links the strategy of the organisation to value which is presented in Figure 1.1. He emphasised that “business strategy thereby describes the way in which a firm decides to compete in the industry in comparison to its competitors”. He had a concern that he could not find a framework that covers the entire cycle from strategic planning through project portfolio management to business success.

It was noted by the author that the model proposed by Meskendahl (2010) focuses on strategic orientation which is a large component of an enterprise business risk and change management processes. The concern is that the strategic orientation links to a small aspect of the company’s strategic intent thus limiting the strategy formulation view. It is critical that strategic orientation considers the full elements of strategy formulation so that strategy execution is well informed by the strategic objectives of the organisation.

The review of the literature yielded a number of models that were developed and published over time in the quest to support management with their efforts to implement and manage the realisation of corporate strategies. These models and frameworks have also been refined to add different components which management should consider as they lead their organisations. Others such as the Balanced Scorecard have received prominence while the use of others may have not been received equal level of publication. It was also noted that these models have found application in different levels of the organisation in which they are either targeted at the strategic, tactical or operational level of the enterprise. There is therefore a need for the different components of enterprise management through the strategic management process to be linked, streamlined, aligned and integrated into a unit that could be used to create value. It is therefore the intent of this research to incorporate this missing component.

2.2.7. Effective strategy execution

Organisations execute strategy based on their strategic objectives in order to achieve set targets. However, the extent to which these objectives are achieved is determined by how effective the organisation is during the strategy execution process. No formal definition of effective strategy execution was found during the review of the literature. In lieu of the need to define effectiveness of strategy execution, Patanakul (2015) defines organisational effectiveness as the degree to which the organisation’s end objectives are accomplished subject to certain constraints. It is therefore inferred that effective strategy execution is about translating the corporate strategy into business value for concerned stakeholders by taking into consideration internal and external

Chapter 2: Literature survey

business constraints. The challenge with strategy and its execution is that the larger part of strategy is conceptual and thus it is critical to focus on defining the strategic objectives and initiatives in a tangible manner. It is much easier to drive the implementation of well-defined and measurable objectives than aspirations.

One would wonder given what the literature reveals so far whether it is possible for organisations to effectively execute their strategy. Cocks (2009) conducted a study of Australia's organisation that were top performers over a period of twenty five (25) years and shares insight on common elements that underpin long-term performance:

1. **Effective execution:** "winning organisations do what they say through announcing what they plan to do, planning and budgeting for it and meeting the plans as well as the budgets. In order to achieve this, they have clear processes that are accepted within the organisation".
2. **Perfect alignment:** "practicing a culture of continuous improvement, they use measurement and systems as the critical foundation for alignment. They seek to align culture, leadership, people and perceptions to strategy. Alignment is to external needs as well as internal forces".
3. **Adapt rapidly:** "Flexibility is key but change comes with control and is continuous. Innovation is sought in process as well as in products and services".
4. **Leadership and fuzzy strategy:** "winning organisations have a clear strategy, though it can be expressed in many ways and does not necessarily exist through a vision or mission statement. Winning organisations are always seeking to take advantage of incremental opportunities, even if they lie just outside their current clear strategy".
5. **Leadership, not leaders:** "leadership is about teams of leaders. They are available, egalitarian, supporting their people from close by, not setting difficult challenges from afar".
6. **Looking out, looking in:** "winning organisations are externally and internally focused. They are aware not just of customers, but of their environment, their community, their international industry and international trends".
7. **Right people:** "winning organisations hire people who believe in their 'cause', whose values and attitudes fit, not the 'best' people who demand the highest pay. People who work in winning organisations are committed and proud though they will not sing the organisation's praises too loudly".
8. **Manage the downside:** "Despite rapid growth, innovation and looking outwards, winning organisations are conservative. They plan carefully beforehand, considering the downside, not just the upside, of major decisions. They seek to share risks with other organisations, customers and their people".
9. **Balance everything:** "Rather than trying to choose between alternatives, winning organisations choose both. While focusing on the long term, they also focus on the short term. While focusing on financials, they also focus on delivering value to customers, employees and the community. While working in teams, people are individually responsible".

Chapter 2: Literature survey

It is becoming apparent that strategy execution has a hard side to it (strategic management) and a soft side (behavioural aspects) which is about keeping all stakeholders within the organisation informed about what is happening and therefore expected from them. It takes a good leader to guide the organisation to the desired destination while ensuring that each person clearly understands his or her role in the journey. The most effective way to make business strategy successful is through alignment and follow-up (Khadem, 2008). He clarifies that alignment is when everyone from the executive team, all the way down to the front line workers, are sharply focused on making the strategy work. He adds that this is the state of alignment where everyone understands the strategy, buys into it, knows how to make a real contribution and strives to contribute to its realisation. He also explains that systematic follow up on commitments made by many managers at all levels that generate a number of commitments to actions that directly affect the strategy, is essential to making the strategy successful.

Guidelines have been developed to equip management with insight on which areas they need to pay attention to. Cocks (2010) conducted a survey of more than 1000 senior executives of large effective organisations in Australia exploring concepts that organisations of all types can use to more effectively execute their strategic plans. His findings point to several factors that help implement strategic plans in service, manufacturing, not for profit and public sector organisations, and the key messages were:

- “Strategic planning requires integration of strategy formulation with strategy implementation”.
- “Effective execution is a key attribute of successful organisations”.
- “Management should provide focused leadership of the right people”.
- “Management should create highly visible management systems to communicate widely and consistently”.
- “Management should use project management techniques to deploy the strategic plan”.

The expectation from leaders is that they should be able to think holistically about what must be done and achieved as well as for them to be able to manage the day to day business activities that would enable the organisation to achieve the desired vision. It is therefore necessary for leaders to realise that the road to effective strategy execution is full of potholes and dangers (Hrebiniak, 2008). He cited the following obstacles to effective execution:

- **Planning and execution are interdependent:** “strategy formulation and implementation are separate, distinguishable parts of the strategic management process. However, formulation and implementation are also interdependent, part of an overall process of planning-executing-adapting. Not involving those

Chapter 2: Literature survey

responsible for execution in the planning process threatens knowledge transfer, commitment to sought-after outcomes and the entire implementation process”.

- **Execution takes time:** “the successful implementation of strategy takes more time than its formulation. This can challenge managers’ attention to execution details. The longer period can also detract from managers’ attention to strategic goals. The process of execution must be dynamic and adaptive, responding to unanticipated events. This imperative challenges managers responsible for execution”.
- **Execution involves many people:** “strategy implementation always involves more people than strategy formulation. This presents a problem in that communication down the organisation or across different functions becomes a challenge. Linking strategic objectives with day-to-day objectives at different organisational levels and locations becomes a challenging task. The larger the number of people involved, the greater the challenge to execute strategy effectively”.
- **Effective execution involves managers across all hierarchical levels:** “another problem is that some top-level managers believe strategy implementation is ‘below them’, something best left to lower-level employees. This view holds that one group of managers do innovation, challenging work (planning), and then ‘hands off the ball’ to lower-levels for execution. If things go awry, the problem is placed squarely at the feet of the ‘doers’, who somehow couldn’t implement a perfect sound and viable plan. This view is wrong. The truth is that implementation demands ownership at all levels of management”.
- **Managing change is difficult:** “execution often involves change in structure, incentives, controls, people, objectives and responsibilities. The importance of managing change well is clearly important for effective strategy implementation. The inability to manage change and reduce resistance to new implementation decisions or actions can spell disaster for execution efforts”.
- **Other execution related problems:** “The research uncovered other problems that challenge strategy implementation and they include responsibility and accountability for execution activities and decisions that are not clear, poor knowledge sharing among key functions or divisions, dysfunctional incentives, inadequate coordination, poor or vague strategy, and not having guidelines or a model to shape execution activities and decisions”.

In light of the complexity of strategic management, Mezger & Violani (2011) proposed seven common, yet crippling shortcomings which management could use to assess the effectiveness of their strategic initiatives:

1. “The strategy fails to exploit accumulated insight about the basis for advantage; many strategies appear to address the route to success through a consideration of Key Success Factors (KSF), but too often, they fail to explicitly link KSFs to the true basis of advantage”.

Chapter 2: Literature survey

2. “The strategy does not say “no” to anything: by definition, not every tempting undertaking can be strategic, because being strategic is about making difficult choices among attractive options”.
3. “The strategy focuses only on the short term: a strategy should focus on creating value over the planning horizon”.
4. “The strategy fails to take into account competitors and their moves: the failure of many companies to do competitive analysis is difficult to excuse in this information age”.
5. “The strategy mistakenly either over-commits to ‘big bets’ or settles for tactical incrementalism: a discovery driven approach can help the company understand what works before risking all its chips”.
6. “The strategy cannot be implemented because it is not aligned to the organisation’s capabilities: a superior strategy is at least partly defined by superior capabilities”.
7. “Strategy implementation is not well planned: a vision must be broken down into strategic intent, and converted into specific initiatives that everyday staff can seek to achieve”.

Effective strategy execution is about directing and managing strategy implementation to realise value from the organisation. In strategic measurement, it is important for leaders to clearly define what the vision is, what must be done to realise the vision, which key measures are going to be used to assess how well the organisation is doing in realising the vision.

The whole process of effective strategy execution needs to be enabled by an effective performance management system that will provide an indication of what is actually happening and to also identify risks including issues that may deter the organisation from reaching its objectives and target. Added to this, leaders need to establish effective feedback mechanisms that will enable them to track the hard and soft side of what is going on within the organisation.

In conclusion

The effectiveness of strategy execution cannot be over emphasised. The area has been researched extensively due to its importance to business and value to the development and growth of enterprises as assets of value. There are a number of lessons that emerge from the review of the literature on executing strategy effectively which are considered in the study in order to gain from them. It was noted that although it is important to execute strategy well, the formulation and defining the strategic direction of the organisation is crucial.

It was noted that defining strategic objectives and measurable targets enables management to measure the performance and achievements made through the

Chapter 2: Literature survey

execution of the corporate strategy. Literature reflects that although effective execution of strategy improves the competitive advantage of an organisation, strategy execution itself is a difficult task. This thus led to researchers contributing models and frameworks to support business managers in this quest. Another theme that emerged from the review of the literature is the role that projects play in the execution of the corporate strategy.

It was also pointed out that there is a missing link between strategy and projects which needs to be defined in order to improve the translation of strategic objectives into projects. It furthermore emerges that there is also a softer side of strategy which involves leadership, governance and communication which are key to effective execution. Accountability emerged as one of the necessary factors and good corporate governance contribute to this effect. It is thus the intent of the study to explore salient factors that contribute to the effective execution of corporate strategy through project portfolios.

The review of the literature on strategy execution including the frameworks that were recommended by researchers provide a broad understanding of some of the pitfalls which management need to be on the lookout for as highlighted in the overall research question. The role of managers in leadership and governance is important since it sets the tone on how the organisation will be directed in strategy execution. Furthermore, a structured approach aids in this quest since different individuals appreciate where the boundaries are over and above what is critical to the success of the organisation.

It is noted from the work that was done by different researchers that there is a need to not only define projects that are going to be used in the execution of the corporate strategy but that this link drives the achievement of strategic objectives. This observation sheds lights on the third research question which seeks to understand how project portfolios could be used to execute the corporate strategy in order to realise the strategy objectives.

2.3. Project portfolios in strategy execution

Literature indicates that project management could be used to enable effective strategy execution. The view is that project management allows organisations to execute their strategic objectives in a structured manner and thus provides some element of control. It is reported by Pedersen & Ritter (2018) that “executives manage the process as a dynamic collection of projects that together bridge the gaps and roadblocks that arise between strategy formulation and execution”. Maddalena (2012) shared that executive leaders can increase the effectiveness of their organisation’s strategic planning processes and improve accountability by incorporating project management principles during the implementation phase of the strategy. Project Management as a discipline is equipped to enable executives to oversee their organisation using a proactive approach. Creating a culture that embraces the principles of project management,

Chapter 2: Literature survey

organisations will increase the likelihood of success and that project management principles could be applied during the implementation and monitoring of various aspects of an organisation's strategic plan (Maddalena, 2012). The advantage which organisation gain from using project management principles is that the field has been researched extensively from different perspectives. There is a wealth of knowledge and insight which organisations could benefit from in applying project management principles. Furthermore, the field has developed tools that enable organisations to measure and develop their maturity in the application of project management principles.

The importance of projects in strategy execution is reported by Crawford, Hobbs & Turner (2006) who found that organisations are increasingly realising that corporate strategy is delivered through projects, and so project management capability is key to their ability to deliver their strategic intent. They argued that in order to ensure the alignment of project management capability with corporate strategy, choices need to be made:

- “Managers must decide how best to use available resources. They must decide which projects, programs, and portfolio of projects to implement in order to make optimum use of available resources. Completed projects should also be assessed to ensure that they actually delivered the desired outcomes. Organisations need to ensure they are doing the right projects”.
- “Organisations must ensure they have the project delivery capability to deliver the chosen projects, programs, and portfolios. They need to be able to develop appropriate competencies, and then assign those competencies to the chosen projects, to deliver them successfully in order to achieve the desired benefits”.

Organisations need to ensure that they can implement their chosen projects right—to deliver the right projects right (Crawford *et al.*, 2006). They emphasise that in order to be able to make these choices, organisations need ways of describing their projects so they can compare them.

The project management function, which is made up of portfolio, programme and project management, is proving to be a model that enables strategy execution as it has the processes that break the strategy into portfolios, which inform the programmes that must be implemented to achieve strategic initiatives. Furthermore, the programmes are made up of projects, which are executed at operational level for the realisation of the program objectives. Kaiser, El Arbi & Ahlemann (2015) say that project management is linked to strategy implementation in two distinct ways. They say that firstly, there is the management of strategy implementation projects, an aspect that has been studied extensively. The second link is the implementation of a strategy through the modification of project management (PM) practices. They emphasise that this applies to all facets of single-project and multi-project management, specifically in project-based industries where projects are of paramount strategic relevance. Longman & Mullins (2004) say that project management requires deliberate planning

Chapter 2: Literature survey

and action to create the conditions for success and put in place the strategy, leadership, goals, processes, skills, systems, issue resolution and structure to direct and exploit the dynamic nature of project work. The PMO processes are maturing and this has resulted in more sophisticated tools and techniques that are available for use by business executives to manage the performance of the organisation.

Literature is rich with studies that demonstrate the complexity of strategy execution and the lack of a well-defined link between strategic planning and execution. While strategy implementation, frequently considered as the graveyard of strategy, the main emphasis in strategy research has been on the formulation of strategies (Meskendahl, 2010). Meskendahl (2010) adds that this is where project portfolio management comes into play, emphasised that projects and especially project portfolios are 'powerful strategic weapons' as they can be considered as a central building block in implementing the intended strategy. The work done by Alsudiri, Al-Karaghoul & Eldabi (2013) revealed that models are available for the alignment between corporate strategies and projects, however they lack empirical verification to share insight on the different processes of implementing the corporate strategy down to the project management level during the planning processes for the execution of the project. (Meskendahl, 2010) points out the need for empirical validation and the further development of the conceptual model, in which its propositions are tested by quantitative empirical study. It is the intent of the researcher to apply the framework that was developed by (Meskendahl, 2010) and test it through the review of case study organisations.

2.3.1. The value of project portfolios in strategy execution

Literature suggests that the project management approach, particularly project portfolio management could be applied to execute strategy. However, caution that the selection and execution of projects including governance are key to the realisations of strategic goals. Patanakul (2015) defines portfolio management as "the organisational capability to 1) form a project portfolio such that the portfolio aligns with the organisation's strategic direction, is adaptive to the internal and external changes and contains projects with high perceived value or benefit, and 2) manage the portfolio to promote project visibility, transparency in decision making, and predictability of project delivery, in order to achieve project success, short and long term value or benefit, and integrity, cohesion and morale of the project community." He infers that the accomplishment of an organisation's strategic business objectives is a typical focus of project portfolio management.

Meskendahl (2010) defines project portfolio management as the simultaneous management of the whole collection of projects as a unit, in which a project portfolio is a set of projects that share and compete for scarce resources and are carried out under the sponsorship and management of a particular organisation. He further clarifies that

Chapter 2: Literature survey

literature highlights the importance of project portfolio management in evaluating, prioritising and selecting projects in line with strategy, which is preeminent in choosing the 'right projects' and therefore an important part of strategic management in organisations. He cites Cooper, Edgett, and Kleinschmidt (2002) who stated that the objective of project portfolio management is the maximisation of the financial value of the portfolio, linking the portfolio to the firm's strategy and balancing the projects within the portfolio in consideration of the firm's capacities. Pedersen & Ritter (2018) advise that "executives need to first decide on which projects to invest in, including project scope and objectives, as a part of their strategy formulation." They add that "executives need to actively manage the interrelationships of the projects in their portfolio as a part of their strategy execution." They further point out that "strategic execution will depend on how well the leadership team deals with the challenges and conflicts that arise as an organisation attempts to implement its projects in a dynamic competitive environment." It is thus essential for an organisation to establish an effective project portfolio management function with supporting systems in order to improve the effectiveness of executing on the strategy.

The implemented project portfolio management system will serve a critical role of providing an overall view of the portfolios in driving the realisation of strategic objectives. It is therefore important to understand how project portfolio management is applicable in this regard so that the selection of projects would seek to serve the realisation of the corporate strategy. Kock and Gemünden (2016) say that the right projects are the ones that provide maximum value, achieve a balance and are aligned to strategy. Martinsuo and Killen (2014) say that project portfolio management presents a complex set of challenges to decision makers in that multiple projects must be configured and managed in a way that enhance the long-term strategic value of the portfolio while considering multiple criteria and interdependencies among the projects in the portfolio. They also point out that the literature on project portfolio management has paid scant attention to value management concepts. They further highlight that most project portfolio management frameworks, as well as research studies, have emphasised the dimension of 'strategic alignment' in terms of how the projects collectively fulfil the firm's strategy, and 'portfolio balance' among the different types of projects as a reflection of strategic priorities, risk management and exploitation of synergies.

Patanakul (2015) says that "project portfolio management (PPM) can be broadly defined as the coordinated management of a collection of projects or programs to achieve specific organisational objectives". He infers that "the accomplishment of an organisation's strategic business objectives is a typical focus of PPM". It is also recommended that the portfolio manager should evaluate his or her portfolio and Patanakul (2015) suggests that portfolio management performance can be measured based on the following criteria:

Chapter 2: Literature survey

- “Having an appropriate number of projects in the portfolio for the resources available”,
- “Undertaking projects on time and in a time-efficient manner”,
- “Having a portfolio of high-value projects”,
- “Having a balanced portfolio”,
- “Having a portfolio of projects that are aligned with the business's strategy”, and
- “Having a portfolio whose spending breakdown mirrors the business's strategy and strategic priorities”.

It is suggested that portfolios should also be managed based on risk given their close proximity to business strategy which is exposed to changes in the market and internal factors. This is still an area of uncertainty as pointed out by Teller & Kock (2013) who observed that research on risk management and its success in a project portfolio context is scarce although the positive effects of single project risk management have widely been acknowledged in project management literature.

Portfolio management is an intricate process which could benefit from the use of a system and Patanakul (2015) notes that such management systems can be assessed from process effectiveness, portfolio success, and portfolio-related corporate success. He adds that the following constructs should be considered when evaluating the effectiveness of a portfolio:

- “Information quality—transparency that is achieved over the whole scope of projects of a certain project portfolio”;
- “Allocation quality—effective and efficient distribution of human resources among the portfolio”; and
- “Cooperation quality—the interplay between different management roles typically involved during a PPM process cycle”.

The effectiveness of managing a project portfolio could also be assessed using the following guidelines which are provided by Patanakul (2015):

- “PPM effectiveness is a multidimensional construct representing different perspectives of stakeholders”.
- “The dimensions (attributes) of PPM effectiveness include factors representing the accomplishment of multiple PPM goals from different perspectives of stakeholders”.
- “PPM effectiveness can be broadly defined based on the attainment of the project portfolio management outcomes with respect to multiple goals of PPM and relevant constraints”.

Patanakul (2015) adds that measurable evaluation criteria should be used to assess and measure the effectiveness of the portfolio of projects in achieving the set goals. This will also be used to make decisions on the projects and their value in the portfolio. Projects may become redundant due to changes that occur and they therefore need

Chapter 2: Literature survey

to be assessed for value and relevance, failing which they need to be terminated to preserve resources that they may consume. It was noted during the review of the literature that project termination is a contentious issue and as such it should be handled with care. However, stakeholders need to consider and do what is in the best interest of the organisation given that the project portfolio is used to execute the strategy of the organisation.

Martinsuo and Killen (2014) point out that the measure of 'value maximisation' is almost always interpreted in terms of financial and business success as well as value for the customer. They furthermore clarify that while the definition of project value is not universally agreed upon; the traditional measure of value is the return on investment in financial terms. Long-term business benefits are increasingly considered as factors to be pursued and assessed in project decision-making (Martinsuo and Killen (2014). Information is key to decision making and senior management requires a system that is able to provide key information at interval stages to enable them to make effective decisions. The complexity introduced by managing project portfolios is that there are a myriad of areas that must be properly managed to ensure that the results are meaningful and presents a picture that could be used to steer the organisation in the right direction.

It is seldom that projects that are used to execute the strategic objectives could be allocated to portfolios in a linear manner. There are interdependencies and some projects could fall into multiple portfolios depending on which strategic objective they influence. Laslo (2010) acknowledges that the relations between projects within the multiple-project environment have been recognised as a major issue for corporations. He states that this is to maintain agility while avoiding wasteful investments, a strong discipline of project portfolio management is needed. He adds that this requires continuous attention and balancing corporate resources against projects' operational risks. He clarifies that in a multiple-project situation the vast majority of projects share resources with other projects and thus the major issue is to find a way of handling resource scarcity according to the overall strategic direction of the corporation. He further adds that attempts to optimise resource allocations are confounded by differences in project activities, due-dates, and the nature of penalties for projects that fail to meet their objectives. Resource allocation and management is one of the main challenges of management given that they are a constraint that they need to balance against organisational demands. It is critical that there is an approach or method that is applied to direct resources where they are needed the most and appropriately allocate the resources that become available at a point in time.

Project portfolio management contributes to strategy execution as a link between what should be done and how it should be achieved. Patanakul (2015) says that project management literature in general discusses project portfolio management from a management perspective and indicates maximised value, portfolio balance and strategic alignment as three main goals of project portfolio management. He further

Chapter 2: Literature survey

adds that besides management, portfolio stakeholders include members of the organisation's project community. He used literature as a foundation and suggested three initial propositions representing project portfolio management effectiveness as:

- "Project portfolio management effectiveness is a multidimensional construct representing different perspectives of stakeholders".
- "The dimensions (attributes) of project portfolio management effectiveness include factors representing the accomplishment of multiple project portfolio management goals from different perspectives of stakeholders".
- "Project portfolio management effectiveness could be broadly defined based on the attainment of the project portfolio management outcomes with respect to multiple goals of project portfolio management and relevant constraints".

The management of project portfolios is a complex process that requires sound understanding and interpretation to ensure that sound decisions are made. The impact of these decisions is serious as they influence the entire organisation. It is therefore important for portfolio managers to be equipped with the necessary knowhow, skills and competencies in order to better support senior managers as they direct the company. Patanakul (2015) indicates that the focus of project portfolio management is to enable the accomplishment of an organisation's strategic business objective, which is managed through the establishment of portfolio committees that are supported by the PMO. He conducted a study to gain a better understanding of project portfolio management effectiveness through the investigation of project portfolio management practices of real-life business settings. His objective was to identify key attributes of project portfolio management effectiveness that were found to be:

1. "Strategic alignment: the alignment of the portfolio with the organisation's strategic direction",
2. "Adaptability to internal and external changes: the ability to address risks and uncertainty", and
3. "The expected value of the portfolio: the consideration of expected value of projects in order to form a portfolio with an acceptably high expected value".

The balance between the strategic and operational levels of strategy execution enables the proper translation of the expectation from the implementation process. Patanakul (2015) also developed operational attributes for effective project portfolio management that are defined as:

1. "Project visibility: the degree of exposure of a project to its stakeholders",
2. "Transparency in portfolio decision making: the stakeholders' understanding of the reasons behind portfolio decisions", and
3. "Predictability of project delivery: the ability to predict project performance".

Chapter 2: Literature survey

The balanced and aligned view of the project portfolio at strategic and operational levels enables the drive towards the achievement of strategic objectives and thus the value expected from the implementation of the corporate strategy.

A well-managed portfolio management process is expected to enable senior management to identify projects that may erode strategic value and thus make appropriate decisions on whether to terminate, rescue or put such projects on-hold. Ghapanchi *et al.* (2012) conducted a study on the application of effective portfolio management. They indicate that their key contribution to the field of portfolio management is the construction of a quantitative methodology for selecting portfolios of projects that respond to uncertainty conditions and deals with project interdependencies in terms of resource, outcome and success probability. They add that their methodology is superior to methodologies that are currently available and used since it incorporates project uncertainty and interdependencies.

Ghapanchi *et al.* (2012) state that applying the Fuzzy Data Envelopment Analysis (FDEA) for portfolio selection results in a higher number of feasible portfolios compared to Data Envelopment Analysis (DEA), in which the FDEA also takes uncertainty into account and differentiates among the most efficient portfolios. They further add that the methodology that they propose is able to determine the optimal portfolio given a set of established criteria. The understanding of project uncertainty and interdependencies is critical when management have to make a decision about a project that is not performing as expected. This is also so because projects have a bearing on the portfolio/s and thus the impact of the decision on the project in question and on the portfolios must be understood.

Literature further indicates the need for improving the organisation's capabilities in effective project portfolio management. Killen & Hunt (2013) advocate that project portfolio management capabilities need to evolve in order to identify areas for further development or to guide new project portfolio implementation. They acknowledge that project portfolio management has gained attention as a way to enable organisations to align projects with strategy and to ensure adequate resourcing for projects. They caution that particular care must be taken to ensure that the project management capability meets the organisation's needs over time. They highlight that project portfolio management is a high-level capability in which managers engage with a range of processes, methods, and tools for ongoing resource allocation and reallocation among a portfolio of projects to maximise their contribution to the overall welfare and success of the enterprise. They add that the aim is to improve project success rates by providing a holistic and responsive decision-making environment to maximise the long-term value of the project portfolio. Management need to identify ways of assuring the effectiveness of project portfolios by an independent party in order to drive the improvement of how the organisation applies project portfolio management.

A study was conducted to refocus key factors that are important in the effective management of project portfolios in an effort to assist practitioners in this field of work.

Chapter 2: Literature survey

Five key attributes in the effective management of project portfolios is reported by Patanakul (2020) and these are “1) a high degree of interaction with strategic management activities through PPM process and structure, 2) a strong relationship with functions responsible for managing multiple projects, 3) a consulting responsibility of project management office, 4) the organisation’s cultural traits regarding involvement, consistency, and sense of mission, and 5) an integrative complexity, a cognitive attribute of the PPM committee members.” The outcome of the study provides key areas which the PPM office needs to consider and evaluate itself against as it seeks to improve maturity in how project portfolios are managed.

There is a project portfolio management capability model that could be used as a standard in assuring the effective management of the project portfolio function. Killen & Hunt (2013) say that capability maturity models are often used to outline the maturity paths for the establishment and evolution of project portfolio management capabilities. They add that obtaining a balance in the project portfolio is difficult to achieve and the balance between incremental and radical or short- and long-term projects is one of the most problematic areas. They add that research shows a strong correlation between good portfolio balance and high portfolio performance.

Killen & Hunt (2013) propose a maturity model that extends existing maturity models by incorporating organisational learning capabilities, by recognising antecedents for maturity stages that build upon other capabilities, and by including steps to recognise and avoid potential ‘fragilities’ and to ensure project portfolio management performance over time. They add that purposeful investment in capability development usually take the form of time, money and managerial effort and are designed to create an environment that encourages organisational learning and enhance absorptive capacity by providing mechanisms to capture that learning. The improvement of the project portfolio management function is expected to contribute positively in providing senior managers with the confidence and assurance that they are applying an effective process to drive the execution of the strategy.

Chapter 2: Literature survey

In conclusion

It is noted from the review of the literature that there is a sentiment that projects could be used to execute strategy. It emerged from the literature that the right projects are deemed as those that provide maximum value and are aligned to the corporate strategy. This observation partly answers the first research question on some of the areas that management needs to pay attention to in order to execute strategy effectively. It is thus encouraged that management needs to consider and incorporate project management principles during the implementation of the corporate strategy. It is therefore emphasised by researchers that the development of project management capabilities is key to strategy implementation. The value of projects in the execution of the corporate strategy is seen as key since:

- They enable the management of strategy implementation projects; and
- Application of project management principles in the execution of strategic projects.

The consolidation of strategic project portfolios is thus a powerful weapon since the project portfolios would be the building blocks in the implementation of the corporate strategy. It was pointed out by a number of researchers that a performance management criteria and management of interdependencies to take advantage of synergies are important in project portfolios. A measurable evaluation criteria should therefore be used to assess and measure the effectiveness of the portfolio of projects in achieving the strategic objectives and targets.

2.4. Project portfolio success

The manner in which project portfolios are structured to achieve corporate strategy, selected to drive the execution of strategic objectives and managed for effectiveness is critical to the execution of strategic objectives. Alsudiri, Al-Karaghoul & Eldabi (2013) found that organisations that had a link between strategy and projects showed successful project outcomes. This is an important finding since it points out that it is beneficial to execute projects that are linked to the corporate strategy. Kock and Gemünden (2016) present a concept of innovative portfolio management which they define as a dynamic decision-making process to screen, select and prioritise project proposals as well as to allocate resources to projects according to priorities. They emphasise that innovation portfolios are important vehicles for strategy realisation. They attribute this position to the concept of entrepreneurial orientation which they define as the entrepreneurial strategy-making process. They indicate that this is the key decision makers use to enact their firm's organisational purpose, sustain its vision and create competitive advantage. Furthermore, another key is innovative portfolio management which they summarise as a dynamic decision making process in which projects are evaluated and selected for which resources are allocated. They clarify that

Chapter 2: Literature survey

the purpose of portfolio management is for doing the right things while the purpose of project management is to do things right.

The field of project portfolio management has been researched extensively over two decades. The insight generated through research has brought understanding of key aspects that need to be managed to achieve project portfolio success. Furthermore, the importance of linking the realisation of strategic objectives to project portfolios has also become an area of interest. The quest to improve business value through creation of financial and non-financial value has broadened the scope of research on project portfolios and their success.

The proper allocation and management of resources in an organisation has a bearing on how quickly projects could be brought on line to achieve the benefits that are expected from it. This implies that effective strategy execution requires that the management of portfolios should be well executed to maximise their contribution to the strategy and the benefits expected from them. Ghapanchi, Tavana, Khakbaz, and Low (2012) say that effective project evaluation and selection strategies can directly affect organisational productivity and profitability. They add that numerous analytical techniques ranging from simple weighted scoring to complex mathematical programming approaches have been proposed to solve the problem of portfolio selection. They caution that traditional project selection methods too often fail to consider both the uncertainties in projects and the interaction among projects. In addition, they point out that it is difficult to foresee all market conditions that may have a bearing on the portfolio and its projects thus adding a variable that is close to impossible to control. They report that these studies failed to look at the effect of interdependencies of projects which is the focus of their study.

Ghapanchi *et al.* (2012) proposed a four-step methodology for selecting information system and information technology projects with interdependencies:

1. "Modelling the problem".
2. "Evaluating the projects and selecting candidate projects using Fuzzy Data Envelopment Analysis (FDEA)".
3. "Portfolio generation and determining the optimum portfolios", and
4. "Evaluating the optimum portfolios using FDEA".

Project portfolio management (PPM) is a commonly employed technique to align a project portfolio with strategic goals (Kaiser, El Arbi & Ahlemann, 2015). They say that prior research has mainly regarded PPM as a methodology to optimise the overall benefit of a project portfolio. They add that while adequate project selection techniques are certainly important, they argued that successful PPM – and consequently effective strategy implementation – depends on an organisation's structural alignment with the needs of PPM. Since according to Hrebiniak (2006) the ability to adequately procure and process information is not only important for strategy formulation and strategy implementation, it stands to reason that organisations equipped with the information

Chapter 2: Literature survey

requirements of strategy implementation are more efficient and/or more agile in implementing new strategies (Kaiser, El Arbi & Ahlemann (2015). They also add that their study established a new perspective on PPM which broadened the narrow focus of methodological approaches. They showed that a major antecedent of successful PPM is structural alignment. They concluded that PPM's implementation in project-based organisations is thus not merely a matter of defining project selection techniques, but – rather – it shapes the organisational structure as a whole.

Unger, Gemünden & Aubry (2012) share that project portfolio management offices (PPMOs) are a subset of project management offices (PMOs) that handle collections of multiple single projects and programmes, i.e. portfolios. PPMOs are centralised organisational units that cater to the demands of various stakeholders by performing specialised tasks. These offices are initiated by their organisation's leadership in response to increasing management challenges originating from project portfolios. They conducted a study that shows a significant positive effect of PPMOs' coordinating and controlling roles on performance in terms of project portfolio management quality, which is a predictor of portfolio success. Unger, Gemünden & Aubry (2012) add that to assess the effectiveness of the distinct roles of PPMOs, it is necessary to consider their respective performance impact on the portfolios under management. They say that performance may be modelled in two ways: 1) as the PPM quality and 2) as the outcome of portfolio management, considering the multiple dimensions of success of portfolios. The outcome of their study are the three roles of the PPMO:

- “Coordinating role: This role involves the twofold steering of the project portfolio, as mandated by first-tier senior management: (re-)allocating of limited resources iteratively across the portfolio and facilitating cooperation. Activities include project appraisal and selection, cross-project support and cross-department coordination”.
- “Controlling role: This role involves information management to deliver input in decision making, which is a prerequisite for project portfolio steering. Activities include gathering, preparing and providing information as well as suggesting corrective measures”.
- “Supporting role: This role involves providing services to projects/members and project leaders during project implementation, including activities to train and motivate project management standards and operations within the organisation. This role may also involve developing and improving the standard methodology and promoting a PPM culture that includes organisational learning, thus improving the implementation and completion rates of single projects”.

It is noted from the review of the literature that the role of project portfolios in strategy execution is receiving the deserved attention. Furthermore, this is an area that continues to be studied given its importance. It is the intention of the study to not only assess the extent to which project portfolios are used to execute strategy but to note how effectively organisations manage this faculty of project management. A number

Chapter 2: Literature survey

of competencies and key requirements for project portfolio management were found during the review of the literature. These requirements are expected to provide the required foundation to enable the effective management of project portfolios. It is the intent of the study to identify the prevalence on these requirements in organisations that use project portfolios as well as the benefits they achieve from them. Furthermore, literature shed light in that successful project portfolios need to be aligned to the corporate strategy, enable the organisation to develop capabilities to position itself in the market, be structured based on agreed measurable criteria, enable the enterprise to mitigate against business risk and promote the management of single project success to enable the realisation of strategic objectives.

2.4.1. The role of projects in strategy execution

The strategic planning and execution process are key to enabling an organisation to achieve its vision and mission. Longman & Mullins (2004) say that any strategy formulation session ultimately distil vision into critical business issues, and if the organisation is serious, these issues then are translated into projects, with discrete deliverables and back-up plans. They add that an organisation's strategy should provide the boundaries for projects including goals, and results must flow from an organisation's future direction. They further clarify that the best project management organisations have a clear, well-communicated strategy and know how each project supports it.

The need to understand the heartbeat and pulse of the organisation does not direct that executives must be fully imbedded into the day-to-day operations of the business. However, the requirement is that they must provide mechanisms to enable managers to execute the strategy and where necessary provide the required resources for the achievement of the set targets. Maddalena (2012) says that leaders can increase the effectiveness of their organisation's strategic planning processes and improve accountability by incorporating basic project management principles during the implementation phase of strategic planning. He adds that strategic planning is a process that establishes key priorities to advance the mission including the aims of the organisation, and clarifies that the ability of an organisation to successfully achieve its organisational mission and promote accountability for its actions is dependent on its ability to strategically plan its future.

In an attempt to clarify organisational concepts, Serra & Kunc (2015) say that business strategy, which implies organisational change, usually requires the development of projects, however organisations fail in implementing strategies even though they employ project, programme and portfolio management techniques. They propose benefits realisation management (BRM) as a set of processes structured to close the gap between strategy planning and execution by ensuring the implementation of the most valuable initiatives. They highlight that there is no empirical evidence of the

Chapter 2: Literature survey

effectiveness of BRM, however their study shows BRM practices being positive predictors to project success on the creation of strategic value for the business. They concluded from the study that BRM practices could be effective to support the successful execution of business strategies.

Organisational project management comprises the governance mechanisms put in place to manage projects and Aubry, Sicotte, Drouin, Vidot-Delerue, and Besner (2012) caution that the concept of organisational project management is uneasy to identify with precision, which then challenges the concept's own existence. They clarify this mystery by stating that the one promising approach is to re-conceptualise organisational project management as a function within the organisation with a focus on what is achieved in practice through the organisation's activities.

Project Management is a structured field which aims to take a defined expectation and apply a systematic approach to drive its realisation. Project Management also includes process such as risk, change and quality management to ensure that the end goal is managed to achieve the desired outcome. It is therefore expected by the author that project management could be applied not only in strategy execution (converting input into outputs) but to also drive strategy realisation (managing the achievement of the desired outputs). One of the ways in which executives are using project management to drive the realisation of strategic objectives is through the establishment of a Project Management Office (PMO). The PMO is proving to be useful due to the structured manner in which processes are put in place to enable the successful delivery of projects.

Project management enables the visibility of what is done in the organisation and the impact of the actions taken. The information obtained from the execution of projects equip management to also make effective decisions that are based on tangible outcomes. Furthermore, where the project management function is mature and works effectively, executives are kept informed through performance information that is presented in a form of a dashboard. The simplicity and effectiveness of the performance report allows executives to identify issues quickly in order to implement corrective action to address problems. Furthermore they are able to consider preventative and predictive measures to prevent risks from materialising into issues. The PMO model has been designed and adopted as a mechanism to enable the execution and reporting on the realisation of strategic initiatives.

In addition, literature indicates some of the value which project management could bring to business management and strategy execution. Aubry *et al.* (2012) state that fit between organisational context and project management implementation may lead to the creation of value for the organisation. They further clarify that components related to the management of multiple projects within an organisation should be considered globally in an integrated concept. Good operational integration of the three basic levels of project management within an organisation (i.e. projects, programmes and portfolios) is achieved through the use of Organisation Project Management

Chapter 2: Literature survey

Maturity Model (OPM3) and the Portfolio, Programme and Project Offices (P3O) (Aubry *et al.*, 2012).

In theory, Aubry *et al.* (2012) convey that one aspect of organisational project management is that its components are network-based and spread out through the organisation and further state that this situation poses a difficult problem of alignment or fit between the components themselves, such as governance mechanisms, portfolios, programmes and projects. They clarify that most of these components are temporary arrangements and form multiple layers of networks, which could be resolved through the establishment of the organisational project management function.

Strategy is normally managed through roadmaps which are pictorial depictions of the change journey which the organisation is about to embark on. It is therefore important to break the journey into components that will determine what must be done at operational level. Jerbrant (2013) states that the great need is to deliver what is requested today, while adapting to future business characterises the management, governance and execution of project based organisations (PBO). She states that the most common way to initiate and emphasise structure and planning in a PBO is initiating a project management office (PMO) and further states that the primary goal of creating a PMO is usually to increase the number of successful projects and to standardise the performance of the individual projects as much as possible. If work today is done through projects, as is surely the case, then working smarter on projects will undoubtedly enable an organisation to meet head-on, whatever strategic and operational challenges may come its way (Longman & Mullins, 2004).

Literature also shows contribution from authors that question whether strategy can be executed through project management. Srivannaboon & Milosevic (2006) found traditional literature on aligning project management with business strategy vague, as the interactions between project management and strategy were not explained. They found that although research studies were conducted on the strong links between project management and strategy, none explicitly talked about the relationship between business strategy and project management in a cohesive and comprehensive way. They concluded their study by highlighting that the journey of studying the project management / business strategy alignment is still at its infancy, the relationship between the two is obscure and that there is a need for the alignment to be quantified.

In addition, Young *et al.* (2012) reported on the effectiveness of the project management and investment frameworks in the State of Victoria where they found that the way projects are selected and managed limit the capability to realise strategic goals. They recommended future research to develop programme management, portfolio management and project governance to increase the likelihood that strategy will be implemented. It is the aim of this study to further improve understanding in this area.

Chapter 2: Literature survey

The contribution from researchers on the link between strategy and project management (operational mechanism for driving the realisation of components of programmes) may be valid. The gap could have been due to a clear link between strategy and what is actually happening at operational level. Furthermore, the review of the literature demonstrates that when it is not clear what the strategy is, people at operational level do what they believe to be important. It is the belief of the author that benefits must also be clearly defined so that every member of the organisation do not only take responsibility for their realisation but that their actions are driven by the expected outcome. Therefore, the link between strategy planning (priority actions that must be done) and execution (actions that are implemented) is crucial. This has been explained in the sections above that the strategic management process must be integrated and iterative in order to ensure alignment and control.

The primary question to consider is why project management is important in strategy execution? Should project management be a visible mechanism used to manage the strategic management process or must it be imbedded into the strategic management process (integrated approach) to influence how the process is managed? The strategic management process has been improved through research over the years. However, strategy execution has remained a challenge and is at times inefficient. Project Management is seen as a way of improving the efficiency of implementing objectives. Therefore, in the context of strategy, it could drive the effectiveness of strategy execution because of the structured approach used to deliver projects. Another consideration could be that the structured approach could lead to efficient (quicker) execution of projects and thus faster realisations of strategic goals. It could also be expected that the improved governance and control of changes in projects would enhance the control of the strategic management process.

In conclusion

Project portfolios are key to strategy execution since they involve the screening, selection and prioritisation of project proposals including the allocation of resources to projects according to priorities as defined in strategic objectives. Researchers found that fit between organisational context and project management implementation may lead to the creation of value for the organisation. It also emerged from the review of the literature that project portfolio management is a commonly employed technique to align a project portfolio with strategic goals. The selection criteria is informed by the strategic objectives and inform the structuring of project portfolios in order to achieve these strategic objectives. It is thus crucial to note that effective project evaluation and selection strategies can directly affect organisational productivity and profitability.

Literature clarifies that the purpose of portfolio management is for doing the right things while the purpose of project management is to do things right. It was also pointed out

Chapter 2: Literature survey

that project management offices (PMOs) play a critical role in that they are used to govern the execution of projects to realise the strategic objectives. However, there were contrasting views on the contribution of projects in the implementation of a corporate strategy. It emerged in the review of the literature that the way projects are selected and managed may limit the capability to realise strategic goals. This points out to why it is important to manage project portfolios to realise the expected benefits, which is the aim of the first research questions on enablers of effective strategy execution through project portfolios. In addition it was reported that traditional project selection methods often fail to consider both the uncertainties in projects and the interaction among projects thus limiting their use in realising the corporate strategy. Furthermore it was noted that although business strategy usually requires the development of projects, however organisations fail in implementing strategies even though they employ project, programme and portfolio management techniques.

2.5. Business value

The review of the literature points out that it is important to link the business strategy to performance. It is the view of Anwar & Hasnu (2016) that this could be achieved by using various performance measures and the explicit measure of causality. This will enable management to create a link between what is expected and done in the organisation in order to analyse the effect of the actions taken in realising the expected outcomes.

Value based management has fundamentally changed how managers think about their businesses since it enables them to think about both the short and long term impact of their decisions (Copeland and Meenan, 1994). They further add that value based management helps managers to identify and quantify the sources of value creation – key value drivers for business. They add that in order to optimise shareholder value, managers must evaluate the effect all their decisions have on the value drivers. One could say that managers could use expected shareholder value as a way of comparing potential strategies for adoption. Copeland and Meenan (1994) highlighted that value based management contributes to superior performances since it requires greater management focus on balance sheet management and on the long term, which is ideal for large corporations. They further caution that companies that measure their performance with income statement based measures miss value creating opportunities by failing to manage the balance sheet.

2.5.1. Strategy evaluation

Management is results orientated and the use of performance management systems is widespread. It is with this in mind that Micheli & Mura (2017) say that Performance Measurement Systems (PMS) can play a fundamental role in strategy implementation

Chapter 2: Literature survey

since it creates organisational alignment and facilitates the process of translating strategy into action. Another importance and contribution of PMS is its use in communicating the performance achieved in the execution of the strategy (Micheli & Mura, 2017). They contributed that management needs to be aware of the use of diverse types of performance indicators which need to be a balance of financial and non-financial measures. They also pointed out that “the use of non-financial indicators is tightly intertwined with organisational effectiveness”. In addition to enabling communication, Micheli & Mura (2017) highlighted that relating strategy and performance measurement could align attitudes and behaviours of employees facilitating the attainment of organisational goals. Furthermore they report that the effective implementation of a PMS may lead to improved organisational and innovative performance.

The importance of measurement and the ability to quantify the efforts of the organisation is emphasised by a number of authors. Sheehan (2006) highlights that measurement is a powerful tool because what gets measured is managed and what is managed, is done. Srivastava (2013) proposes a model of strategic performance factors (SPFs) which could be useful in measuring the right thing in the right way to ensure effective strategy execution. He also adds that management of SPFs such as situation and actor is a further value addition to the debate on balancing lead and lag measure or financial and non-financial measures.

The introduction of the Balanced Scorecard (BSC) saw its adoption by industry and different organisations apply the tool to meet their unique requirements. Kaplan (2005) presented a balanced scorecard measurement approach that organises performance objectives and measures in four perspectives:

- “The financial perspective describes the tangible outcomes of the strategy in traditional financial terms, such as return on investment (ROI), shareholder value, profitability, revenue growth, and lower unit costs”.
- “The customer perspective defines the drivers of revenue growth. It includes generic customer outcomes, such as satisfaction, acquisition, retention, and growth, as well as the differentiating value proposition the organisation intends to offer to generate sales and loyalty from targeted customers”.
- “The internal process perspective identifies the operating, customer management, innovation, and regulatory and social process objectives for creating and delivering the customer value proposition and improving the quality and productivity of operating processes”.
- “The learning and growth perspective identifies the intangible assets that are most important to the strategy. The objectives in this perspective identify which jobs (the human capital), which systems (the information capital), and what kind of climate (the organisation capital) are required to support the value creating internal processes. Managers use the scorecard to describe and communicate their strategy, to align business units and shared services to create synergies,

Chapter 2: Literature survey

to set priorities for strategic initiatives, and to report on and guide the implementation of the strategy”.

The BSC alignment model, depicted in Figure 2.7, illustrates how an organisation creates value. Kaplan (2005) explains that the 7-S model and the BSC alignment model both articulate that effective strategy implementation requires a multi-dimensional approach and that they both stress interconnectedness. He concludes by highlighting that although the two strategy implementation frameworks were developed completely independently from each other, the 7-S model and the BSC align remarkably well. He highlights the strength of the model in that the application of the BSC to diverse organisational units aligns companies’ structure to business unit and corporate strategy.

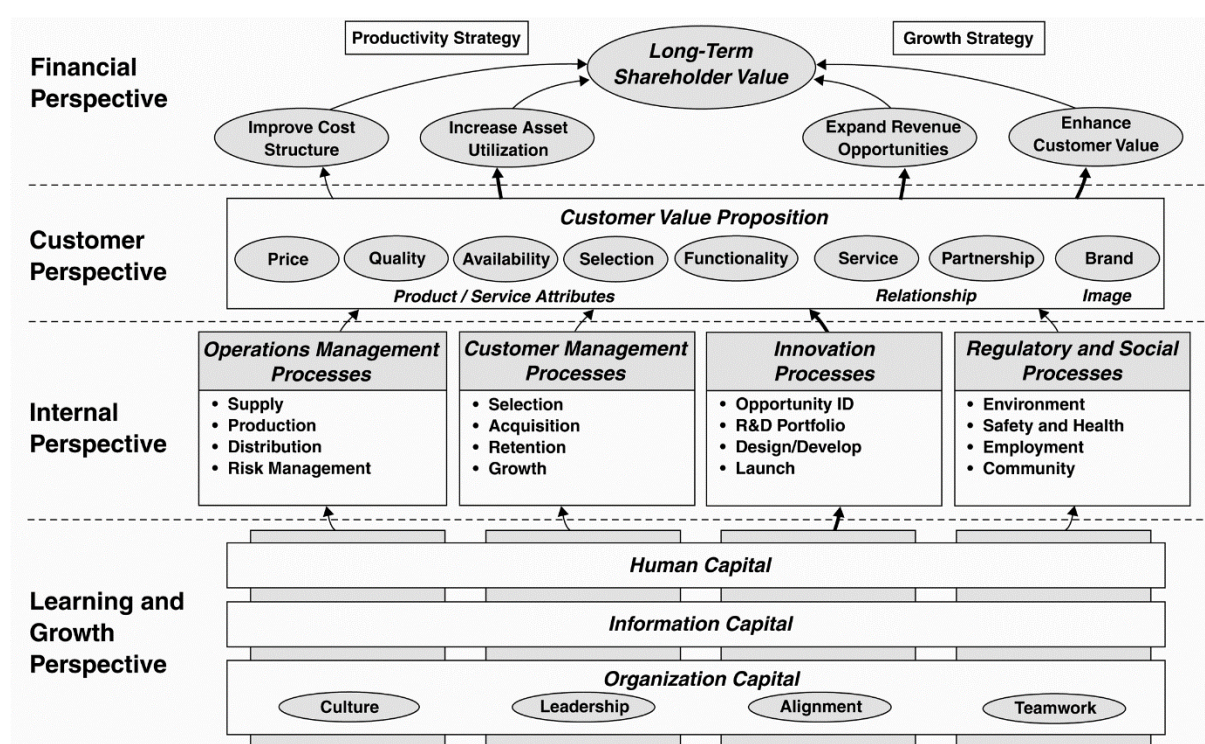


Figure 2.5: Balanced Scorecard strategy map (Kaplan, 2005)

Business managers value tools that are practical and enable them to gain insights in order to make informed decisions. It could be inferred that the Balanced Scorecard was adopted by industry due to the value it brought to organisations. Other models on performance management were noted and the vastly available literature on these models demonstrate that researchers are presenting alternative models to enable management to report on the value created by the organisation. Its wide use and vast application has led to insight to be gained over time, which enabled Kaplan (2005) to demonstrate its value through the development of strategy maps (Figure 2.7) that show how performance measures are linked to strategy.

Another model that was reviewed is the one by Flitman (1996) which is depicted in Figure 2.8. It is aimed at the development of balanced measures for a strategic

Chapter 2: Literature survey

initiative. It is important to note that the design of strategic performance factors (SPFs) will be unique for an organisation as business models adopted by organisations differ. The plans developed to execute and realise the company strategy would depend on the capability and capacity of the organisation.

It is the uniqueness of the company that will lead to the development of SPFs, depicted in Figure 2.8, that are relevant to manage the effective execution of their company strategy. Srivastava (2013) explains that each strategy is unique and requires different types of performance measures and although the company may give different weightage to performances measures considering the strategic direction, the company cannot ignore the performance measures of strategic importance for long-term sustainability. They state that there are also limited attempts to develop the structural relationships among the SPFs for effective performance management.

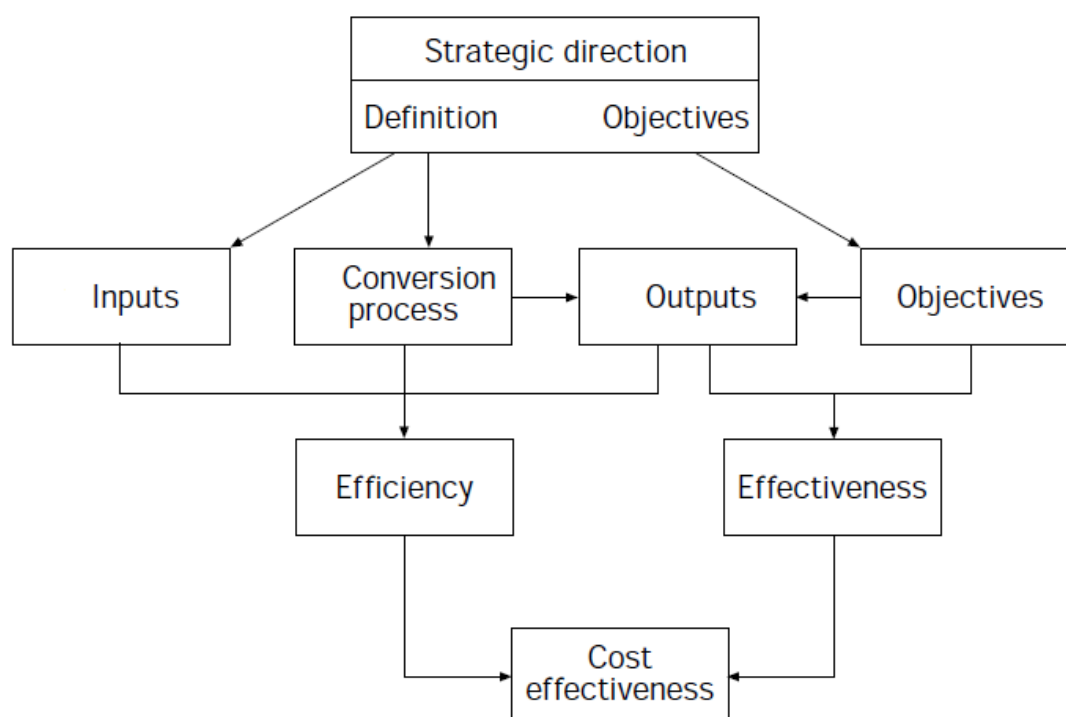


Figure 2.6: Framework for measurement development (Flitman, 1996)

Enterprises exist to create value through the realisation of their strategy. It is important to measure performance against the different strategic objectives but it is more important to articulate the achievements in terms of the corporate strategy. It is with this in mind that Lukac & Frazier (2012) stated that “senior executives, therefore, should be adept both at developing strategic plans that provide competitive advantage and at communicating how they will provide shareholder value. They should be able to link strategy to value”. It was found by Meskendahl (2010) that “there are a few studies exploring single aspects of the linkage between strategy, project portfolio management, and business success”. Serra & Kunc (2015) clarified that successful projects deliver the expected benefits thus creating strategic value to the business. They explained that “careful management of each project ensures the delivery of

Chapter 2: Literature survey

outputs, enables outcomes, and then supports the realisation of the right benefits. Although benefits are not the only criteria to evaluate project success, they are a measurement of how valuable a project is”.

Lukac & Frazier (2012) cite a Deloitte’s method of articulating value and ways of affecting value drivers. The method is depicted in Figure 2.9 and demonstrates how particular actions contribute to the shareholder value. They also caution that in addition to being relative, value has another important characteristic: value is purposeful. This is another contribution from literature that is adopted in the quest to compile a conceptual model for effective strategy execution to achieve strategic objectives.

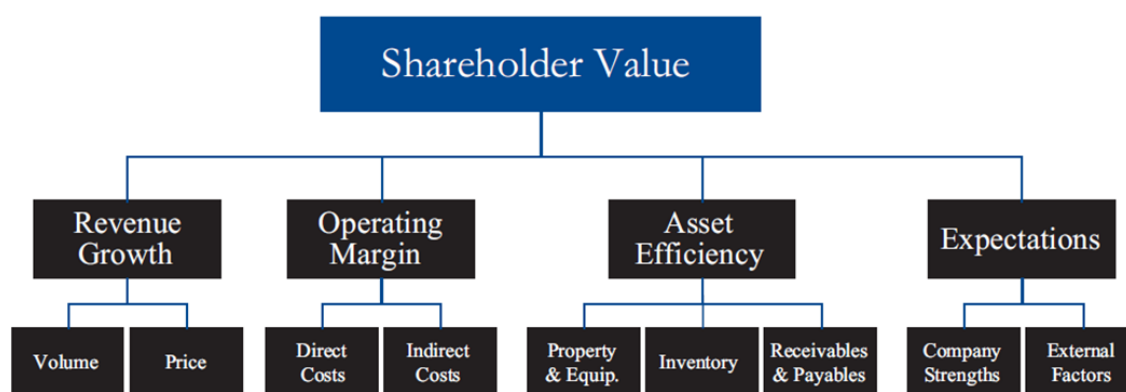


Figure 2:7: The Deloitte’s method of articulating value (Lukac & Frazier, 2012)

Further to the Deloitte’s method of articulating value, Lukac & Frazier (2012) attempt to illustrate how purposeful value is created by depicting how strategic maps can be linked to shareholder value as demonstrated in Figure 2.10. It is emphasised by Cocks (2010) that effective execution of the company strategy is a key attribute of successful organisations. Serra & Kunc (2015) concur that “good business strategies are those that deliver stakeholder value, which is the organisation’s long-term cash generating capability or the ability to provide value”. They point out that benefits are derived and achieved from projects through the use of programme and project management techniques. They confirm that the creation of value for business, through the successful execution of the business strategy, strongly depends on programmes and projects delivering the expected benefits. They presented a way in which organisation could demonstrate the shareholder value derived from the execution of strategic initiatives, which is illustrated in Figure 2.10 below. The figure is not meant to share the details but to illustrate the concept on how the strategic intent of the organisation is linked to shareholder value. This also illustrates the link between the strategic intent which is unique with the shareholder value which is common.

Chapter 2: Literature survey

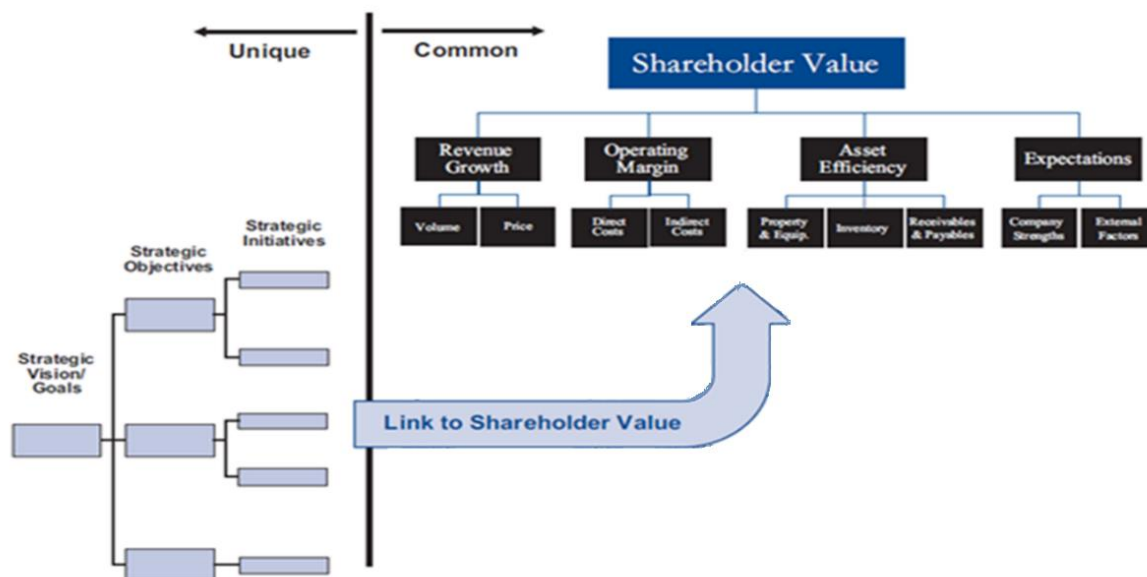


Figure 2:8: The model linking strategic maps to shareholder value (adapted from Lukac & Frazier, 2012)

The model depicted in Figure 2.10 thus demonstrates how strategic initiatives could be linked to shareholder value. Furthermore, it enables business leaders to visualise and evaluate how well they have realised the business strategy by relooking at the strategic objects that aim to achieve the vision and mission of the organisation. This is the notion of effective strategy execution as conceptualised in this research.

It is at this stage that the measures of success need to be clearly defined to reduce subjectivity. Each strategic objective and its targets need to be defined in measurable terms to make them tangible and define how success will be measured. The question at the back of the head of business leaders should be how the organisation will know when it has achieved its objectives and which indicators will alert it that it is deviating from the intended benefit.

It is apparent that the key to assessing the effectiveness of strategy execution does not lie only in determining performance measures, but how these performance measures are defined is critical. Executives need to be clear on what they aim to achieve from the reporting process and define appropriate performance measures to enable them to assess how well the company is doing against its strategy.

Once the strategic initiatives are defined in terms of objectives and measurable targets, key performance measures are determined, then there is a need for a framework which would enable management to not only implement the set strategy but to also provide reports on progress made. Srivastava (2013) advises that the identification of the right combination of SPF converts the abstract vision into actionable targets. They add that the identification of the right set of SPFs helps management focus on the right issue, acquire appropriate data and resources, develop required measures and monitor the execution of the strategy.

Chapter 2: Literature survey

2.5.2. Evaluation of performance

The evaluation of how strategy execution is proceeding is crucial as it provides the timely information that helps business managers to understand what is achieved and the challenges faced by the organisation in realising strategic objectives. Ramakrishnan (2012) says that enterprises are incorporated for performance and the decisive test of performance is the value created in relation to a promise made to the stakeholders. He further adds that achieving the value promise requires a clear, well-enunciated and measurable strategy, which is at the core of the performance dimension. He is supported by Jonash (2005) who highlights that if corporate leaders want to capture significant value for their shareholders, they must create substantial value for their stakeholders, raise the sustainable growth expectations of their investors, and demonstrate the ability to deliver on these expectations. He further states that in today's hyper-competitive business climate, not taking active steps to build sustainable growth and innovation may be the biggest risk of all.

It is incumbent on the board of directors and executives to deliver on the company strategy. Therefore, it is necessary for the leaders of an organisation to review how they are doing against these objectives. Ramakrishnan (2012) clarifies that effective boards combine performance with compliance at the board level and explains that "effectiveness" at this level means that shareholder and stakeholder expectations are met or exceeded, for which the primary objectives must be achieved. He adds that effective boards deliver on the strategy.

Managers within an enterprise need to have a holistic view of the performance of the organisation and the micro understanding of what is driving operational performance. Carroll (1982) suggests that a useful way to think of a business strategy is that it contains two components, a positional and performance component, which he believes is what enables some companies to achieve consistently better financial performance than others over time. He clarifies that a performance component of strategy deals with attempts to enhance relative performance in a persistent manner over time. He encourages that there needs to be a consideration for long-run profitability of a company by considering execution differences rather than the differences in exploitation of sources of comparative advantage. He further adds that there is a need to respond to less drastic changes affecting the business and, above all, there is a need to adopt a program which seeks to exploit sources of comparative advantage as a means of enhancing relative performance. He laments that there is no appreciation of the importance of environmental factors that enhance relative performance because of the lack of a conceptual framework that permits sources of comparative advantage in a business to be identified and exploited. The work done in this study seeks to bridge this gap.

The challenge that is facing business leaders is how do they ensure that there is alignment between what is planned and expected from the company (strategy) and what is actually happening at the operational level (day to day activities). The

Chapter 2: Literature survey

effectiveness of the alignment process is reflected in how well executives are able to provide strategic reporting that demonstrates progress made in achieving strategic initiatives. Chau (2008) says that strategic performance management can take place at top management, middle management or strategic operations level and their impact on team strategy, company performance and organisational effectiveness can be regarded as a special phenomenon termed “strategy team performance management”.

Strategic performance management is considered as an enabler of the steering of the organisation through the systematic definition of mission, strategy and objectives in order to be able to take corrective actions to keep the organisation on track (Chau, 2008). He adds that many senior managers are removed from the on-going daily activities of their organisation and this leads to more disconnect between senior management and the rest of the organisation. The problem is becoming increasingly difficult to address as involving senior management on strategic activities proactively at the operational level is not carried out effectively, which may be due to poorly implemented performance management frameworks (Chau, 2008). The key to enabling the organisation to perform as intended is to build in the performance measures during the strategy planning phase so that they may be cascaded into the strategy execution and evaluation phases.

It is through the integrated approach that the leaders of the organisation could drive the logical or intended thinking and expected performance outcomes. Flitman (1996) highlights that whether the strategic initiatives have been developed from a traditional planning process or a less formalised thinking process, it is still important to monitor progress towards the goals. He adds that providers of management reports have struggled to develop focused reports which directly summarises the strategic progress of an organisation. He also indicates that other problems encountered include the derivation of measures for all areas of strategic progress and the provision of timely, quality information at a cost the organisation can live with. This is another area which the study seeks to contribute.

The activities that are taking place at operational level need a tracking and monitoring process to assess progress made. Flitman (1996) clarifies that the key to reporting strategic performance is to identify which metrics will, between them, adequately describe progress towards a strategic target. He cautions that it is necessary to ensure that information coverage is sufficient while not falling into the trap of producing too much information. Monitoring progress should be balanced and requires qualitative and quantitative measurements of progress, while recognising the limitations of the traditional quantitative methods using strategic planning activities (Flitman, 1996). Flitman (1996) shares that to achieve balance one needs to define different measures: those measures that concentrate on inputs (efficiency measures) and those that concentrate on outputs (effectiveness measures).

However, organisations tend to experience problems with the quality of information that is captured as work is done. It is at times not considered that the information forms

Chapter 2: Literature survey

part of a corporate performance system, which will inform decisions on what should be done, areas that the organisations must focus on, and the resources that are required to drive the delivery of the expected outcomes. Flitman (1996) says that quality of information depends not only on what is reported but also on how it is reported and adds that it is vital that the different forms of information presented are combined to enhance the overall information content and be consistent with management needs.

Performance management is a critical tool to measure the progress made in strategy execution. The review of the literature indicates that a number of researchers have conducted work to gain insight on the best way to not only measure and report on the performance of the organisation but to also identify performance measures that are representative of the progress made in realising the strategy of the organisation. The work done by Srivastava & Sushil (2015) indicate that rich literature is available on performance measurement and management systems but there is limited studies showing how performance measurement systems ensure effective strategy execution. They clarify that there are also debates on identifying right combination of Strategic Performance Factors (SPFs) that balance competing perspectives such as financial and non-financial measures, short- and long-term approaches, lead and lag factors. They also add that many frameworks have addressed these challenges but attempted in limited ways to integrate SPFs in their performance measurement and management system. This is another area which this study seeks to contribute.

When the organisation is focused on the goal (expected benefits and the value that must be realised), then motivation and drive to realise the benefits is stimulated. The objective is to see the desired outcome and this focused effort would inform the actions that are taken to realise the expected benefits. Benefits realisation is an approach, which organisations could adopt to focus their efforts and to achieve the results they are targeting. Esteves (2009) says that benefits realisation management is an important approach to ensure that corporate initiatives deliver what they promise: it provides focus, demonstrates value for money, reduces the risk of failure and maximises benefits achieved.

In addition, Breese (2012) provides guiding principles from the scientific approach, which could be adopted to enhance how organisations manage the achievement of the desired performance through benefits realisation management:

- **“Logic:** by applying logic to the decision-making process a good outcome can be derived”;
- **“Linear thinking:** the benefits realisation management process involves a prescribed series of procedures for the chosen timeframe”;
- **“Quantification:** to compare different proposals, benefits need to be quantified as far as possible”;
- **“Cause and effect:** causal links between activities and the benefits to be gained can be established”;

Chapter 2: Literature survey

- **“Reductionism**: amongst all the different impacts, some can be isolated as the most important ones for decision-making”;
- **“Split between thinking and doing**: there is a distinction between the benefits planning process and the implantation of the activities which will lead to the benefits”;
- **“Control**: The appraisal process is a means of achieving management control over resources”.

The importance of an effective corporate performance system in driving strategy execution cannot be overemphasised. It needs to support the strategic management process from strategy planning through to evaluation and review. It is the seamless integration of the different phases of the strategy process as well as the measurement of performance at each phase that would shed light, through the information that is gathered, on where the organisation is doing well and the areas that need improvement.

2.5.3. Benefits realisation management to achieve business value

Effective strategy execution is driven by the need to create business value for stakeholders. There is a need to quantify and qualify the effectiveness of strategy execution and one of the ways, which this could be done, is through the benefits realisation management process. Benefits management originated in information system (IS) projects (Baccarini and Bateup, 2008) because of poor performance of IS projects to deliver intended benefits. However, it was realised that the concept of benefits realisation management needs to be expanded beyond the IS environment and be considered in business management given the need to drive the management of value created by an organisation.

The notion of benefits realisation was introduced as a result of a mismatch in what was perceived as project success. It was introduced to promote the realisation of the benefits and business case that was presented to an investment committee to obtain the approval for a project. Benefits realisation proves critical for the use of project portfolios in strategy execution. Projects are no longer evaluated only on whether they were delivered on time, within budget and at the correct quality but the evaluation criteria is extended to assess whether the expected benefits, as articulated in the business case, were achieved or not. The use of project portfolios gain strength as the measure of success is more meaningful to portfolio managers and they are primarily focused on the benefits delivered through their portfolio to achieve strategic objectives. This further enables the strategy evaluation process to not only review performance against key performance indicators (KPIs) but the extent to which the strategic intent is achieved.

Chapter 2: Literature survey

It goes without saying that the process of benefits realisation management is critical not only for project management but for project portfolio management and ultimately to demonstrate the value created by the organisation through projects that were executed to realise the corporate strategy. This sentiment is echoed by Chih & Zwikael (2015) who said that successful realisation of project benefits is strongly associated with organisational performance. They pointed out the importance of formulating project target benefits since they are regarded as the first and critical step in the benefit management process. They also concur that projects are initiated to implement organisational strategies and as a result their target benefits should align with organisational strategic goals.

This will enable the strategy evaluation process since performance will not only be measured against the outcomes achieved in the project but the extent to which the outcomes contribute to strategy realisation. Chih & Zwikael (2015) echo this sentiment and said that formulating and appraising project target benefits are considered the first and critical step to ensure successful benefit realisation. Once approved, target benefits become the basis for ongoing project performance review. A proper formulation and appraisal of such information is thus essential.

It was a finding in the study by Serra & Kunc (2015) that organisations fail in implementing their strategies even though they employ project, programme and portfolio management techniques. It is anticipated that the use of benefits realisation could contribute toward improving this observation. Serra & Kunc (2015) introduce Benefits Realisation Management (BRM) as a set of processes structured to close the gap between strategy planning and execution by ensuring the implementation of the most valuable initiatives. However, they indicate that they were not able to locate empirical evidence of the effectiveness of BRM. It is the intent of the author to test this observation during the research.

The Office of Government Commerce (OGC) (2011) defines a benefit as a measurable improvement resulting from an outcome perceived as an advantage by one or more stakeholders, which contributes towards one of more organisational objective(s). The OGC also advocates that there is a need to equally quantify dis-benefits, which are defined as measurable decline resulting from an outcome perceived as negative by one or more stakeholders, which detracts from one or more organisational objective(s). The OGC acknowledges that the definitions recognises that there will invariably be winners and losers, however, benefits should be delivered while recognising the sensitivities of the stakeholders.

Value is a nebulous concept as it means different things to different people. In the business concept, it becomes easier for stakeholders to grasp what is meant by value when it is defined in terms of benefits that need to be achieved to demonstrate that value has been either created or destroyed. Benefits could therefore be analysed to assess the extent of value generation and its management. These benefits could be

Chapter 2: Literature survey

defined and organised into categories such as (Office of Government Commerce (OGC), 2011):

- **“Economic benefit:** A financial improvement, realising cash, increased income or the better use of funds”.
- **“Effective benefit:** Doing things better or to a higher standard”.
- **“Efficiency benefit:** Doing more for the same or the same with less”.

It is equally important to define what one means by benefits management to provide context to how the concept is applied in this study. Baccarini and Bateup (2008) cites Ward and Griffiths (1996) who defined benefits management as the process of organising and managing business activities such that potential benefits can be identified and the necessary changes made to deliver those benefits. They point out that benefits models have been developed which involves:

- **“Benefit identification:** Benefits identification documents benefits that must be achieved which are triggered by the business need for change”.
- **“Benefits planning:** This is the process for developing the benefits realisation plan. Benefits planning explicitly stipulating the means by which benefits are to be achieved. The plan is essential to effectively realise business benefits. Key performance indicators are defined for each target benefit so that the organisation can continually monitor the achievement of the benefits”.
- **“Benefits control:** Benefits control is a set of actions to realise planned benefits through ongoing monitoring to ensure that they are being achieved. Benefits monitoring is required because it is almost impossible to identify all of the benefits in advance and if there were no monitoring processes, any change or new benefits would never be identified”.
- **“Benefits realisation:** Benefits realisation is comparing actual benefits to predicted benefits to see whether planned benefits have been realised or not. The review allows for the identification of any new benefits that may have arisen over time”.

The process of benefits management is critical to informing management on how to direct the execution of the individual projects in the project portfolios in order to achieve both project objectives and portfolio objectives. The effectiveness of project execution has a bearing on the outcome and the realisation of the benefits that are expected from the individual projects which would then have an impact on the project portfolios which they belong to. The Office of Government Commerce (OGC) (2011) advises that there is a need for benefits and dis-benefits to be profiled in order to provide a detailed understanding of what will be involved and how the benefit will be realised. In this case, a benefit management strategy needs to be defined in order to establish an approach that should be followed to realise benefits and the framework within which benefits realisation will be achieved. A generic four-step cycle for managing benefits is defined that involves, identifying the benefit, planning for the benefit, delivering the benefit and

Chapter 2: Literature survey

reviewing the benefit. The Office of Government Commerce (OGC) (2011) encourages that a benefits realisation plan is key to track the realisation of benefits and for setting review controls along the journey.

Benefits are the basis on which the returns that are expected from projects could be assessed. They provide an indication of the extent of the validity of the assumptions that are made in the business case when projects are motivated for execution. Pina, Romão & Oliveira (2013) say that business management is closely linked with investment management and is driven by business strategy. They highlight that benefit management is more useful in organisations where there is the ability to deal with the interdependencies and risks associated with the projects aimed at delivering the benefits and their respective value. They also stipulate that benefit management is driven by two interconnected challenges, the need to assess the benefits achieved in relation to the investments and the need to establish appropriate means to monitor the process of change management. It is therefore important that the benefits that are expected from projects are closely and regularly monitored in order to improve the likelihood of achieving them. The monitoring process will enable management to make proactive decisions where there appears to be indications that the expected benefits may be eroded as a result of project risks and issues.

The study conducted by Chih & Zwikael (2015) report that literature places an increasing emphasis on the management of project benefits to ensure organisational strategic goals are achieved. They also support the point that properly formulated target benefits can support informed project funding decisions when business plans are presented for investment and also ensure appropriate strategic attention from project managers and team members. They add that target benefits must be measurable so that they could be quantified when they are realised. They recommend that there should be a formal benefit formulation process to ensure successful benefit realisation.

Benefits realisation advocates that whatever is done within the organisation be geared towards achieving the expected benefit. A proactive approach drives the actions and decisions that are taken throughout the different levels of the organisation. In order for the benefits to be managed and realised, it is critical that there is a clear understanding of what these benefits are, how they are going to be realised, how they should be measured and how their realisation should be managed.

It was noted during the review of the literature that even though the area of BRM is gaining attention, there is still a need for further work to gain better understanding of how it is managed empirically. It was noted that since some of the benefits may take a while to be realised given that they occur post project closure. Therefore management of the benefits realisation process, once a project is closed, need to be improved. It is anticipated that the effective link of project portfolio management and project management would contribute in this regard.

Chapter 2: Literature survey

Literature available on the link between benefits management or benefits realisation management and strategy execution is limited and most of what is available pertains to information systems or information technology projects. It is therefore more on programme and projects management as the need to demonstrate value for the quantification of the return on the investment made. References were made in the literature, cited in this sub-section, on the potential relationship between strategy and organisational objectives but very little could be evaluated to assess the views of contributing authors on effective strategy execution. This area is one of the critical areas that need further research given the need to identify methods used to quantify value created by organisations as strategy is executed. This is another area, which this study seeks to contribute to, through demonstrating how benefits realisation management could be integrated into strategy execution.

2.5.4. Value creation and management

Traditionally organisations measure performance based on measures such as growth in revenue, profitability, earnings per share and market value. These measures are a good indication of return on efforts employed. However, are they a good indication of effective execution of strategy and value created by the organisation for shareholders? Copeland and Meenan (1994) say that shareholder value creation should be the ultimate goal of strategy – the primary measurement guiding corporate decisions and the myriad day-to-day choices of the business units. They recommend the use of economic value added (EVA) as a period measure of shareholder value that focuses on both the after tax income and asset utilisation. In addition they recommend the use of the market value add (MVA) since it tracks economic value added much more closely than more popular measures such as earnings per share, operating margins or return on equity. They clarify that measuring economic value added provides a powerful decision making tool that allows managers to identify factors that aid in creating an excess over minimum required returns. In so doing, shareholder value is created.

Additional work was done by researchers to improve the understanding of what shareholder value is about and its importance. Rappaport (1983) says that the shareholder value approach provides a consistent framework for evaluating both strategic plans and manager's performance. He elaborates that if strategic planning is to have a favourable long-term impact on a company's share price, then strategic plans and corporate performance must be evaluated in rational economic terms. He emphasises that top management and board members have a fiduciary responsibility to be certain that the right numbers are made. He cautions that accounting numbers such as earnings per share and book return on investment (ROI) are not reliable indicators of economic value. It is noted that performance management plays an important role in quantifying and qualifying the value created by the organisation. In addition, it is not only the performance that is reported which is critical but also the

Chapter 2: Literature survey

basis (accuracy and precision) of the numbers that are shared with decision makers which one needs to pay attention to. Furthermore, measures of performance need to be a fair representation of the value created by the organisation, not only for shareholders but the broader stakeholders' community.

Additional studies were conducted on economic value added given the importance of organisation to quantify value given its importance in measuring the extent to which strategy execution was effectively delivered. Worthington and West (2001) conducted a literature review on economic value added and their findings are that:

- “The measure itself is almost identical to the non-proprietary measure of residual income”.
- “The empirical evidence concerning economic value added has been mixed and thus there is a need for further research”.
- “Examination of economic value added over a longer period would allow greater empirical certainty on its status as a corporate performance measure”.

Further contribution in the area of economic value added came from de Wet (2005) who conducted a study using data from South African listed companies to investigate the strength or the relationship between economic value added and other traditional accounting measures relative to market value added (MVA), and to compare the findings with those of studies already published elsewhere in the literature. He indicates that the results are interesting and of interest to financial managers and analysts since a way to identify the driver(s) of value with the strongest impact on may be extremely helpful in developing financial strategies that can optimise value creation for shareholders. He proved theoretically that economic value added is superior to other measures of performance (excluding residual income) on the grounds that it accounts for the full cost of capital, including the cost of equity. He argues that economic value added is the same type of measure as residual income, in which the difference lies in the adjustments required to the net assets and operating profits for the calculation of economic value added.

De Wet (2005) reports that the study conducted based on the data of companies listed on the Johannesburg Stock Exchange (JSE) for the period from 1994 to 2004 revealed that on a year-on-year basis, economic value added did not show the strongest correlation with MVA. He explains that given that MVA is equal to the present value of all future expected economic value added, therefore one can expect the correlation between MVA and economic value added on a year-on-year basis not to have a strong correlation. He further adds that another interesting finding of the South African study was the insignificant correlation between MVA and Earnings per share (EPS) and Dividends per share (DPS), given that both earnings and dividends are frequently used as the basis for share valuation. He highlights that one could infer that, for South African listed companies, the valuation methods are unreliable in the extreme.

Chapter 2: Literature survey

Another contribution came from a study that was conducted by Palliam (2006) that showed that economic value added is a relatively poor predictor of share performance and enhanced shareholder value. He found in his study that there is little or no relationship between shareholder return and a firm's economic value add. He furthermore, found minimal evidence of a difference between market return of firms that use economic value added compared to firms that do not use economic value added. He concluded that strategies that incorporate economic value added did not outperform strategies that incorporate simple metrics of corporate valuation based on reported earnings. He thus said that economic value added by itself will probably be no more effective in enhancing shareholder value than will other metrics if they do not ultimately drive earnings and earnings growth.

Despite the volume of literature on economic value added, Biddle, Bowen & Wallace (1998) say that clear evidence is still lacking on the benefits of economic value added on shareholder value. They suggest that economic value added is the subject of on-going investigation. Although economic value added lost its lustre over time, it was noted as a proposed approach to measure the performance of an organisation beyond the traditional financial and non-financial measures.

The ultimate measure of business success is how much economic value is created by an organisation. Literature indicates that this is an area which has been researched to gain insight on how to best present the value created by an organisation. The extent of the need is highlighted by Ballou, Burgman & Molnar (2004) who say that managers face a daunting task when it comes to increasing shareholder value as managing intangible assets, one of the key drivers of value, is perplexing because accounting systems fail to track or analyse them. They shed light that the biggest issues in managing shareholder value that is facing executives in high performance companies is that it is driven by intangibles. They explain that companies cannot just ignore intangible assets since shareholder value is eroded should the market lose faith. They highlight that executives are often left with inadequate insight into how various investment choices link to the creation of shareholder value. They indicate that management needs an approach that is able to handle this complexity and make the final connection from assets use to create shareholder value. They conclude by saying that the reality that the tangible assets on a company's balance sheet account for such a small percentage of the market value led them to believe that simply tweaking traditional financial reporting and analysis will not be sufficient. They say that ultimately a more scientific approach to value creation can provide executives with the insight they need to proactively manage all components of their valuation and the assets of the high performance enterprise. This is another area which the study seeks to make a contribution. It is the intention of this study to generate insights on how organisations define economic value and measure it to demonstrate how well they have performed.

Furthermore, the survey of the literature indicates that accounting measures are still relevant in measuring shareholder value even though management need to consider

Chapter 2: Literature survey

the contribution of both tangible and intangible assets to value creation. Literature indicates that there is still a need for further research on the measures of value creation. It is also important to assess how executives perceive the concept of value creation, shareholder value and demonstrated value. This will go a long way in understanding the views and opinions of executives on how they manage the process of creating value for stakeholders.

In conclusion

The fourth research question sought to understand how companies could improve the level of business success, measured through value created, which is achieved through the execution of strategic objectives by means of project portfolios. It was noted in this sub-section that there have been a number of developments in how value is defined, measured and managed. The review of literature pointed out that researchers advocate for value based management since it has fundamentally changed how managers think about their businesses. Value based management received its prominence since it demonstrated how an organisation creates value. It also emerged that literature places an increasing emphasis on the management of project benefits to ensure organisational strategic goals are achieved.

It was noted that performance management influences the behaviour of people across the organisation since what gets measured is managed and what is managed, is done. In order to measure and manage this value, a number of performance management frameworks, models and systems were developed over time. It was observed that these tools provide a method of articulating value and ways of affecting value drivers. It was noted from literature that performance management systems are valued due to their role in strategy implementation since it creates organisational alignment and facilitates the process of translating strategy into action.

Furthermore performance management systems are valuable since they allow communicating, across the organisation, the performance achieved in the execution of the strategy. In extension, it was encouraged by a number of researchers that measures need to be balanced between financial and non-financial as well as those that track internal and external performance indicators. Although it came out strongly that shareholder value creation should be the ultimate goal of strategy, there was a shift in value management to include other stakeholders as well. This further presented a challenge since different stakeholders view value differently. This then led to different views on the definition of value or business value which need to be managed well by management in order to cater for the different stakeholders that have a vested interest in the organisation.

Chapter 2: Literature survey

2.6. Salient factors for effective strategy execution

The review of the literature showed a number of studies in which behavioural and non-behavioural factors were also highlighted as key to strategy execution. Organisations are made up of individuals and the human element of strategy execution consistently came through as an area that requires attention and consideration. A concerning observation that was made by Cândido & Santos (2019) was that “one of the major unresolved management problems is the great percentage of strategy implementation efforts that fail, with most authors estimating a rate of failure between 30 and 70 percent”. They therefore researched a number of obstacles to effective strategy execution that were identified from the review of the literature. It is noted from this study that most of the obstacles that were identified are the ones which deemed to be from organisational structures that are under management control and that there is a lack of consensus on which obstacles are most significant.

It was noted from a report by Srivastava & Sushil (2015) that “there is a lack of literature on strategic performance factors and their role in effective strategy execution, which turns out to be a barrier to the success of strategy execution”. Cocks (2010) concluded a study in which he identified nine common elements for long-term success and these are: effective execution, perfect alignment, adapting rapidly, clear and fuzzy strategy, leadership not leaders, looking out and looking in, right people, managing the downside and balancing everything, that are also depicted in Figure 2.11.

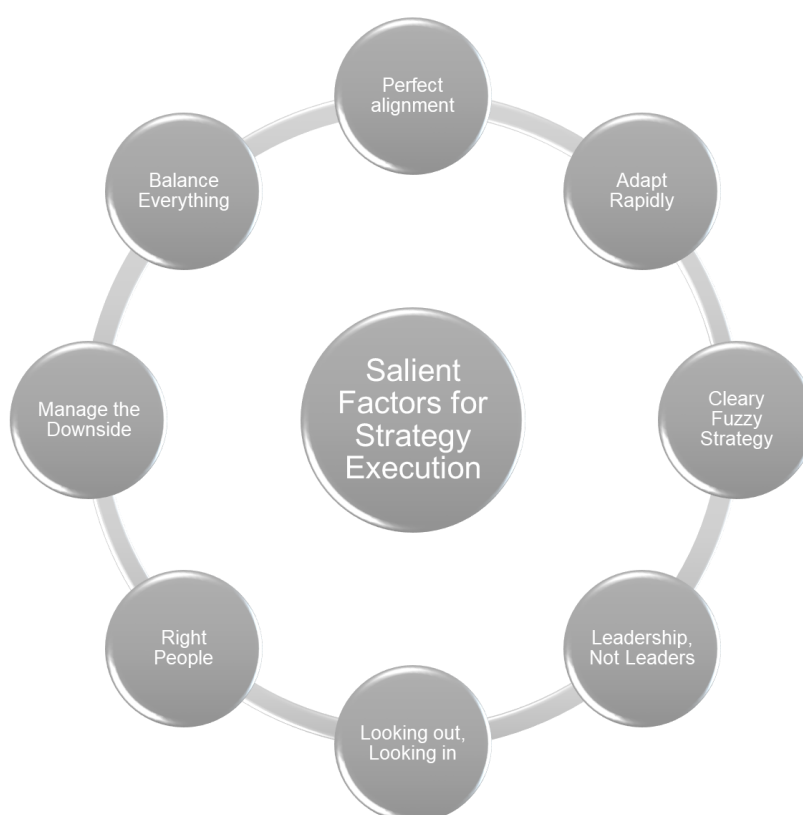


Figure 2:9: Effective Execution Framework (Cocks, 2010)

Chapter 2: Literature survey

It is important for business leaders to appreciate the factors presented by Cocks (2010) and their contribution to how they lead the execution of strategy in their organisations. The factors are a good guide and a good place to start from. He further points out that “the pivotal role of effective execution that is depicted as both an element of the framework and as representing the outcome of the total framework. The other elements of the “winning wheel” are connected together to make the wheel work and steer the organisation towards its mission and goals. The power of the model lies in its integrative approach – there is no “start” or “finish” to the wheel. All elements are important and change in one precipitates change to others and it is organisations that execute effectively that defines them as winners.”

Similar work was done by Hrebiniak (2008) and the outcome of his research is presented as a set that demonstrates the vast areas which management should be conscious of during strategy execution. According to Hrebiniak (2008) the following salient factors are key to make strategy execution:

- “Remembering that sound strategy comes first”.
- “Structure is important to successful implementation”.
- “Care must be taken to translate strategic objectives into short-term operating metrics”.
- “Having an implementation model to guide execution thoughts and actions”.
- “Clear responsibility and accountability are a must for effective execution”.
- “Reward the right things, use incentives to support execution processes and outcomes”.
- “Ensure the development and appropriate capabilities and managerial skills to make strategy work”.
- “Focus on managing change”.

Literature contains multiple authors that cite the challenges faced by organisations on strategy implementation. Al-Ghamdi (1998) notes fifteen potential problems that may be encountered during strategy implementation:

1. “Took more time than originally allocated”.
2. “Major problems surfaced which had not been identified earlier”.
3. “Coordination of implementation activities was not effective enough”.
4. “Competing activities distracted attention from implanting the decisions”.
5. “Capabilities of employees involved where insufficient”.
6. “Training and instruction given to lower level employees were inadequate”.
7. “Uncontrollable factors in the external environment had an adverse impact on implementation”.
8. “Leadership and direction provided by departmental managers were inadequate”.
9. “Key implementation tasks and activities were not sufficiently defined”.
10. “Information systems used to monitor implementation were inadequate”.

Chapter 2: Literature survey

11. "Advocates and supporters of strategic decision left the organisation during implementation".
12. "Overall goals were not sufficiently understood by employees".
13. "Changes in responsibilities of key employees were not clearly defined".
14. "Key formulators of the strategic decision did not play an active role in implementation".
15. "Problems requiring top management involvement were not communicated early enough".

It is therefore noted that these problems demonstrate that little emphasis was given to strategy implementation, poor co-ordination of implementation activities and that there was a lack of thorough analysis and in-depth consideration of what needs to be managed.

It was noted from the review of the literature that defining concrete and clear links between the different phases of the strategic management process is critical. This is then followed by the need for alignment and streamlining of the process to enable a continual conduit that will drive the realisation of the intended business results. (MacLennan, 2011) cites the following common strategy execution barriers (the area that this study aims to make a contribution in) which managers need to be aware of that may limit their effectiveness as they implement the corporate strategy:

- "Strategy execution frameworks".
- "Task definition".
- "Organisation structure".
- "Resource management".
- "Information sharing".
- "Top team functioning".
- "Staff involvement".
- "Budgeting systems".
- "Conflicting priorities".
- "Cross-functional co-ordination and conflict".
- "Time pressure".
- "Reporting and problem escalation".
- "Communication".
- "Clarity of accountability".
- "Organisational capability".
- "Performance measures".
- "Management information and feedback".

The factors above, which could be linked to keys for effective project management, provide insight in some of the aspects that need to be observed, evaluated and considered during strategy execution in order to improve the level of successful

Chapter 2: Literature survey

execution. It is the intent of the study to note some of the key factors, which were found from practice, that have made a significant impact on effective strategy execution.

The second research question seeks to understand which factors are key to effective strategy execution through the use of project portfolios. A series of salient factors were identified from the literature and these span strategic management, the role of management and the importance of capabilities within the organisation. It is thus important to note to what extent are these prevalent during the data gathering process.

2.7. Conclusion from the review of the literature

The review of the literature indicates that there are areas in strategy management that are well developed, those that require further research to gain insight to improve their application and those which researchers differ on, thus requiring further study. Strategy is understanding an industry structure and dynamics, the competitiveness of the company in the market, determining the organisation's relative position in that industry and taking actions to either change the industry's structure or the organisation's position to improve organisational results (Oliver (2001), Davies (2000), MacLennan (2011), Porter (1996) and Carroll (1982)). Sound leadership is required from senior management (executives) and the board of directors to direct the organisation through the turbulent environment. It is their responsibility to oversee the corporate governance of the investment made by shareholders (Rothschild (2007), Certo et al (1995), Ramakrishnan (2012), Davies (2013) and Early (2006)).

2.7.1. Project portfolio management as an enabler of strategic alignment

Project management is of utmost importance in strategy implementation, a fact that has been neglected in most of existing frameworks (Kazmi, 2008). It was also noted that the link between effective strategy execution and a delivery mechanism such as project management needs further research in order to improve the effective application of project management in realising the strategy for the organisation (Maddalena (2012), Aubry et al. (2012) and (Serra & Kunc, 2015)). However, further research is required to cement the relationship between project management and strategy execution (Srivannaboon & Milosevic, 2006), Young, Jordan, and O'Connor (2012) and Young and Grant (2015)).

The strategy execution process is made up of defined processes that are complex in nature (Martinsuo and Killen, 2014). The link between these processes is key and the better defined these links are, the better the translation of the outcome of one processes into the key inputs of the next process. Project portfolio management is viewed as an effective link between strategy planning and execution to enable strategic objectives to be translated into appropriate project objectives ((Meskendahl, 2010),

Chapter 2: Literature survey

Ghapanchi *et al.* (2012), Patanakul (2015)). In addition, the effectiveness of project portfolios is critical since it depicts how scarce organisational resources need to be allocated and managed to realise strategic objectives (Laslo, 2010).

2.7.2. Effective strategy execution

Strategy execution is about the realisation of intentions, the fulfilment of the company's mission and the achievement of its vision (MacLennan, 2011). Strategy execution is a complex task due to the different factors that play a role during the execution process and the lack of a guiding framework (Hrebiniak (2005), Al-Ghamdi (1998), (Speculand, 2014), Getz *et al.* (2009), MacLennan (2011) and Getz *et al.* (2012)). The most effective way to successful business strategy is through alignment and follow up (Khadem, 2008). Ramakrishnan (2012) says that enterprises are incorporated to performance and the decisive test of performance is the value created in relation to a promise made to the stakeholders.

2.7.3. Value creation

Benefits realisation management is an important approach to ensure that corporate initiatives deliver what they promise: it provides focus, demonstrates value for money, reduces the risk of failure and maximises benefits achieved (Esteves, 2009). It is clear from the research work as noted during the review of the literature that strategy execution still needs improvement to ensure that the expectations from the strategic formulation and planning phases are realised. Furthermore, the surveyed literature indicates that effective strategy execution is still in its infancy thus the aspect of benefits realisation as well as value creation, management and realisation may be jeopardised. Shareholder value measured through financial and non-financial measures should be the ultimate goal of strategy execution as it provides a framework for the evaluation of strategic plans and management's performance (Copeland and Meenan (1994), Rappaport (1983) and Copeland *et al.*, 1994). However, the measures for value creation are not clear, they need to be determined (Rappaport (1983), Copeland *et al.* (1994), Biddle, Bowen and Wallance (1998), Worthington and West (2001), Palliam (2006) and de Wet (2005)). Furthermore, since value mean different things to different people, the value created by the enterprise needs to be articulated in a manner that demonstrates benefits to different stakeholders.

2.7.4. Approach and framework for effective strategy execution to realise value

The importance of strategy execution to realise value gives rise to the need for a guiding framework to improve the chance of success (Hrebiniak (2005), Al-Ghamdi (1998), (Speculand, 2014), Getz *et al.* (2009), MacLennan (2011) and Getz *et al.*

Chapter 2: Literature survey

(2012)). The challenges faced by organisations in executing strategy are lamented by a number of authors. A number of strategy implementation frameworks have been developed and some such as the balanced scorecard model are widely applied by industry. However, the level of integration of the different models to develop a comprehensive model that could be applied during strategy execution is still to be developed. Frameworks for effective strategy execution have been proposed and refined to improve their effectiveness (Hambrick and Cannella (1989), Hrebinaik and Joyce (1984), Stonich (1982), Waterman et al (1980), Vasocellos e Sa (1990) and De Feo and Janssen (2001)). Proposals have been made of integrated frameworks since effective strategy execution is not a linear process (Okumus (2003), Kaplan (2005), Kazmi (2008) and Lukac and Frazier (2012)).

The results of the review of the literature presents areas which the study needs to consider in order to evaluate the extent to which these observations are valid in practice. Literature also present areas which the study could learn more about in order to contribute to the current body of knowledge. Furthermore, literature present areas which are not well understood and requires testing and validation.

2.8. Developments in the research of strategy execution through PPM

It was observed during the review of the literature that a number of significant contributions were made by researchers in the area of strategy execution, effective strategy execution, strategy execution through project portfolios and the achievement of business success through execution of strategy using project portfolio management. The review of the literature indicated that between 2001 and 2015 there were a number of studies that sought to go beyond the understanding of the components that enable effective strategy execution and strategy execution through project portfolios. It was noted by the author that these studies focused more on integrated frameworks since strategy execution is a complex process. Furthermore, researchers shared their empirical observation on factors that are critical to effectively executing the corporate strategy. These factors highlight the complexity which business leaders face in overseeing strategic management throughout the organisation while providing guidance to the strategic, tactical and operation levels of an organisation.

The observations, denoted in Table 2.1 were made during the review of the literature, indicating the pertinent contribution that was made by the different researchers in the field of strategy execution:

Table 2:1: Pertinent contribution towards the field of strategy execution

Researcher	Focus area	Pertinent contribution
Artto, K. (2001, 2004)	Strategy execution through projects	Artto has researched and contributed in the management of project oriented

Chapter 2: Literature survey

Researcher	Focus area	Pertinent contribution
Okumus, F. (2003)	Strategy execution	organisations as well as strategic management through multiple projects. Okumus proposed a framework to implement strategies in organisations taking into consideration content, context, processes and outcomes as well as explains the potential role and importance of each factor in the process.
Hrebiniak, L. G. (2005, 2006, 2008)	Strategy execution	Hrebiniak has researched and contributed towards the area of effective strategy execution. He has researched strategy implementation, the importance of leading effective strategy execution and change, obstacles to effective strategy implementation and making strategy work.
Kazmi, A. (2008)	Strategy execution	Kazmi conducted research work to expand on earlier frameworks of the popular McKinsey's 7-S model by Waterman, Peters and Philips (1980) and the work done by Okumus (2003) and starts by clarifying the different components that make up the framework proposed by Okumus (2003). He proposed a model of strategy implementation that attempts to capture the major themes in strategy execution and the activities that make up each theme.
Meskendahl, S. (2010)	Strategy execution through PPM	Meskendahl proposed a conceptual on the relationship between strategic orientation, project portfolio management and business success.
Lukac and Frazier (2012)	Strategy execution	Lukac and Frazier advocate the need to link strategy to value. They promote the need to develop strategic plans that provide competitive advantage and how shareholder value will be created. They indicate that there is a need for research to provide guidance on how shareholder value will be achieved

Chapter 2: Literature survey

Researcher	Focus area	Pertinent contribution
		since there is no simple framework for connecting strategy and value. They proposed a model on how to link strategic maps to shareholder value.

It was the aim of the researcher to build on this seminal work done by different researchers and expand on the work done by Meskendahl (2010) and test the conceptual model proposed from the study. Furthermore, this study also incorporates exploring the link between strategy and value as proposed by Lukac & Frazier (2012). The review of the literature demonstrated a number of gaps (see section 2.9) which by validating the proposed conceptual model the research may present insight on better mechanisms of executing corporate strategies.

The following progression which is depicted in Figure 2.10 was noted during the review of the literature which demonstrates the evolution of strategy execution in the quest to improve its effectiveness and the realisation of business value:

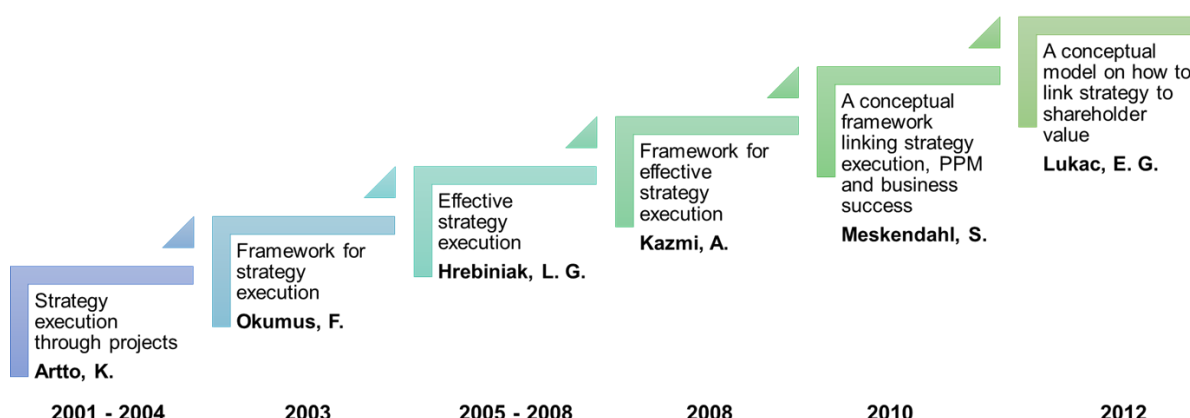


Figure 2.10: The evolution of strategy execution

It is thus noted that the progression in the field of strategic management is towards improving the effectiveness of the process in order to improve the extent to which organisations achieve their strategic objectives thus creating value for stakeholders. Furthermore, this progression demonstrates the quest for effective strategy execution to create value, which this study seeks to contribute and add to. It is anticipated that the tested conceptual model will equip business leaders with insight that will enable them to better execute the corporate strategy and thus improve the level at which they achieve their strategic and commercial objectives.

2.9. Gaps and deficiencies identified during the review of the literature

It is the view of the author, based on the literature review conducted in this report, that there appears to be a number of areas that require attention that this study would contribute towards in some form.

Chapter 2: Literature survey

Effective strategy execution through project portfolios

- Kazmi (2008) indicates that “project management is of utmost importance in strategy implementation, a fact that has been neglected in most of existing frameworks”. According to Young and Grant (2015) “the contribution on the link between strategy execution and project management is smaller than expected and more research is required to explore how projects can contribute more to strategy”. According to Meskendahl (2010) “there are few studies that are exploring single aspects of the linkage between strategy, project portfolio management and business success thus there is a need for testing and the further development of the conceptual model, in which the propositions are tested by quantitative empirical study”. Young et al. (2012) report that “the way projects are selected and managed limit the capability to realise strategic goals thus recommended future research to develop programme management, portfolio management and project governance to increase the likelihood that strategy will be implemented”. Martinsuo and Killen (2014) found that “project portfolio management presents a complex set of challenges to decision makers in that multiple projects must be configured and managed in a way to enhance the long-term strategic value of the portfolio while considering multiple criteria and interdependencies”. They also pointed out that the literature on project portfolio management has paid scant attention to value management concepts.
- “It is tragic that when leaders are asked to implement the strategy, they do not know what to do, even though successful strategy implementation provides a competitive advantage” (Speculand, 2014).
- “Shortcomings in that little emphasis was given to strategy implementation, poor co-ordination of implementation activities and that there was a lack of thorough analysis and in-depth consideration of what needs to be managed” (Al-Ghamdi, 1998). According to Getz and Lee (2011) “management do not realise that managing strategy execution requires well-orchestrated management processes and need to thoughtfully manage the way the strategy is implemented”.
- Aubry et al. (2012) found that “the concept of organisational project management is uneasy to identify with precision, which then challenges the concept’s own existence. Furthermore, they highlight a difficult problem of alignment or fit between the components themselves, such as governance mechanisms, portfolios, programmes and projects”.
- Kock and Gemünden (2016) reports that they are not “aware of empirical studies that evaluate the effectiveness of strategy execution through project portfolios”. They proceed to state that “there is little understanding of how the use of project portfolios in strategy execution differ between organisations”.

Chapter 2: Literature survey

Performance management and value creation

- Flitman (1996) highlights that “management have struggled to develop focused reports that directly summarises the strategic progress of an organisation”. He also indicates that “other problems encountered include the derivation of measures for all areas of strategic progress and the provision of timely, quality information at a cost the organisation can live with”.
- Srivastava & Sushil (2015) say “there are limited studies showing how performance measurement systems ensure effective strategy execution”. “The lack of strategic performance factors and their role in effective strategy execution, which turns out to be a barrier to the successful execution of strategy identified” by Srivastava & Sushil (2015). “Poorly implemented performance management frameworks leading to increasingly difficulty in addressing a problem involving the inability of senior management to be proactive on strategic activities thus causing activities at the operational level to no be carried out effectively” (Chau, 2008).
- According to Serra & Kunc (2015) organisations fail in implementing strategies even though they employ project, programme and portfolio management techniques since there is no empirical evidence of the effectiveness of BRM, however their study shows BRM practices being positive predictors to project success on the creation of strategic value for the business.

A guiding framework for strategy execution

- According to Lukac & Frazier (2012) “there is a significant body of knowledge covering how to identify value once it has been created but there is less guidance on how shareholder value will be achieved and there is no simple framework for connecting the two”. Ballow, Burgman & Molnar (2004) highlight that “executives are often left with inadequate insight into how various investment choices link to the creation of shareholder value”. They indicate that “management needs an approach that is able to handle this complexity and make the final connection from asset use to shareholder value creation”. They say that “ultimately a more scientific approach to value creation can provide executives with the insight they need to proactively manage all components of their valuation and the assets of the high performance enterprise”.
- According to Carroll (1982) “there is no appreciation of the importance of environmental factors that enhance relative performance because of the lack of a conceptual framework that permits sources of comparative advantage in a business to be identified and exploited”. “The lack of a model, blueprint or template that could be used to shape execution decisions or actions” as found by Hrebiniak (2005).
- “The inadequacy of existing business strategy models to cope with the limited level of integration across the strategy management process” as identified by

Chapter 2: Literature survey

Ghezzi (2013). “An integrated approach is required to act strategically and increase the chances of success” (Dandira, 2012).

- “The adequacy of existing business strategy models to cope with discontinuity should be subject to further research in order to resume and potentially redesign traditional strategic planning and strategy analysis” (Ghezzi, 2013). Getz, Jones & Loewe (2009) state that “most strategies don’t deliver the results that are promised because they lack a critical link, which they call migration management, between long-term strategy and the actions needed to achieve it”.

A number of gaps were identified from the review of the literature that warrants research work on the improvement of strategy execution to create business value. In addition, there was a need for the development of an integrated framework that would guide how organisations should effectively execute the corporate strategy through project portfolios in the quest to realise value. Furthermore, there was a need to gain insight on behavioural factors that contribute to effective execution of strategy thus enhancing the outcome of strategy execution.

2.10. Envisaged contribution to the body of knowledge

The gaps that were identified from the review of the literature are vast, complex and diverse. This indicates the need for a holistic approach on strategy execution that takes into consideration the different dimensions that enable effective execution of strategy and the realisation of value from the implementation process. The gaps are from different angles i.e. understanding and management of the strategy execution process, defining and identification of key measures of performance, measurement of performance, a framework to guide strategy execution and an integrated approach to allow a holistic approach to strategic management. There are also enabling processes such as benefits realisation, project management and change management that are necessary but have not been proven to contribute to the successful execution of strategy to realise value.

It was therefore observed that there is a need to move from just adopting an integrated approach to strategy execution but moving on to effective execution of strategy while adopting an integrated approach. It was envisaged that the study would contribute in the following areas:

- Identify and test key factors (organisational levers) that improve the effective execution of strategy,
- Determine and tested key aspects of value creation and management during strategy execution, and
- Propose a tested integrated model/framework that could be used for effective strategy execution to realise value.

Chapter 2: Literature survey

The empirical approach adopted for the research is seen as a way of validating the observations from literature and to propose new methods that should be adopted to improve the effective execution of strategy while striving to realise value by the organisation. It was the aim of the researcher to propose a tested framework to fast track the realisation of business value and success due to the effective execution of strategy through project portfolios.

3. Conceptual Model

Strategy execution involves three key areas: leadership, people and process. It is when the mission and mandate of an organisation is clear to all stakeholders that all members move as a collective towards the vision that has been cast by business managers. It is therefore critical that it is clear to management what the strategic objectives of the organisation are and how these are going to be achieved. The sound understanding of the company strategy at this level will enable management to assess how well they are doing in realising what they have set out to do to achieve the corporate strategy. The approach taken to review the literature pertaining to the study on the use of project portfolios in effective strategy execution is depicted in Figure 3.1 below. It is important to note that Figure 3.1 is not different from the conceptual model that is being tested by the study but differs in how the elements are presented.

Three concepts that were studied i.e. strategic management, project portfolios and business value were integrated to demonstrate how they relate to each other, as reflected in Figure 3.1. Strategic management involves strategy formulation, planning, execution and evaluation. It is also depicted that strategy monitoring and measurement occurs over time once the corporate strategy is defined, adopted and executed. Project portfolios are developed based on strategic objectives in order for projects to be used to execute the strategy. A project identification and selection process that evolves from ideation to implementation is also illustrated including the use of selection criteria to compile the portfolios including performance measurement to assess the effectiveness of the portfolio in delivering the strategy. Projects go through a refining process (funnel effect) where they are considered and selected based on the performance criteria. The value created through the implementation of projects is evaluated based on the project portfolios and strategic objectives to articulate the extent to which the corporate strategy is realised. The diagram also highlights processes, tools and approaches which play a role in the use of project portfolios to effectively execute the corporate strategy in order to create business value. An additional intent was to also point out the importance of the different components which form part of the study and how these contribute to other components.

The diagram allows one to better understand the integration points between strategic management, project portfolios and value creation. The first is the link between the corporate strategy that is defined through the strategy formulation process. It is imperative that the strategy is translated into strategic objectives which will inform the selection criteria of the project portfolios. Next is the link between the corporate strategy and the projects in the portfolio. This link is identified from the literature as the project strategy which enables the translation and execution of the strategic objectives through projects. Thirdly is the link between projects and the corporate strategy which is achieved through the benefits realised from the implementation of projects. These benefits enable the organisation to evaluate the value derived from the execution of

Chapter 2: Literature survey

the strategic objectives through projects in the portfolio. Lastly is the link between strategy evaluation and the strategic intent which is articulated through the formulated corporate strategy. It is important that the performance that is achieved by the organisation is evaluated to assess how well the corporate strategy was executed and the intended aspirations achieved. It is the view of the author that this is how the effectiveness of the execution of the corporate strategy through the project portfolios is evaluated. It was necessary to identify these integration points so that it is clear how the different components are linked to each other. Furthermore, this understanding enabled the researcher to observe how the case organisations managed and controlled these integration points in order to avoid eroding the benefit of using project portfolios in effective strategy execution.

The concept of using project portfolios in strategy execution, which is illustrated in Figure 3.1, is envisaged as comprising of interdependent processes while managing the critical links as described above. Furthermore, it was noted from the review of the literature that an organisation needs to implement and manage its corporate governance process which would enable business leaders to lead and provide oversight as the strategy is executed through project portfolios. In addition the governance process will enable the organisation to manage the execution of the strategy and report to business leaders.

The proposed conceptual model as illustrated in Figure 3.1 incorporates processes and tools which are aimed at improving the effectiveness of the execution of strategy through project portfolios. Firstly, it is imperative that the organisation formulates its corporate strategy taking into consideration its strategic intent (which is made up of the vision, mission and business values), external market forces, internal capabilities, and its aspirations given the context in which it operates. This is a key input into executing the corporate strategy through project portfolios. Researchers cautioned that the strategy formulation process is key since the quality of the strategy is critical in addition to an effective strategy execution process.

Secondly there is a need to plan how the organisation is going to execute its corporate strategy as well as the process which will be followed in the implementation of the corporate strategy. The planning process of project portfolio management is applied in which projects that were identified, prioritised and selected based on a criteria derived from strategic objectives would be added to project portfolios that are aimed at delivering the strategic objectives. Traditionally strategy maps are used as a tool to articulate this process which also enables business leaders to communicate the corporate strategy to the rest of the organisation as well as the key stakeholders of the organisation.

Thirdly the organisation needs to execute on its strategy through the projects that were selected and form part of the project portfolios. In this case Project Portfolio

Chapter 2: Literature survey

Management techniques need to be adopted. There are commercially available tools that are used to manage the project portfolio management process which empower the portfolio manager to effectively and efficiently manage the portfolio in order to achieve the set targets which are derived from the strategic objectives of the organisation. It is also critical that the organisation manages the selected projects for success through the application of a formally adopted project management process. The advantage of a formalised project management process is that it will enable the organisation to manage the execution of projects in a controlled and managed manner. In this case programmes could be managed through the use of an approach such as Managing Successful Programmes and implement projects through the adoption of project management methodologies such as Prince2 or those defined in the Project Management Institute (PMI).

In the fourth place, the organisation needs to manage the performance management process. There are two processes which must be closely co-ordinated at this point that are related and form part of the performance management and governance process which are the strategy monitoring and measurement and benefits realisation. It would be beneficial for the portfolio manager to adopt Benefits Realisation Management so that the value that is realised as projects are executed is captured and measured. The benefits that are realised from the execution of projects need to be consolidated through the portfolio management process and be consolidated into the results that are achieved for the strategic objectives. This enable business leaders to evaluate how well they are doing in realising the strategic objectives as defined during the strategy planning process. Traditionally organisations use the Balanced Scorecard (BSC) to aid the process. However, other methods were also identified in the literature such as the use of Strategic Performance Factors (SPF).

In the fifth place, it is imperative that the performance management process should not end with the strategy evaluation process but that it is taken a step further to evaluate how well the organisation is doing in achieving its strategic intent was developed during the strategy formulation process. It is the view of the author that the evaluation of the organisation on how it is effectively realising its corporate strategy through the use of project portfolios will empower business leaders to appreciate how well the organisation is doing to achieve its reason for existence.

Lastly, there is a need for business leaders to evaluate the processes, competency, tools and techniques that are adopted by the organisation in order to improve their maturity over time. This will enable the organisation to refine how things are done overtime so that the process is effective and resilient given the changing environment which the organisation operates in.

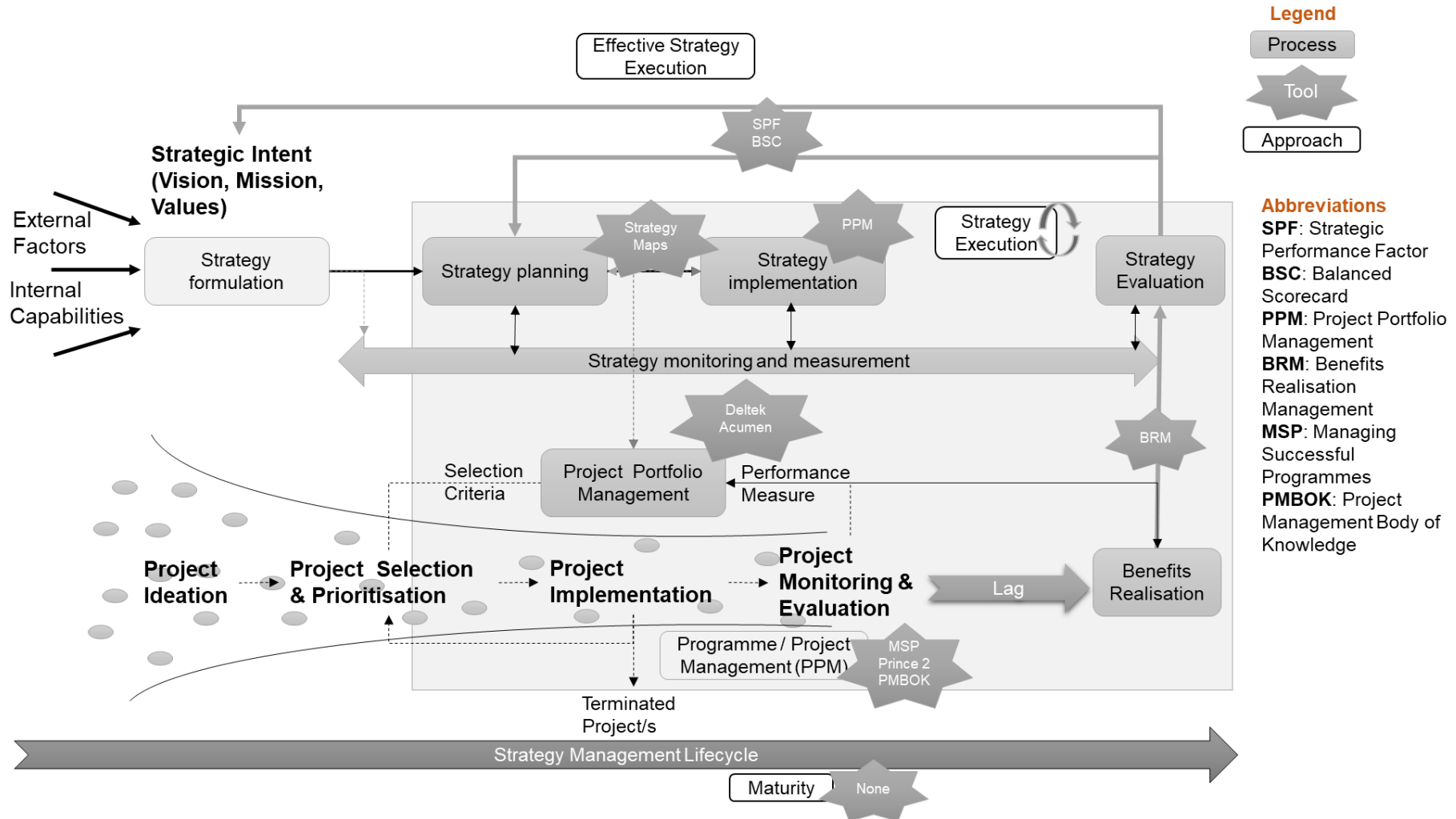


Figure 3:1: The model on effective strategy execution through project portfolios

Chapter 3: Conceptual model

The additional advantage of Figure 3.1 is that it provides insight on the links between corporate strategy, the strategic management process, project portfolio management, benefits realisation and strategy execution. Furthermore, one is able to identify the different processes and systems which play a role in the use of project portfolios in effective strategy execution. The researcher was also curious what constitutes the maturity of the strategy management lifecycle to further understand how this affects the evolution of corporate strategy over time.

It was noted during the review of the literature that one of the main gaps is the lack of a tested framework that would be used to provide guidance during strategy execution. A conceptual framework proposed by Meskendahl (2010), (please see Figure 2.10) was found to be closely aligned to the objective of this study since it integrates the use of projects in the execution of the corporate strategy. Furthermore, the conceptual framework needs to be tested which is the aim of this study.

The advantage of the study conducted by Meskendahl (2010) is that he proposed a linkage between business strategy, project portfolio management, and business success to close the gap between strategy formulation and implementation. It is therefore important that one understands the factors and elements that make up the strategic management process and how they contribute to the effective execution of strategy. Furthermore, there are enabling processes such as project portfolio management, strategic management, benefits realisation, value management, change management and performance management that need to be integrated effectively into the strategic management process in order to enable the realisation of strategic objectives of the organisation.

There are two themes that make up this study i.e. project portfolio management and effective strategy execution. It is important that these concepts are defined in the context of this research:

- Project portfolio management is adopted as per the definition provided by Meskendahl (2010) who said that project portfolio management is the simultaneous management of the whole collection of projects as one large entity, in which a project portfolio is a set of projects that share and compete for scarce resources, and are carried out under the sponsorship and management of a particular organisation.
- A formal definition of effective strategy execution was not found in literature. However, Cocks (2010) explains that implementation is not merely about operationalising the strategy by exercising command over resources, employees and their work. He highlights that “effective execution requires unique, creative skills including leadership, precision, attention to detail, breaking down complexity into digestible tasks and activities, including communicating in clear and concise ways throughout the organisation as well as to all its stakeholders”. He further adds that “intricate control and feedback mechanisms are also necessary to hone the operations to align with business

Chapter 3: Conceptual model

strategy". In the context of this research, effective strategy execution is deemed as a measure of the superior growth achieved by an organisation, based on its strategic position, over a period of time.

The analysis of the literature did not provide a definition of effective strategy execution but a broad articulation of what effective strategy execution is or is not. It is therefore important to establish a common understanding of the context under which effective strategy execution is looked at in this study. It is expected that the definition would be proposed based on the insights gained from the study.

3.1. The proposed conceptual model

The conceptual model proposed by Meskendahl (2010) was adapted based on the insight gained from the review of the literature to propose a conceptual model that would provide guidance on how to direct the strategy execution process. The proposed conceptual model (Figure 3.1 below) also takes into consideration the need to manage interdependencies and business risks within the strategy execution process. The interdependencies could be between and among the strategic intent, project portfolio success, and business value.

The review of the literature indicates that strategic orientation goes beyond the understanding of external factors but takes into consideration internal capabilities that enable the organisation to respond to market demands. The assumption made by Meskendahl (2010) on strategic orientation is aligned with literature since it focuses on industry structure, changes in the external market, competitiveness of the market, and the position of the organisation in the market (Oliver (2001), Porter (1996) and Carroll (1982)). However, it is important for management to also consider the company's capacity and capability given its operations model, resources required to deliver on the corporate strategy at both the strategic and operational level and also ensure that the company is matched to its environment in order to realise its business objectives (Davies (2000), Certo et al. (1995)), Dandira (2012), and David (2003)). The strategic orientation component was therefore revised to strategic intent to incorporate the strategic management process of the organisation to realise its strategic objectives.

The project portfolio structuring component of the model proposed by Meskendahl (2010) was expanded with strategic alignment and business risk management to incorporate the observations noted from literature as key requirements in defining project portfolios to deliver strategic objectives. The review of literature points out that the management of project portfolios is a complex process due to the need to manage the successful delivery of multiple projects in a way that enhances the long-term strategic value of the portfolio considering multiple criteria and interdependencies among the projects in the portfolio (Martinsuo and Killen, 2014). The process therefore requires that project portfolio managers to consider aspects such as strategic alignment, business risk management, selection of the right project/s, portfolio balance

Chapter 3: Conceptual model

and exploitation of synergies as they focus on strategic priorities Martinsuo and Killen (2014), Shenhar *et al.* (2001) and Crawford, Hobbs & Turner (2006)). These key observations were therefore embedded into the proposed framework in order to take advantage of outcomes from studies on the use of project portfolios in delivering strategy.

The project portfolio success component was not modified. This is due to the observations from the review of the literature on project portfolio success. It was noted during the review of the literature that project portfolio success hinges on the successful execution of individual projects in order to deliver on the portfolios (Meskendahl, 2010) and Kaiser, El Arbi & Ahlemann (2015) which when selected and evaluated effectively would directly affect organisational productivity and profitability (Ghapanchi *et al.*, 2012). Literature thus supports the recommendation by Meskendahl (2010) on the project portfolio success component.

The business success component as proposed by Meskendahl (2010) was changed to business value since business success is a broader term. Furthermore, business value was also found to be broad since the term mean different things to different people. The element on preparing for the future was revised to long term vision to clarify the intention. Literature proposes that business strategy drives business success (Pina, Romão & Oliveira, 2013), that shareholder value creation should be the ultimate goal of strategy (Kaiser, El Arbi & Ahlemann, 2015) which should be used to evaluate both strategic plans and manager's performance (Rappaport, 1983) and that value based management focuses on both the short and long term horizon of the business (Copeland and Meenan, 1994).

The following table summarises the changes which were effected to the conceptual model proposed by Meskendahl (2010) taking into consideration the outcome of the review of the literature which led to the proposed conceptual model which was developed for the research:

Table 3:1: Comparison of the conceptual model developed by Meskendahl (2010) to the proposed conceptual model

Meskendahl (2010)	Proposed conceptual model	Comments
Strategic orientation	Strategic intent	Strategic orientation as defined by Meskendahl (2010) is a component of the strategy
Analytical posture Risk-taking posture Aggressive posture	Strategy	Strategy formulation and planning considers internal and external factors, business risk, and the business model which will enable the

Chapter 3: Conceptual model

Meskendahl (2010)	Proposed conceptual model	Comments
		organisation to create value for its stakeholders (Davies, 2000), (Kock and Gemünden, 2016), (Porter, 1996).
	Objectives	Measurable objectives and targets are required to quantify the extent to which the strategy is achieved (Davies, 2000), (Mezger & Violani, 2011).
	Target	
Project portfolios structuring	Project portfolios approach	Project portfolio structuring is a component of project portfolios. Project portfolios are linked to the strategy in order to enable the realisation of the expected value.
	Strategic alignment	Project portfolios need to be aligned to the strategy in order for the selected projects to deliver on the expected value (Martinsuo and Killen, 2014).
	Business risk	The project portfolio will take into consideration the risk which the enterprise is exposed to including projects that are meant to mitigate or manage this risk as part of the organisation's governance process (Davis, 2013).
Consistency Integration Formalisation Diligence	Project portfolios structuring	In the structuring of the project portfolios elements such as consistency, integration, formalisation and diligence are taken into consideration (Kock and Gemünden, 2016).

Chapter 3: Conceptual model

Meskendahl (2010)	Proposed conceptual model	Comments
Project portfolios success	Project portfolios success approach	This element was not modified.
Business success	Business value	Business success was termed business value in order to improve the understanding of what the enterprise seeks to achieve.
Economic success	Economic success	This element was not changed.
Preparing for the future	Long term vision	The detail of these concepts are viewed as similar in that the long term vision informs the preparation for the future of the enterprise (Copeland and Meenan, 1994).

Kock and Gemünden (2016) expanded on the work done by Meskendahl (2010) and define the following concepts which are covered by the model which Meskendahl (2010) put forward:

- **“Strategic implementation** success is defined by the strategic fit of the project portfolio and the perceived implementation success of the strategy”.
- **“Portfolio balance** concerns the equilibrium of risk, long- and short-term opportunities and the steady utilisation of resources within the execution of project portfolios”.
- **“Average product success** is measured by the commercial success of project outcomes which determine in their entirety the quality and success of the strategy implementation”.
- **“Synergy exploitation** represents the added value that emerges from dedicated portfolio management over and above contributions from individual projects through capitalising on interdependencies and avoiding redundancies”.

The proposed conceptual model still comprises of four components namely strategic intent, project portfolios, project portfolio success and business value. The company's strategy is articulated through its intent which is broken down into aspirations that are converted into strategic objectives with measurable targets. The project portfolio is structured in such a way that there is alignment with strategic objectives. This link is crucial as it enables the translation of strategic objectives into projects that are key to the realisation of the corporate strategy. The project portfolios are structured to create business value given time and resource constraints. This business value, which is the

Chapter 3: Conceptual model

value created through the business model by the organisation for the different stakeholders, is defined in terms of value created (economic success) and the long term vision of the organisation.

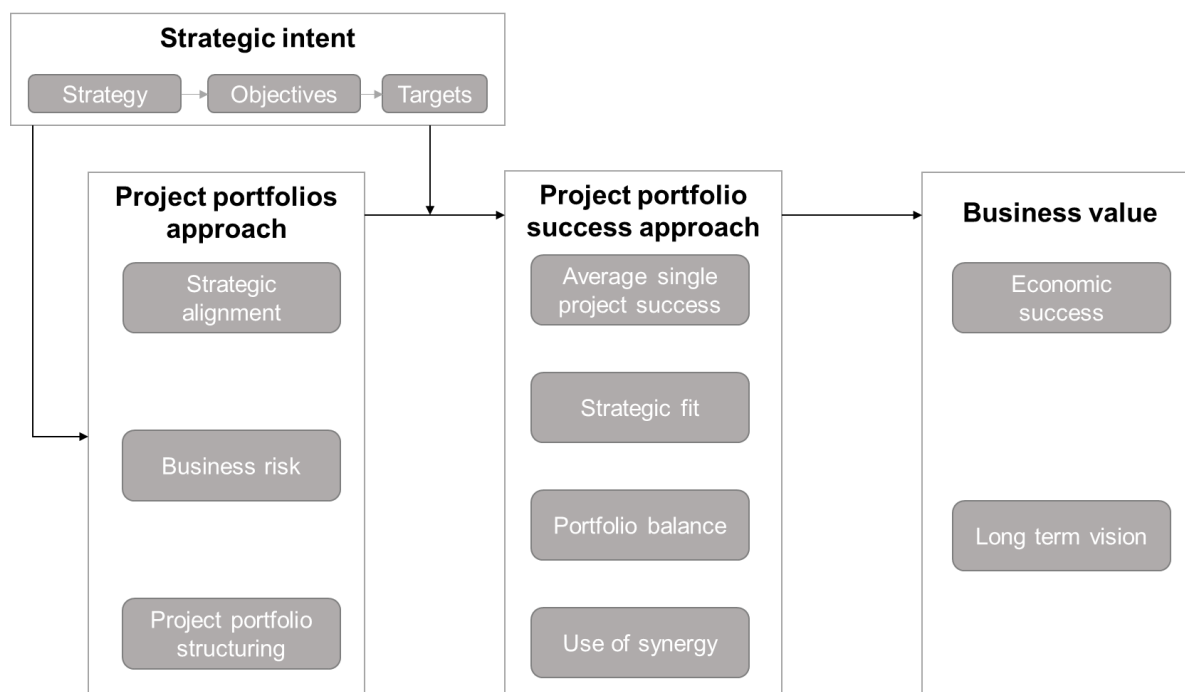


Figure 3.2: The proposed conceptual model

The resulting conceptual model is an adaptation of the model proposed by Meskendahl (2010) and its testing was expected to provide sound insight on the drivers and salient factors that lead to effective strategy execution through the use of project portfolios. The constructs of the proposed conceptual model as outlined in Figure 3.2 are defined below:

Strategic Intent: Massaro, Dumay & Bagnoli (2015) define strategic intent as “the essence of winning due to a sense of obligation to the corporate challenge that pushes firms to create and sustain consistent motivation to overcome resource constraints”. Thus the strategic intent of the organisation is the proactive choice of what the organisation needs to achieve collectively given its limited resources while overcoming both internal and external constraints.

- **Strategy:** Carroll (1982) defines strategy as a statement of important actions to be taken to improve relative performance by allocating limited resources, which reflects an understanding of the principal economic forces affecting the business, of the external changes to the business requiring a response, and of the role played by competitors. MacLennan (2011) defines strategy as the pattern of resource and market interactions an organisation has with its environment in order to achieve its overall objective. Thus the strategy is made up of deliberate actions which the organisation is going to adopt in order to realise its strategic intent.

Chapter 3: Conceptual model

- **Objectives:** Strategic objectives are the most significant initiatives which an organisation must implement, they define what must be done, how they will be achieved and they enable the organisation to establish whether it has or has not achieved its intent (Lukac & Frazier, 2012).
- **Targets:** These are the measures of the strategic objectives that are used to drive change, defined through a common language, which will be used to test the extent to which the objective has been realised (Witcher & Chau, 1993).

Project Portfolios Approach: A group of projects that are most relevant for a firm's success, the sum of which embodies the organisation's investment strategy, that are continually optimised in order to implement the strategy effectively (Unger et al., 2012).

- **Strategic alignment:** Since projects support the execution of the firms competitive strategy and are used to deliver a desired outcome, it is critical that they are aligned to business strategy (Srivannaboon & Milosevic, 2006). They defined strategic alignment as the degree to which prioritised projects are compatible with priorities of the business strategy. "Strategic alignment is a success criterion for success for project portfolios" (Unger et al., 2012).
- **Business risk:** Risk is an uncertain event or condition that may cause a significant positive or negative effect on at least one significant project portfolio (Teller & Kock, 2013). They further recommend that the management of risk at portfolio level may enhance the effectiveness of risk management since the process will also consider the overall risks in-between projects (interdependencies). It is thus imperative that the portfolio is positioned in a manner that enable the organisation to use resources of advantage to compete with its rivals thus improving its competitiveness while mitigating adverse business risk (Srivannaboon & Milosevic, 2006).
- **Project portfolio structuring:** A manner of describing projects through the use of attributes, which are described through a shared language, in a controlled categorisation system used to shape the project portfolios so that they are comparable (Crawford, Hobbs & Turner, 2006).

Project Portfolio Success Approach: "The maximisation of the financial value of the portfolio, linking the portfolio to the firm's strategy and balancing the projects within the portfolio in consideration of the firm's capacities" (Meskendahl, 2010).

- **Average project success:** Given the clear role projects have in implementing strategy, there is a need to define clearly how delivery of benefits and project management performance will be measured since project success is a vital component of business success (Serra & Kunc, 2015)
- **Strategic fit:** Alignment of project portfolios to strategic priorities at corporate, business unit and functional level (Srivannaboon & Milosevic, 2006). They also emphasise that projects are expected to influence the adaption of business strategy thus it is critical that the interaction (link, connection) of the projects with the strategy is well defined.

Chapter 3: Conceptual model

- **Portfolio balance:** A balanced portfolio, along a range dimensions to provide the best value to the organisation, that enables a firm to achieve its objectives without being exposed to unreasonable risk (Meskendahl, 2010).
- **Use of synergy:** Co-ordinated management of all projects in a project portfolio to deliver benefits beyond independently managed projects (Meskendahl, 2010).

Business Value: The use of multi-dimensional success model to assess the value created by the project portfolios based on the overall business purpose (Meskendahl, 2010).

- **Economic success:** Projects create significant business value such as improving corporate competencies, increasing revenue, saving costs, improving quality, saving time, improving the satisfaction of stakeholders and protecting the environment (Alsudiri, Al-Karaghoul & Eldabi, 2013). The evaluation of the market and commercial performance due to the project portfolio adopted by the firm (Meskendahl, 2010).
- **Long term vision:** Organisations need to have a view of their long-term vision in order to use project portfolios to realise it (Shehu & Akintoye, 2010). Examination of long term benefits and opportunities from projects which are mostly indirect and can only be realised long after the projects have been completed (Meskendahl, 2010).

The following sub-sections presents the description of the constructs of the proposed conceptual model as guided by the insights gained from the review of the literature:

3.1.1. Strategic intent

The starting point in effective execution of corporate strategy is a solid strategic intent. This is the long-term vision of the organisation broken down into short-term objectives.

The conceptual model suggests that the effect of strategic orientation on business value is mediated by portfolio structuring and project portfolio success. At the same time, a moderating effect of strategic orientation on the relationship between project portfolio structuring and project portfolio success is suggested.

Organisations are increasingly becoming more complex due to the need to develop mechanisms to react to external factors such as market changes, competitor tactics, legal and regulatory requirements, customer buying behaviour and the ever increasing demand to improve profit levels. Kock and Gemünden (2016) say that strategic clarity means that the company or business unit has a clearly formulated strategy that is communicated and understood within the organisation. They add that a clearly formulated strategy is a necessary condition for effective implementation of deliberate strategy. It is therefore necessary that there is a common understanding of the position of the organisation in the market and how it intends responding to external forces. They emphasise that companies with a clear and focused corporate strategy more

Chapter 3: Conceptual model

effectively implement the right projects. This is a difficult task and thus a structured approach enables co-ordination between different stakeholders to enable alignment. Dandira (2012) states that the strategic management process consists of five major ever-present tasks:

1. “Developing a concept of the business and forming a vision of where the organisation needs to be headed”.
2. “Converting the mission into specific performance objectives”.
3. “Crafting strategy to achieve the targeted performance”.
4. “Implementing and executing the chosen strategy efficiently and effectively”.
5. “Evaluating performance, reviewing the situation and initiating corrective adjustments in mission, objectives, strategy or implementation in light of actual experience, changing conditions, new ideas and new opportunities”.

An important outcome from the review of the literature is the need for alignment of project portfolios to the company strategy. Petro & Gardiner (2015) acknowledge that many researchers have investigated the organisational structural factors and their influence on project success. In addition they report that all such constructs are a product of strategy, and if not aligned correctly, a dichotomy will appear between strategy (portfolio) and its translation (structure) with an effect on performance. They concluded that the selection processes, for managing the constituent projects in a business unit, have a significant role in the success of the business and the overall success of the organisation in realising its strategic intent. One of the key aspects of the study would be to establish how alignment and the link between the company strategy and the project portfolios could be strengthened. This is an area which the researcher seeks to contribute towards.

3.1.2. Project portfolios approach

It is critical that an organisation develops criteria for the selection and structuring of project portfolios and Meskendahl (2010) states that firms with a qualitatively high portfolio management maturity achieve a higher level of strategic alignment. He adds that portfolio management has to achieve an optimal alignment of projects to each other and should only pursue projects that are aligned to the business strategy. He however found that there is not much literature on a theoretical construct on the strategic fit of project portfolios. Applied to project management for the desired combination of projects is a balanced portfolio that enables a firm to achieve its objectives without being exposed to unreasonable risk (Meskendahl, 2010). These factors speak to the need to improve the understanding on the best approach to developing an evaluation criteria that improves the quality of the project portfolio and mitigates against business risks that may erode the benefits expected from the project portfolios. Kock and Gemünden (2016) affirms that portfolio structuring and portfolio

Chapter 3: Conceptual model

steering are key to extract those management activities that most likely depend on the firm's strategic orientation in their performance impact.

The next step after a criteria is developed, which will enable the structuring of project portfolios that will enable the achievement of the corporate strategy, is the selection of the portfolios. Kock and Gemünden (2016) defines portfolio structuring as the composition of a target portfolio that contributes the highest possible value to the organisation and is aligned to the corporate strategy. They clarify that it comprises the evaluation, prioritisation and selection of projects. They add that the main objective in portfolio structuring is to ensure that the strategy is optimally reflected in the portfolio. They point out that adequate involvement of critical stakeholders, such as functional managers and divisional heads, and a clearly defined corporate strategy are essential success factors in portfolio structuring. Archer & Ghasemzadeh (1999) found that the task of selecting project portfolios is an important and recurring activity in many organisations. They proposed the following integrated framework (Figure 3.2) for project portfolio selection:

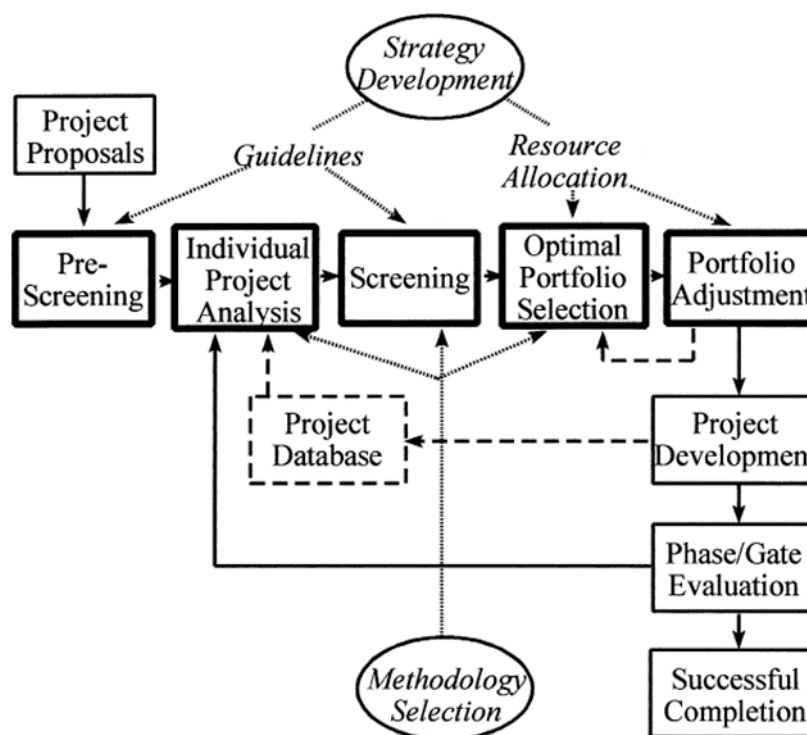


Figure 3:3: Integrated framework for project portfolio selection (Archer & Ghasemzadeh, 1999)

The framework may be implemented in the form of a decision support system in which an iterative process is followed to achieve sub-optimum portfolios which will lead to the achievement of the strategic objectives (Archer & Ghasemzadeh, 1999).

The understanding of the project portfolios is therefore critical to how well they are managed so that changes occur to ensure that correct decisions are made. Martinsuo (2013) comments that companies struggle with the sub-optimisation and changes

Chapter 3: Conceptual model

among their projects, even if various normative instructions and good practices have been introduced for project portfolio management. He found that, to respond to uncertainties and complexities in business environments, project portfolio management can be viewed as negotiation and bargaining elements instead of rational decision processes. These alternative perspectives offer new insight into the dilemmas identified in day-to-day project portfolio management and open up avenues for resolving them, thereby promoting success in project portfolio management. It is therefore the intent of the researcher to assess how organisations maintain control of their project portfolios in the midst of changing business conditions.

3.1.3. Project portfolio success approach

The concept of strategic fit originally stems from organisational research with the central proposition that performance of an organisation is the result of fit between two or more factors such as strategy, structure, technology or environment (Meskendahl, 2010). He adds that the strategic fit of the project portfolio describes the degree to which the sum of all projects reflects the business strategy.

It is prudent to acknowledge that portfolios are structured, selected and managed by managers who are influenced by different stakeholders. This is the case since these stakeholders have a vested interest in the success of the organisation and most of the time demand that their voice should be heard. Beringer, Jonas & Kock (2013) report that stakeholder behaviour and stakeholder management are key success factors within project portfolio management (PPM). Their study shows that the effect of stakeholders is phase-specific and that role clarity as a measure of PPM maturity affects the nature of the relationship between the intensity of engagement (IoE) of stakeholders and portfolio success. They elaborate that each of these stakeholders is supposed to comply with his or her specific role with respect to the PPM process. Thus, to explore stakeholder engagement in PPM, one must consider the degree to which stakeholder roles in the management system are ambiguous and the clarity of the allocation of tasks within such a system. They clarify that the core responsibilities of project portfolio managers in the PPM process are more operational in nature, and they should not serve as visionaries focusing on strategy. However, they must not be pure administrators who solely focus on data and operations. Rather, project portfolio managers need both a strategic orientation (i.e. understanding and buying into portfolio strategy) and operational transparency (i.e. collecting and analysing relevant information) to be able to steer project portfolios successfully. Kock and Gemünden (2016) contributes that organisations need to be able to adapt the portfolio in a dynamic environment. They describe responsiveness as the extent to which a firm is able to change and adapt its portfolio to changing conditions.

The main focus of project portfolio success approach is that the expected strategic objectives are realised in an economical manner. This hinges on the ability of

Chapter 3: Conceptual model

management to deliver projects at the highest value possible through the deliberate management of risks that may erode the benefits expected from these projects. Kock and Gemünden (2016) say the project portfolio steering is concerned with the ongoing co-ordination and control of the portfolio which includes the prioritisation and termination of projects, reallocation of resources and exploitation of synergies. They emphasise that previous research show that successful portfolio management depends on the right type of controlling activities. They point out that successful companies concentrate not only on tracking adherence to time, cost and scope objective of projects but continuously monitor the validity of each project's business case. They add that business case monitoring is defined as the revalidation of a project's business case considering changing project scope and timing as well as changing environmental conditions. They point out that equally important in the portfolio steering is the organisation's ability to quickly adapt the portfolio in a dynamic environment.

The ultimate expectation is that the benefits that are expected from the project portfolios are realised. This puts pressure not only on managers that oversee the execution of projects but the managers that oversee the various portfolios. It was noted by Meskendahl (2010) that the coordinated management of all projects within a portfolio delivers benefits beyond the results of independently managed projects. He adds that although these additional benefits are often not put into practice due to complexity of the numerous interdependencies within the portfolio, it is worth the efforts to reduce double work and enhance synergies regarding technologies, marketing, knowledge and resources. He notes that the dimension of project portfolio success constitutes the use of technical and market synergies between projects within the portfolio. The achievement of synergies between portfolios and projects needs to be proactively managed in order to optimise resources during the execution process. It is the aim of the study to gain an understanding of how this aspect is enabled and managed during the management of projects and portfolios, since it is an area that could add value if managed in a co-ordinated manner.

3.1.4. Business value

One of the challenges that are facing management is that organisations are complex and nebulous entities. It was proposed in project management research that project portfolio management and its success should be examined in a multi-dimensional way at the project, portfolio and business level (Meskendahl, 2010). He explains that the success assessment of projects and therefore also of portfolios has to cover the performance during the execution as well as the success of the result. He explains that "business success" and the dimension "preparing for the future" deal with the project results and consequently examine short-term economic effects and long-term implications. Accordingly, short-term economic success and long-term preparing for the future are adopted as proposed by and adjusted to the portfolio perspective (Meskendahl, 2010). All these elements need to be closely monitored by managers in

Chapter 3: Conceptual model

the different levels of the organisation in a co-ordinated fashion. The issue of alignment and follow-up has been emphasised by researchers and it is expected to be one of the contributors to business value.

It is therefore crucial that managers throughout the organisation do not lose focus of the main thing, which is to oversee competitive enterprises that are sustainable and create value. Lukac & Frazier (2012) argue that senior executives should be adept both at developing strategic plans that provide competitive advantage and communicating how they will provide shareholder value. They reinforce that management should be able to link strategy to value. They further add that there is a significant body of knowledge covering how to identify value once it has been created but there is less guidance on how shareholder value will be achieved. They acknowledge that, although it is commonly recognised or expected that effective strategies result in value creation, there is no simple framework for connecting the two. It is the aim of this study to make a contribution in this area. They then proposed a model on how to link strategic maps to shareholder value (see Figure 8). The contribution of the proposed model is a visual understanding of how the link between the strategic intent of the organisation and shareholder value could be established. Following on this recommendation it is key that managers across the organisation are clear on how the strategic objectives are going to be achieved.

The argument underlying the study is that most activities within the organisations should be contributing toward the achievement of strategic objectives and ultimately create value which leads to business success. This is traditionally defined through the business model of the organisations. The business model provides insight on how the organisation is going to generate an income (revenue streams) in a profitable manner. Meskendahl (2010) explains the business success component as follows:

- “All kinds of projects and portfolios that deal with the performing organisation by affecting cycle time, yield, quality and so forth can be assessed and evaluated”.
- “The firm's economic success of the project portfolio considers the share of revenue generated by new products compared to competitors and the overall revenue share of new products with and without predecessor products”.
- “The economic success dimension consists of the two subsets: market performance and commercial performance. Market success describes the extent to which sales objectives like market share or sales volumes are achieved. Commercial success measures are derived from the classical financial management criteria like ROI, profit, or break even and are mostly compared to the initial objectives”.
- “Project success measures a broad set of market and commercial criteria, and constitute that the combination of measures depends on the firm's situation and strategy. The overall compliance of products with market goals, return targets, and amortisation schedules is assessed”.

Chapter 3: Conceptual model

- “The long term vision which focuses on the preparation for the future covers the sufficiency of new technologies and competencies developed within the project portfolio. One could view the long term vision as benefits obtained in line with the corporate vision”.
- “The development of new products, markets, or technologies in comparison to competitors is considered and the degree to which it will create the future of the industry”.

In light of the proposed conceptual model that is built on the conceptual framework proposed by Meskendahl (2010) and the conceptual model proposed by Lukac & Frazier (2012), the uniqueness of the study is that it seeks to test the validity of the conceptual models and gain insight on how they could be applied in strategy execution. However, the review of the literature also alludes to the need to also bear in mind factors that are key to effective strategy execution. The salient factors that emerged from the review of the literature are captured in the following section in an attempt to present a complete picture of the dynamics that are at play during strategy execution.

3.1.5. Salient factors for effective strategy execution

The review of the literature yielded a model that encompass the link between strategy execution and delivery structure. Cocks (2010) conducted a study in which he identified nine common elements for long-term success: effective execution, perfect alignment, adapting rapidly, clear and fuzzy strategy, leadership not leaders, looking out and looking in, right people, managing the downside and balancing everything that are depicted in Figure 2.11.

These factors were built into the research to assess their prevalence and effect during the execution of the strategy. They bring clarity to the softer side of effective strategy execution beyond the model, which may be viewed as a tangible outcome of the research.

3.2. Proposed propositions for the research

The objective of the study is to propose a framework which could be used to navigate an organisation to business value. This success is defined in terms of value created (economic success) and the long term vision of the organisation. The proposition depict in Figure 3.4 below illustrates the approach which will be adopted during the research to test the proposed framework.

Chapter 3: Conceptual model

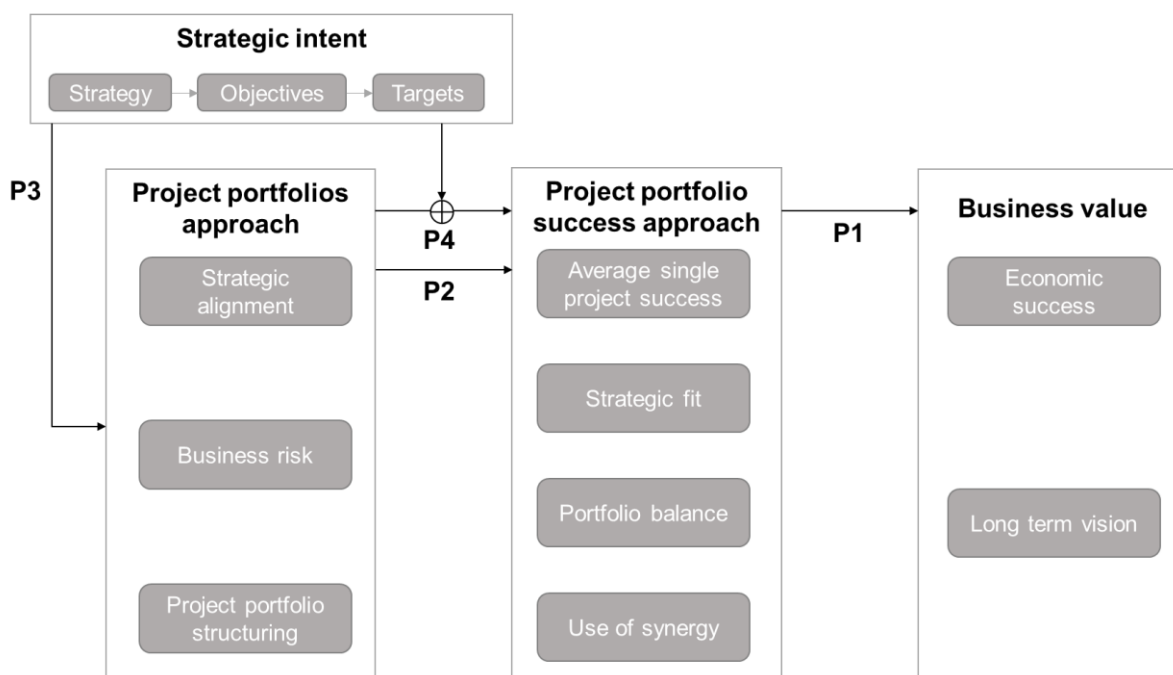


Figure 3:4: The proposed conceptual model including propositions

Four (4) propositions are defined for the purpose of the study where:

P1: Proposition 1 - Project portfolio success approach consists of average single project success, project balance, strategic fit as well as use of synergy and is positively related to business value consisting of economic success and determining the long term vision.

P2: Proposition 2 – Project portfolios approach consist of strategic alignment, business risk and project portfolio structuring and is positively related to project portfolio success approach.

P3: Proposition 3 – Strategic intent consists of strategy, objectives and targets have a direct influence on project portfolios approach.

P4: Proposition 4 – Strategic intent is moderating the relationship between project portfolios approach and project portfolio success approach.

These propositions inform how the study is structured in order to answer the research question and gain insight on how organisations could improve the manner in which they execute their corporate strategy in order to improve the level of success that is achieved in strategy execution through the use of project portfolios.

Please refer to Table 4.1 in the next chapter on the mapping of the research questions to the propositions derived from the conceptual model in an attempt to illustrate the link between the research questions and propositions.

Chapter 3: Conceptual model

3.3. Conclusion

It is expected that the combination of a conceptual model for effective strategy execution through project portfolios, together with factors that are key for effective strategy execution, will provide sufficient insight on how to improve the manner in which organisations manage the process for executing on its corporate strategy to realise value. The salient factors for effective strategy execution include key aspects which management need to bear in mind during the strategy execution process in order to improve the level of successful strategy execution.

Chapter 4: Research Design and Methodology

4. Research Design and Methodology

The nature of the study was applied research in which the researcher sought to understand the approach and factors that must be considered when using project portfolios to execute strategy effectively. The goal was to conduct an exploratory and descriptive study that involves the use of qualitative information to formulate a view on how sustainable businesses execute their strategy effectively through project portfolios.

The study applied an inductive approach where primary data was gathered and used to understand how business use project portfolios to execute their strategy thus identified insights, trends, relationships and patterns which were prevalent in such organisation. It was assumed that the observations from the empirical research would enable the researcher to support or refute some of the observations that were made from the review of the literature. Furthermore, the insight enabled the presentations of a conceptual model that was tested which is also supported by salient factors that are required to enable business to use project portfolios in effective strategy execution.

4.1. Case study research

The review of the literature asserts that research that starts with a “why” and “how” questions most likely lead to case studies, histories and experiments as the preferred research strategies (Yin, 2014). The nature of case studies is such that they address questions that deal with operational links needing to be traced over time, rather than mere frequencies or incidence (Yin, 2014). Some ‘how’ and “why” questions are ambivalent and need clarification thus leading to explanatory type of studies (Yin, 2014).

Literature indicates that case study research can include both single and multiple case studies (Yin, 2014 and Rowley, 2002). Yin, 2014 and Rowley (2002) emphasise that multi-case studies are superior to single case studies due to the replication effect. Given the need to gain insight on the prevalence of the best practices noted from the review of the literature, the study was explored through a multi-case approach, with each case study as a single unit of analysis as recommended by Yin, 2014.

The benefits of the methodological richness of qualitative research are balanced by the difficulties of “coming to grips” with the diversity of approaches and their associated requirements for quality, validity and rigor (Cepeda & Martin, 2005). They further add that there are different research strategies (collecting data through document study, interviews, observation or participation and analysing data using hermeneutics, phenomenology or grounded theory) for building interpretive understanding. Cepeda & Martin (2005) add that case study field research enables the development of a deep understanding of the complex interaction of people, processes and technology within organisations.

Chapter 4: Research Design and Methodology

Cepeda & Martin (2005) summarised the three reasons why case study research is a viable management research strategy:

1. “The researcher can study management in a natural setting, learn about its state-of-the-art and generate theories from practice”.
2. “The case method allows the researcher to answer “how” and “why” issues in order to understand the nature and complexity of the processes taking place”.
3. “A case study approach is an appropriate way to explore areas where research studies are scarce”.

The nature of case studies is such that they address questions that deal with operational links needing to be traced over time, rather than mere frequencies or incidence (Yin, 2014). Rowley (2002) clarifies that case study strategies are most suitable when the relevant behaviour cannot be manipulated. Some ‘how’ and “why” questions are ambivalent and need clarification thus leading to explanatory type of studies (Yin, 2014).

The study applied the case study approach since it would allow the researcher to explore multiple sources of data in order to gain insight on how the case organisation uses project portfolios during the execution of its corporate strategy. The case study’s unique strength is its ability to deal with a full variety of evidence such as documents, artefacts, interviews and observations (Yin, 2014 and Rowley, 2002).

Guidance was sought and applied from the review of the literature on how to structure the study. It was noted that there are key elements which research needs to cover when conducting a case study. These elements were covered during this study as recommended by publishers. A sound case study should have three main elements (Cepeda & Martin, 2005):

- **A conceptual framework:** “A formally defined conceptual structure is essential in case studies, not only in the initial stages, but also throughout the research process. The conceptual framework is created from the research themes, existing knowledge about which is gathered from the literature, and filtered by a researcher’s theoretical foundations. It is made up of the conceptual content or structure used to guide the initial stages of a qualitative research project. Researchers bring some kind of conceptual framework to the research process. This conceptual framework expresses the researcher’s current understanding of the research topic, and so clearly sets out the territory to be explored. The conceptual framework is defined at the beginning of the research project. Then, at the end of research cycle, it should be critically examined in order to incorporate gained understanding regarding the research topic. A conceptual framework was developed from the outcome of the review of the literature and linked to the research and interview questions in order to allow gathering of data that will enable the research questions to be answered”.

Chapter 4: Research Design and Methodology

- **The research cycle:** “Refers to the gained understanding of the research topic accumulates through cycles of research. The research cycle is conceptualised in four stages: (a) Plan, (b) Data collection, (c) Analysis, and (d) Reflection (critical analysis). Although these four stages have been noted as inclusive and separate, in practice they are fluid and ill-defined, allowing much iteration between adjacent stages. Consequently, movement through the cycle does not follow any set, sequential pattern. The research cycle played a role during the study, gathering of data from case organisations and the outcome of the study was thus managed given this insight”.
- **The literature-based scrutiny of developed theory:** “Theory building is creative, intellectual work. The reflection stage implies moving beyond the data to explore ideas, link concepts, note patterns and examine tentative topics. Concepts are clarified and categorised, whereas the relationships between categories are specified so that theory can be inferred from the research theme. Theory denotes the sense of a “system of interconnected ideas that condense and organise knowledge”. It was the intent of the researcher to purposefully link the data gathering and analysis phases with the insight gained from the literature review. The research questions were also enhanced with insight from the literature to improve the understanding of information during data gathering and analysis”.

It was the aim of the research to improve the quality of the outcome of the study and as a result guidance was taken from literature given that Yin (1994) cited the following challenges of the case study methodology which were considered during the research:

- “The case study has been viewed as a less desirable form of inquiry since case study investigators have been sloppy and have allowed equivocal evidence or biased views to influence the direction of the finds and conclusions of the study”.
- “Case studies provide little basis for scientific generalisation. This is found not to be the case since case studies are generalizable to the theoretical propositions and not to populations or universes”.
- “Case studies take too long and result in massive, unreadable documents”.
- “Case studies are very difficult since there is little way of screening or testing for a researcher’s ability to do good case studies”.

These challenges were noted and mitigating strategies were built into the research methodology to improve the quality of the research conducted in this study.

4.2. Case study application

Literature provides guidelines and requirements that are key to improve the quality of a qualitative study. It is also recommended by Yin (2014) to also develop case protocol

Chapter 4: Research Design and Methodology

for the research. Rowley (2002) suggests that data collection in case studies should be governed by the following protocols:

- “An overview of the case study project”.
- “Field procedures, such as use of different sources of information, and access arrangements to these sources”.
- “Case study questions, or the questions that the case study researcher needs to keep in mind when collecting data”.

Case study protocols were adopted during the study and documented to ensure that they are embedded in the approach taken to conduct the research.

The field procedures incorporated different sources of data and information in order to enable triangulation. The field procedures enabled a consistent and controlled approach to the multiple case study approach adopted in the research. Case studies could be based on any mix of qualitative and quantitative evidence and they need not always include direct, detailed observations as a source of evidence (Yin, 2014). Yin (1994) provides at least five different applications of case studies as:

1. “The most important is to *explain* the causal links in real life interventions that are too complex to the survey or experimental strategies”.
2. “The second is to describe an intervention and the real life context in which it occurred”.
3. “The third is to *illustrate* certain topics within an evaluation, again in a descriptive mode even from a journalistic perspective”.
4. “Fourth may be to *explore* those situations in which the intervention being evaluated has no clear, single set of outcomes”.
5. “The fifth is that the case study may be a *meta-evaluation*: a study of an evaluation study”.

It is envisaged that all five applications may apply to this research given its magnitude, nature and complexity as well as the sub-questions which seek to improve the depth of the study in order to gain fundamental insight on what led to the observable results.

4.3. Logic of designing a case study

The approach used to conduct a case study is defined by literature. Furthermore, guidance is provided on how a case organisation should be evaluated and selected which was applied in the research. It was noted that case selection must be determined by the research purpose, questions, propositions and theoretical context, but there will also be other constraints that impact on case selection (Rowley, 2002). It was also borne in mind that a research design is the logic that links the data to be collected, and the conclusions drawn from the case study, given the initial question of a study (Yin, 2014). He clarifies that case study research design is a plan that guides the researcher

Chapter 4: Research Design and Methodology

in the process of collecting, analysing and interpreting observations thus becoming a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variables under investigation. Yin (2014) and Rowley (2002) provide the following five components of a research design:

1. **A study's question:** "the form of the question in terms of 'who', 'what', 'where', 'how' and 'why', provides an important clue regarding the most relevant research strategy to be used".
2. **Its propositions (if any):** "propositions are inferences that are made about a study and need to be validated to check the correctness of the defined relationship. Rowley (2002) says that descriptive and explanatory studies need propositions which are derived from the research question/s. Each proposition attracts attention to something that should be examined within the scope of the study. The proposition in addition reflects an important theoretical issue and also begins to tell one where to look for relevant evidence. The more a case study contains specific propositions, the more it will stay within feasible limits".
3. **Its unit(s) of analysis:** "the definition of the unit of analysis, and therefore of the case, is related to the way the initial research questions have been defined. Selection of the appropriate unit of analysis results from the accuracy with which the primary question is specified. If the question does not lead to the favouring of one unit of analysis over another, then the question is probably either too vague or numerous thus presenting a case that is difficult to investigate. All types of questions need to be considered and answered to define the unit of analysis and thereby to determine the limits of the data collection and analysis. Previous literature could also become a guide for defining the case and unit of analysis".
4. **The logic linking the data to the propositions:** "Linking data to propositions could be done in a number of ways. One promising approach for case studies is the idea of 'pattern-matching' where by several pieces of information from the same case may be related to some theoretical proposition".
5. **The criteria for interpreting the findings:** "There is currently no precise way of setting the criteria for interpreting findings".

It was noted from the review of the literature that case studies suffer from the lack of generalisation. Insight was obtained from the work that was done by experts in case study methodology in order to apply this concept fairly in the research. Yin (1994) clarifies that the research design also defines the domain of generalisability, that is, whether obtained interpretations can be generalised to a larger population or to different situations. He provides the following approach when designing a case study:

- "The technical definition begins with the scope of a case study: a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. One would use the case study method because

Chapter 4: Research Design and Methodology

they deliberately want to cover contextual conditions believing that they might be highly pertinent to the study of the phenomenon”.

- “The phenomenon and context are not always distinguishable in real life situations, a whole set of other technical characteristics, including data collection and data analysis strategies”. Case study inquiries:
 - “Cope with the technically distinctive situation in which there will be many more variables of interest than data points and as one result”.
 - “Relies on multiple sources of evidence with the data needing to converge in a triangulating fashion and as another result”.
 - “Benefits from the prior development of theoretical propositions to guide data collection and analysis”.

The data gathered from a case study could be analysed using a variety of qualitative data analysis techniques to provide insight. Case study as a research strategy comprises an all-encompassing method with the logic of design incorporating specific approaches to data collection and to data analysis (Yin, 2014). In case studies, theory development is essential in the design phase, whether the ensuing case study’s purpose is to develop or test theory (Yin, 2014). He further suggests that the researcher should incorporate rival theory (alternative or inverse of the expected outcome) in the design. He emphasises that the complete research design embodies a “theory” of what is being studied.

It has emerged from the review of the literature that there is a science behind case study research. Yin (1994) confirms that the complete design of the study will provide surprisingly strong guidance in determining what data needs to be collected and the strategies for analysing the data. He adds that for this reason, theory development prior to the collection of any case study data is an essential step in doing case studies. Yin (1994) explains that an explanatory case study should be preceded by statements about:

- “What is to be explored”,
- “The purpose of the exploration”, and
- “The criteria by which the exploration will be judged successful”.

Literature guides that the use of case studies could yield results that could be generalised to other settings provided the case study is designed properly. Yin (1994) cautions that the researcher should be aware of the full range of theories that might impact or be relevant to their study. He says that theory development does not only facilitate the data collection phase of the ensuing case study. He emphasises that the appropriately developed theory also is the level at which the generalisation of the case study results will occur. Case studies are not ‘sampling units’ and thus cannot be treated with statistical generalisation (Yin, 1994). He states that the method of generalisation is analytical generalisation in which a previously developed theory is used as a template with which to compare the empirical results of the case study. He adds that if two or more cases are shown to support the same theory, replication may

Chapter 4: Research Design and Methodology

be claimed. He emphasises that the empirical results may be considered yet more potent if two or more cases support the same theory but do not support an equally plausible rival theory. This ability to generalise case studies also presents an opportunity to infer certain behaviour in other case organisations thus enabling the research to compare the outcome from multiple case studies.

One of the challenges with qualitative research is the requirement for a skilled researcher. This requirement is central to the outcome of the research given the rigour applied by the researcher. However, literature provides guidelines on how to improve the quality of a qualitative study. Yin (1994) and Rowley (2002) point out that there are no firm procedures for the analysis of results obtained from case studies. Rowley (2002) suggests that good case study analysis adheres to the following principles:

- “The analysis makes use of all of the relevant evidence”.
- “The analysis considers all of the major rival interpretations and explores each of them in turn”.
- “The analysis should address the most significant aspect of the case study”.
- “The analysis should draw on the researcher’s prior expert knowledge in the area of the case study but in an unbiased and objective manner”.

The final stage in the case study is to write a report. Rowley (2002) points out that the wealth of information that is gathered during the case study makes this process difficult, however encourages the researcher to document pertinent issues and maintain other details in a research database. The effective analysis of the results will assist in providing a structure (Rowley, 2002). It is noted from the guidelines provided by contributors on case study methodology that a systematic and controlled approach to the research is critical to the outcome of the study. Mechanisms as pointed out by researchers were thus put in place to maintain control and to preserve the quality of the outcome of the research.

4.4. Criteria for judging the quality of research design

It was noted that Yin (2014) says that the quality of any case study design could be assessed on the degree of trustworthiness, credibility, confirmability and data dependability. The recommendations from Yin (2014) were thus embedded in the research approach in order to improve the effectiveness of the study. The review of the report published by Yin (2014) shares that case study investigation must maximise four aspects of the quality of any design:

- a. **Constructive validity:** “establishing correct operational measures for the concepts being studied. Three tactics are available to increase constructive validity: (i) multiple sources of evidence, (ii) chain of evidence and (iii) to have the draft case study report reviewed by a key informant. In order to meet the test of constructive validity, an investigation must cover the following two steps”:

Chapter 4: Research Design and Methodology

- “Select the specific type of changes that are to be studied in relation to the original objectives of the study”, and
 - “Demonstrate that the selected measures of these changes do indeed reflect the specific types of change that have been selected”.
- b. **Internal validity:** “establishing a causal relationship whereby certain conditions are shown to lead to other conditions as distinguished from spurious relationships. Numerous ‘threats’ of validity have been identified mainly dealing with spurious effects. Internal validity is a concern only for causal (or explanatory) case studies in which an investigator is trying to determine whether event x led to event y. The concern over internal validity for case study research may extend to the broader problem of making inferences. The specific tactic for dealing with validity are difficult to identify however a researcher could apply an analytic tactic such as pattern matching, explanation building and time series analysis”.
- c. **External validity:** “establishing the domain to which a study’s findings could be generalised. The analogy of samples and universes is incorrect when dealing with case studies. This is because survey research relies on statistical generalisation whereas case studies rely on analytical generalisation. In analytical generalisation the investigator is striving to generalise a particular set of results to some broader theory. The generalisation is not automatic, a theory must be tested through replications of the findings in a second or even a third instance where the theory has specified that the same results should occur. This replication logic is the same that underlies the use of experiments”.
- d. **Reliability:** “demonstrating that the operations of a study such as the data collection procedures can be repeated with the same results. The objective is to be sure that, if a later investigator followed exactly the same procedures as described by and earlier investigator and conducted the same case study all over again, the later investigator should arrive at the same findings and conclusions. The goal of reliability is to minimise the errors and biases in a study. One prerequisite for allowing this other investigator to repeat an earlier case study is the need to document the procedures followed in the earlier case. A good guideline for doing case studies is therefore to conduct the research so that an auditor could repeat the procedures and arrive at the same results”.

The above mentioned requirements are more pertinent to the study given that a multi-case study approach has been adopted. Each case study must be carefully selected so that it either (a) predicts similar results (a literal replication) or (b) produces contrasting results but for predictable reasons (a theoretical replication) (Yin, 2014). He adds that if all the cases turn out as predicted then one would have provided compelling support for the initial set of propositions. He points out that if the cases are in some way contradictory, the initial propositions must be revised and retested with another set of cases. He adds that again this logic is similar to the way scientists deal with contradictory experimental findings. Although the number of ‘samples’ used in case studies is small compared to methods such as surveys, the extent of detail

Chapter 4: Research Design and Methodology

available for each case tends to be larger (Rowley, 2002). She further adds that the objective of case studies is to compare or replicate the case organisations studied with each other in a systematic way, while the researcher explores different research issues.

An important step in all of these replication procedures is the development of a rich, theoretical framework (Yin, 2014). He adds that the framework needs to state the conditions under which a particular phenomenon is likely to be found (a literal replication) as well as the conditions when it is not likely to be found (a theoretical replication).

4.5. Research questions

The study attempts to go beyond reporting on the corporate performance metrics and seeks to develop a framework or model for evaluating the effectiveness of strategy execution through project portfolios. It seeks to answer the following questions:

Figure 4.1 outlines the research sub-questions, propositions and related objective:

Table 4.1: Research sub-questions, propositions and objectives

Question	Proposition	Objective
Sub-question 1: What are the reasons why companies do not execute corporate strategy effectively to achieve business success?	None.	To identify the key limitations and obstacles that hamper the effective execution of the corporate strategy through project portfolios.
Sub-question 2: What are salient factors that enable effective strategy execution through project portfolios that enable an enterprise to create value for its stakeholders	None	To identify salient factors in the use of project portfolios in effective strategy execution in order to realise business value.
Sub-question 3: How could project portfolios be used to drive the effective realisation of strategic objectives?	Proposition 1 - Project portfolio success approach consists of average single project success, project balance, strategic fit as well as use of synergies and is positively related to business value consisting of economic success and determining the long term vision.	To gain insight on how project portfolios are used to drive the effective realisation of strategic objectives to realise business value.

Chapter 4: Research Design and Methodology

Question	Proposition	Objective
	The lack of a clearly defined strategy execution framework in which the strategic intent links project portfolio success with business value. Proposition 2 – Project portfolios approach consist of strategic alignment, business risk and project portfolio structuring and is positively related to project portfolio success approach. There are factors that should be clearly defined to enable project portfolio success approach in order to inform how project portfolios could be successfully deliver in strategy execution. Proposition 3 – Strategic intent consists of aspirations, objectives and targets have a direct influence on project portfolios approach. There is a need for a defined, structured and controlled framework that could be used to inform how an organisation executes its corporate strategy through project portfolios in order to realise business value. Proposition 4 – Strategic intent is moderating the relationship between project portfolios approach and project portfolio success approach. Strategic intent has a direct influence on project portfolios which when delivered successfully will lead to business value. It is necessary	

Chapter 4: Research Design and Methodology

Question	Proposition	Objective
	to create a link between the strategic intent and project portfolios so that the successful execution of projects will lead to the realisation of strategic objectives.	

In the context of this research, effective strategy execution is deemed as a measure of the superior growth achieved by an organisation, based on its strategic position, over a period of time. The aim of the study was to develop a framework that could be used to improve the extent to which business success is achieved when executing strategic objectives through project portfolios. Furthermore, the study sought to identify salient factors which management need to consider during the strategy execution process in order to improve its effectiveness.

4.6. Selection and review of case organisations

A primary case study organisation was selected and three (3) case study organisations. An overview of the primary case study organisation was conducted through the consultation of multiple sources of information. A case report was compiled based on the information gathered through different methods. This procedure was repeated on the other three (3) case study organisations. Overall four case organisations were evaluated during the study. The summary of case organisations is provided in Section 5 while the profile of participants is provided in Section 6.1.

It was critical that the correct organisations are selected for the case study. The following criteria was developed to guide the selection of case organisations:

- The organisation should have implemented project portfolio management and be applying it in strategy execution.
- Ideally, the organisation needs to have a well applied project management approach to manage the consistent implementation, control and management of projects.
- Ideally, there needs to be a central office or function where strategy and project portfolios are managed, controlled and evaluated for effectiveness and improvement of the current project management approach.
- Ideally, the organisation should have a head of strategy or project portfolio management to evaluate, control and manage strategy execution as well as measure its effectiveness against the strategic intent of the organisation.
- There needs to be a governance and reporting structure in place for controlling and providing oversight on the execution of strategic objectives through project portfolios.

Chapter 4: Research Design and Methodology

- The organisation needs to have a managed central storage and archiving system for management reports with controls on the changes made to the controlled environment as well as controlled access to these records.
- The organisation needs to have a reporting structure between its executive management and the board of directors on strategy execution and progress made against strategic objectives. The report needs to provide a view on the commercial and non-commercial growth of the organisation, creation of value by the business.
- The company needs to have been fairly stable for at least the past three years with no major change in structure or its strategic direction.

A consolidated case study report was compiled based on the outcome of the individual case study organisations considering the research question, its sub-questions and the propositions as well as the conceptual model including the salient factors for effective strategy execution.

4.7. Approach during research

The research was structured in a manner that allows the review, evaluation and verification of what case organisations do for the following elements of the proposed conceptual model:

- Strategic intent;
- Project portfolio;
- Project portfolio success; and
- Business value.

The following approach depict how the each component of the conceptual model was assessed and evaluated through the different questions in the questionnaires. Semi-structured interviews were used to test the different components that make up the elements of the proposed conceptual model, as mapped out in Figure 4.1. The questionnaires that were used during the study are attached in Appendix 4.

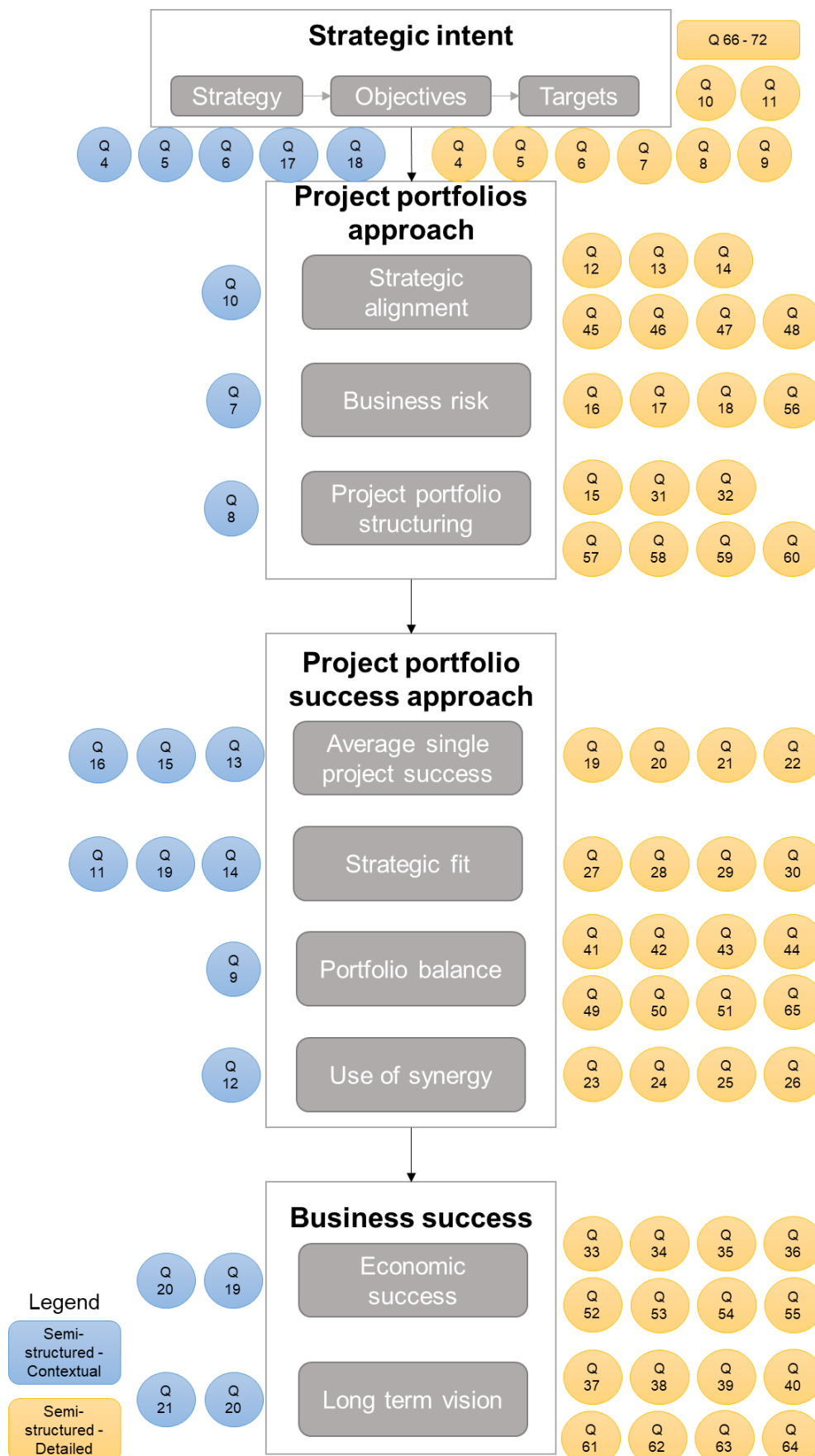


Figure 4:1: Structure of research questions to cover the conceptual model

Chapter 4: Research Design and Methodology

Document review and observation were used to obtain pertinent information, assess the effectiveness of the execution of the corporate strategy through project portfolios and test the responses obtained from the interview process.

4.8. Field procedures

The case study research was conducted based on the guidelines provided in the literature to develop a sound research approach and strategy for the study. Included in the research methodology is the case protocols that were imbedded in the data gathering and analysis steps of the study.

The case review and data gathering process considered multiple sources of data. The objective was to gather information in order to answer the research questions, its sub-questions and test the research proposition. Furthermore, the different sources of information were used to gather evidence and for the corroboration of information obtained from the different field procedures (triangulation).

The following field procedures were applied during the study:

4.8.1. Document review (archival, published and company based)

The selected case organisations are listed organisation that publish their performance and other key information that is aimed at shareholders. Desktop review was one on the publicly available information on the case study organisations. This information was used to establish the strategic position of the organisation and the context for the field work.

The following are some of the artefacts that were consulted during the research:

- Corporate strategy documents and annual reports
- Project portfolio management plans
- Project portfolio management reports
- Governance reports and supporting documents
- Corporate annual reports

4.8.2. Semi-structured interviews

Interview questionnaires were developed based on the conceptual model and key aspects that needed to be tested. The focus of the interviews was to gain insight on key areas required for the use of project portfolios in effective strategy execution that the organisation is strong at and those aspects that they need to improve on. Semi-structured interviews were conducted with the executives/senior managers from case study organisations in order to establish how effectively they are applying the components of the proposed conceptual model during strategy execution through the

Chapter 4: Research Design and Methodology

use of project portfolios. Two questionnaires were used with one aimed at establishing the context of strategy execution through project portfolios at the case organisation and the other focusing on establishing the effectiveness of the practices that are found to be in place. Validation questions were added to establish a link between the two questionnaires to assess consistency of the answers provided by interviewees. Summative questions were included to offer interviewees to contribute practices that are prevalent in the organisation which may have not been covered during the interviews as a way of enriching the outcome of the study with practices which may have been overlooked or not reported on in the literature.

4.8.3. Observations

Demonstrations were done with interviewees, where possible, to understand how the methodologies, system and reporting structures work within the case organisation. These were correlated with the answers provided by the interviewees and aspects which were observed during the review of company documents. The demonstrations were invaluable and allowed the researcher to assess how methodologies, systems and report structures contributed to the observed practices and any improvements that were implemented by the case organisation.

4.9. Data analysis techniques

A number of qualitative analysis tools were used to gain insights from the information gathered from different sources of data. AtlasTi version 7 was used as a qualitative tool to analyse the articles and the data that were gathered during the research. Network diagrams and code family structure were produced for analysis. Codes were analysed based on Groundedness and Density. Groundedness indicates the number of quotations linked to a code while Density indicates the number of other codes that are connected to a code. Vensim was used to analyse relationships between research elements in order to improve the understanding of interdependencies and influences among them. Excel spreadsheets were used to identify patterns and note trends from the data gathered during the review of documents obtained on case organisation and interviews conducted with representatives. The results of the first interview (which are descriptive, elaborative, detailed and unstructured) were captured on a word processor in order to generate a document that could be coded in AtlasTi for further analysis.

4.10. Data and information storage

A database of information used and gathered during the study was compiled to maintain the chain of evidence. A folder structure was developed and used to structure

Chapter 4: Research Design and Methodology

how information was stored. It should be noted that some sensitive information was not released by case organisations although reviewed at the case organisation. Key points that were noted from the sources of information (documents, videos, interview recordings and notes) were documents and filed. The objective was to document the study in a manner that allows it to be audited by an independent professional.

Chapter 5: Summary of case organisations

5. Summary of case organisations

Four case organisations were evaluated to establish how they use project portfolios to execute on their corporate strategy. The four case organisations operate in the freight, mining, research and development and telecommunications industries. The approach tested four elements of the conceptual model which are the strategic intent, project portfolios, project portfolio success, and business value.

The starting point was the verification of the process followed to develop the long term corporate strategy which informs the strategic intent of the organisation. The process sought to establish the approach applied by the organisation to ensure that the long term strategy sets the strategic direction of the organisation, it considers input from market insight, business insight, contribution from key stakeholders, and follows a structured approach incorporating market practices in strategy formulation. It was further established whether the corporate strategy is formally approved by the company executives and the board of directors as a requirement for good corporate governance.

The study also considered the extent to which the leadership team of the organisation played an integral part in the strategic management process, approval of the corporate strategy through the established governance structures, communication of the corporate strategy, managed business risk and adopted a governance structure to guide the organisation during the strategy execution process to realise business value. The evaluation of the case organisation to assess how they use project portfolios to execute their corporate strategy followed the following thinking (Figure 5.1) that is drawn using VinSim as a tool:

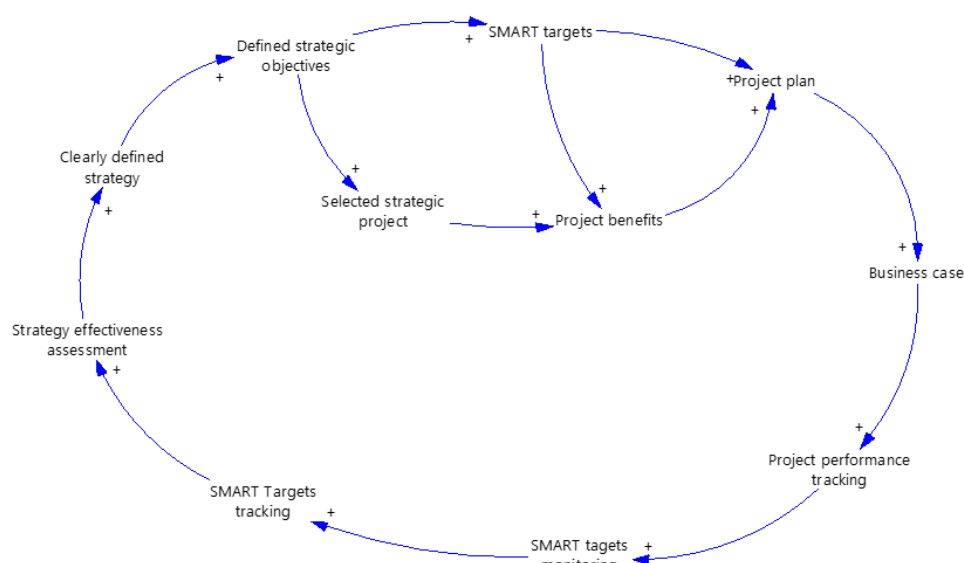


Figure 5.1: Approach in the evaluation of project portfolios in strategy execution

Chapter 5: Summary of case organisations

The study sought to establish how the approved corporate strategy was distilled into its corporate strategic objectives and their measurable targets. The development of the project portfolios for use in the strategy execution process. Development and execution of individual projects in the project portfolio to achieve the portfolio objectives and targets. Measurement and evaluation of the outcomes and benefits realised from the execution of the projects in the portfolio. Monitoring and reporting on the projects, project portfolio and overall performance against the corporate strategic objectives.

The study further sought to gain an understanding of how the results of the corporate strategic objectives were used to evaluate the value created by the organisation. This was assessed by reviewing how the achievement of corporate strategic objectives led to the realisation of the strategic direction and intent of the organisation. This was viewed as the contribution towards the realisation of the long term strategy and vision of the organisation. This is the process that is deemed as effective strategy execution to realise business value since it seeks to measure how well the organisation is doing in achieving its reason for existence as defined in its vision and mission statement.

Four case organisations were evaluated during the study and it was found that all four used project portfolios in the execution of their corporate strategy. The review of the annual reports over a period of seven years indicated that the following portfolios of projects were used to execute the approved corporate strategy:

Table 5:1 Table of projects used in strategy execution

Company	Focus of the corporate strategy	Programme / project
Freight	Growth and expansion	• Infrastructure investment programme • Appropriate and cost effective capacity creation programme • Customer service programme • Performance and efficiency improvement programme • Capital investment programme • Capacity building (expansion of operations) programme
Mining	Growth through expansion	• Mine expansion project 1 mine construction • Mining Company expansion projects • Business Unit 1 Jig plant • Business Unit 1 concentration brownfields project • Business Unit 1 lower grade project • Business Unit 2 expansion project • Phoenix project

Chapter 5: Summary of case organisations

Company	Focus of the corporate strategy	Programme / project
		• Mine expansion project 2 • Mine expansion project 3
Research and Development	Compliance and growth	• Business improvement • Capacity building projects • Research and development projects • Industry support projects
Telecommunications	Growth through better customer experience	• Network infrastructure • Customer service • Operations efficiencies • Expansion programme • Parent Group Global CARE • Digitalisation

The case organisations are identified by the industry which they operate in, in order to distinguish them. It was observed that there are aspects which are common among the four case studies and those which are different. The section below presents the observation on how the case organisations use project portfolios to execute their corporate strategy.

5.1. Freight

Freight Company's corporate strategy evolved in different ways between 2005 and 2019, where the business moved from establishing the Four-point turnaround strategy to improve its financial stability between 2005 and 2007, to Quantum leap and growth strategy to improve operational stability between 2008 and 2012, to implementing the Market Demand Strategy (MDS) to drive the growth of the business between 2013 and 2019. The evolution of the corporate strategy, its focus and strategic objectives are articulated in the Figure 5.2 below:

Chapter 5: Summary of case organisations



Figure 5:2: Corporate's strategy evolution between 2005 and 2017

Organisation's approach to executing strategy

The corporate strategy of Freight Company depends on the business environment and its changes which would inform the direction of the business. The market drivers have a bearing since the company considers how these changes have a bearing on how the company conducts business. It is considered that the business needs to adapt and consider changes in the environment. The Group Leadership Team (GLT) would consider the current corporate strategy and how Freight Company is doing in achieving the objectives. They would also look at the lifecycle of the strategy and how the company is doing in achieving the strategy. Top management continually scan the micro and macro environment and would then prompt the review of the strategy. Some of these changes would be considered as a trigger which would input into the strategy. The GLT would also consider what the Shareholder representative says given their requirements and direction. Freight Company's strategy is not prepared and developed in isolation but it would scope and frame the strategy of the organisation which will then be presented to the Shareholder Representative for consideration, who would then provide input on other matters which need to be considered. The Market Demand Strategy (MDS) had five strategic focus areas:

- Financial sustainability, to remain financially self-sustaining;
- Improve operational performance;
- Capacity creation and maintenance;
- Market segments competitiveness,
- Nine sustainable developmental outcomes.

Chapter 5: Summary of case organisations

The plan was to invest R330bn over seven years to realise MDS. Freight Company committed to five strategic focus areas but as the company was implementing, global and local economy was doing well but then there was a turn in the global economy in 2008/2009 with South Africa lagging and being hit in 2010/2011. The commodity prices were also affected thus impacting on the performance of Freight Company's clients and then that of Freight Company. There was a slowing down of global demand coupled with intensified competition on road freight. There was then price drops which affected the demand for rail. During the running of the MDS South Africa was also downgraded which meant that the cost of borrowing capital increased which meant that Freight Company could do less with the capital it had. The revenue target was based on the growing volumes and this was not realised thus the company then decided to cut down the investment in capital. It was anticipated that MDS will run for seven years with 2018 being the last year of MDS. The business then tested demand for rail and based on this it was then decided to cut down on capital expenditure since the demand has dropped.

The MDS was not wholly achieved due to changes in the market conditions and affordability of some of the projects as a result of the slump in the economic conditions thus leading to lower profits. These are being restructured with clients so that the company could see how other projects could be implemented to meet customer's requirements. The assessment of the business and market performance indicated that Freight Company need to change its strategy. This resulted in the formulation of Freight Company 4.0. The company has identified that there is a need to improve the quality of service to their customers. It also is missing the first and last mile connection which has led to the incorporation of these requirements in Freight Company 4.0. The company will be looking at regional integration as well in order to achieve its enhanced corporate strategy. The outcome of the evaluation of MDS is that it did achieve its original intent, with gaps to close through Freight Company 4.0.

The typical process is that the corporate strategy is developed taking into consideration the state of the business and policy imperatives from the Shareholder Representative, the requirements from business, and the state of the market among other things. The corporate strategy is developed to address the needs of the business, meet customer requirements and to achieve the national mandate. It is important to focus on positioning the business to realise its long term mandate. Other things that are taken into consideration is the need to diversify the business and its ability to source funding for growth for its sustainability.

There is no standard approach to strategy formulation. MDS was formulated based on the outcome of the in depth analysis that was done on the 30 year demand for commodities. This was based on demand of freight for commodities and thus the management team formulated MDS. Freight Company 4.0 was largely based on where the company is in terms of its operations and profitability taking into consideration the

Chapter 5: Summary of case organisations

changing market conditions, evolution into the digital era. The assessment of the trajectory of the digital revolution and how to grow outside of Freight Company's current business focus areas.

The corporate plan, budgeting process and Shareholder Compact are recommended to the Board by the GLT for approval. The key players are Group Finance, Group Strategy, Group Capital, Divisional Strategy Department, Business Development, etc. The Corporate Plan follows a guided process where guidelines are developed by Group Strategy and distributed to the Divisions / Business units with the theme for the year to guide the Divisional Strategy Department with the components that must be completed. The development of the Corporate Plan would cover: Overview, Geographic spread, Locomotive and wagon Plan, Regulatory Environment, SWOT analysis, Business performance, Critical success factors, etc. The templates would be developed and sent to divisions who will then complete and send them back. It is an iterative process which results in a draft version that goes to the GLT who will provide their input, and then the Board who will then provide their input until the document is finalised.

Freight Company has a very extensive regulatory and compliance universe from the different division and uses it to develop the consolidated universe which is evaluated to prioritise and come up with the top list which is managed through its operations. The risks would be looked from various perspectives and managed through the risk committee. In the executive overview there are top ten risks that are being managed through the risk management process. Business risk is provided for in strategy planning and execution. There is a Risk Management Team which works closely with Exco and then the BoD. Business risk management is imbedded into how things are done and it is managed through a sophisticated system that enable tracking and monitoring of logged risks. The preference is to have all risk management practices to be imbedded into how things are done but other business risks are standalone i.e. financial risk such as hedging, etc.

Project portfolios

The review of annual reports that are published by the Freight Company indicate that the following project portfolios were managed between 2010 and 2017 (Figure 5.2).

Table 5:2: Strategic project portfolios between 2011 and 2017

Strategic portfolios	'10	'11	'12	'13	'14	'15	'16	'17
Infrastructure investment programme								
Appropriate and cost effective capacity creation programme								

Chapter 5: Summary of case organisations

Strategic portfolios	'10	'11	'12	'13	'14	'15	'16	'17
Customer service programme								
Performance and efficiency improvement programme								
Capital investment programme								
Capacity building (expansion of operations) programme								

Key challenges and market factors experienced by Freight Company

The following market changes and internal factors were noted during the review of the organisation's integrated reports in the quest to appreciate the dynamics that affected the performance and turn of events within Freight Company:

In the quest to promote better customer service and to increase efficiency, in 2009 Freight Company focused on reengineering its logistics network which resulted in the company putting in place multi-disciplinary teams which focus on optimising the movement of freight along the key logistics corridors in South Africa (Freight Company SOC Limited, 2009). The company's performance in a difficult environment through 2008 demonstrated the steady improvements that have been, and continue to be, realised in the fundamentals of the business (Freight Company SOC Limited, 2009). It was reported in Freight Company SOC Limited (2009) that since the start of the Capital Investment Programme, 21 projects were launched, some in progress and others were completed successfully. In response to and for the duration of the economic crisis, Freight Company decided to focus on the pursuit of low cost growth opportunities, private sector partnerships, further cost reductions and enhanced efficiency of the Capital Investment Plan (Freight Company SOC Limited, 2009) in which the bulk of the investment, some R10,9 billion or 56%, was allocated to the expansion of operations by providing additional capacity while R8,5 billion or 44% was spent on the maintenance of existing infrastructure. Freight Company SOC Limited (2009) reported that the main objective of the funding strategy was to ensure that Freight Company has adequate liquidity to meet its operational and capital expenditure requirements cost effectively given that the organisation believed in a self-funding operating model. It was reported in Freight Company SOC Limited, (2009) that during the year the programme for disposing of non-core assets as part of the strategy to focus the Company on freight transport continued and is then nearly complete. The company noted that despite the successful implementation of the required changes, market conditions, particularly during the second half of the year, not all volume growth targets were achieved (Freight Company SOC Limited, 2009).

Freight Company SOC Limited (2010) reports that a robust cost-cutting exercise implemented at the onset of the economic crisis resulted in a reduction of

Chapter 5: Summary of case organisations

approximately R1,9 billion of costs compared to planned expenditure regardless of high increases in input costs such as electricity and fuel. It was further noted that despite steady gains in key areas of the business over the previous six years, Freight Company's operational performance had generally fallen short of world-class standards, and this lethargy in performance has impeded the successful realisation of the company's Growth Strategy as first envisaged five years ago (Freight Company SOC Limited, 2010). It was thus the intent of the Quantum Leap initiatives to change the trajectory of performance improvements to a significantly higher level (Freight Company SOC Limited, 2010).

Freight Company SOC Limited (2010) reports that capital investment was planned to increase in the short to medium term where Freight Company planned to invest R93,4 billion over the following five years while it seeks to leverage additional investment opportunities through private sector partnerships. It was also noted that Freight Company had emerged from the recession in a strong position and was therefore poised to harness and benefit from the emerging upswing in the economy (Freight Company SOC Limited, 2010). However, poor conditions in the domestic economy impacted Freight Company negatively across most segments of the general freight business (GFB) with total general freight volumes declining by 8% year-on-year (Freight Company SOC Limited, 2010).

In 2011 the company reported that the underlying urgency on volume growth, increased productivity and efficiency, capital investment, financial sustainability and safety, were the core elements of the Quantum Leap strategy and continued to inform efforts to improve customer service (Freight Company SOC Limited, 2011).

Freight Company changed gears in 2012 in response to the prevailing market conditions. Freight Company SOC Limited (2012) reported that it adopted the Market Demand Strategy (MDS) in which the strategic focus areas sought to address productivity and efficiency improvements, volume growth, financial sustainability, skills development, job creation, infrastructure development, safety, preferential procurement and enterprise development, as well as regional integration and regulatory certainty. The MDS had been subdivided into eight focus areas based on the Company's commercial needs and South Africa's broad macro-economic and developmental objectives (Freight Company SOC Limited, 2012):

1. "Optimising capital investments and growing the asset base";
2. "Growing volumes and market share";
3. "Improving operational efficiencies";
4. "Secure funding and continued financial strength";
5. "Prioritising SHEQ, sustainability and risk";
6. "Meeting complementary objectives of the NGP through job creation and skills development";

Chapter 5: Summary of case organisations

7. “Creating regulatory certainty”; and
8. “Promoting strategic enablers, governance and creating a high performance culture”.

The current economic and market environment is characterised by significant uncertainty and change, particularly in the short term in which Europe’s ongoing financial crisis has left the global economy at risk of a deep and prolonged recession (Freight Company SOC Limited, 2012). However, it was noted that the longer-term outlook remains positive for South Africa and the region, with continued growth in emerging economies driving increased commodity demand (Freight Company SOC Limited, 2012). It was anticipated that changing global and regional trade patterns would benefit the region as increased trade volumes and connectivity made it easier for regional firms to participate in global manufacturing supply chains (Freight Company SOC Limited, 2012). It was reported that growth forecasts were significantly downgraded with the World Bank forecasting growth of 2,5% and 3,1% in 2012 and 2013 versus the 3,6% projected in June 2011 for both years (Freight Company SOC Limited, 2012).

In 2013 Freight Company noted that adverse market conditions together with operating challenges which included lower than anticipated volumes, customer cancellations, rolling stock inefficiencies and infrastructure failures, meant that the company could not achieve 49% of the demand productivity and efficiency targets that were set for year (Freight Company SOC Limited, 2013). Nonetheless, two international rating agencies confirmed Freight Company’s strong standalone credit profile with Moody’s holding Freight Company’s rating a notch above sovereign (Freight Company SOC Limited, 2013).

Freight Company SOC Limited (2015) reported that the year was characterised by lower than anticipated economic growth, depressed commodity prices and sporadic labour unrest in some sectors of the economy which was exacerbated by power supply challenges and rising electricity and fuel costs, the impact of which was felt throughout the business. Freight Company SOC Limited (2015) reported that the organisation established the MDS implementation plan which was encapsulated through eight pillars comprising four strategic imperatives and four foundational enablers as outlined below:

1. “Capital planning and execution: Freight Company will provide critical logistics infrastructure and capacity”.
2. “Grow volumes, enhance customer satisfaction and improve market share: Freight Company will work to ensure customer satisfaction and transform the transport industry, thereby growing volume”.
3. “Operational efficiencies and productivity: Freight Company will improve operational efficiencies and pursue performance excellence in all they do”.

Chapter 5: Summary of case organisations

4. “Finance and funding: Freight Company will pursue financial sustainability through responsible finance and funding and Private Sector Participation”.
5. “Constructive stakeholder relations: Freight Company will engage internal and external stakeholders on critical issues to support the MDS and to promote a collaborative view of the transport sector”.
6. “Organisational readiness: Freight Company will promote a high performance culture that prioritises safety and inclusiveness and creates an integrated organisational structure”.
7. “Sound governance and ethics: Freight Company will ensure ethical leadership, regulatory compliance, social accountability and environmental stewardship; and promote an impeccable governance and risk framework”.
8. “Human capital: Freight Company will build a skilled and representative workforce”.

Freight Company SOC Limited (2016) reported that in order to remain agile and resilient in the face of projected declining demand and lower volumes performance from four major customers, the company continuously modulated its spend to ensure that capacity is created ahead of tested demand. It was reported in Freight Company SOC Limited (2016) that oil and other non-energy commodities were the world’s worst performing sectors for the second year running and as a result projections of future growth from key commodity customers indicate a lower growth path, which in turn required a slower pace of capacity creation from Freight Company, aligned to tested demand. It was reported that during the year, continued economic uncertainty and muted growth, characterised by weak demand for commodities and manufactured products, and low commodity prices triggered severe turbulence in markets (Freight Company SOC Limited, 2016). It was noted that the decline in commodity prices was driven by weak demand from China and a strong US dollar for commodity-importing emerging economies, and this decline in commodity prices led to the lowest demand in key commodities, such as steel, iron ore, coal, chrome and manganese, to levels previously experienced during the recession of 2008 (Freight Company SOC Limited, 2016). Furthermore, it was acknowledged that this had resulted in a new ‘mediocre normal’ in the demand for commodities and created a recession in the logistics sector (Freight Company SOC Limited, 2016). Furthermore, in addition to impacting the primary sectors of mining and agricultural commodities, the effect was felt across the board, hampering the secondary (manufacturing) and tertiary (consumption) sectors of the economy (Freight Company SOC Limited, 2016). However, the global and domestic macroeconomic strain on customers, especially commodity customers, pressured total rail volumes to fall to 214,2mt from 226,6mt in the previous year and as such in order to mitigate the impact of the slow growth, Freight Company implemented various cost-containment measures throughout the company (Freight Company SOC Limited, 2016).

Chapter 5: Summary of case organisations

Freight Company SOC Limited (2017) reported that as a response to changed business conditions, the organisations had introduced four MDS strategic thrusts to drive an organisational culture that can thrive amid exponential change, while still committed to a counter-cyclical investment strategy the implementation of the MDS in the current economic climate required more agility. It was confirmed that the key driver behind the large MDS capital investment programme remained the need to close the gap between the market demand for cargo transport and handling services, and the infrastructural capacity to satisfy this demand (Freight Company SOC Limited, 2017). It was also reported that the longer-term vision for Freight Company was encapsulated in its new strategic framework, Freight Company 4.0, as introduced in the current Integrated Report in which the framework sets the scene for the company's future commercial activities and will, importantly, guide its activities for the remaining MDS period while establishing a firm foundation for activities post-MDS (Freight Company SOC Limited, 2016).

Freight Company SOC Limited (2017) reported that whereas historically reporting was based both on its commercial success and the success of its Sustainable Developmental Outcomes squarely on the inherent value created by Freight Company's infrastructure expansion and logistics activities, there was now a need to acknowledge the exciting but daunting prospects inherent in the fast-emerging digital paradigm of the 4th Industrial Revolution. The company acknowledged that it required resilience, agility and adaptive capacity to transition successfully over the coming decades (Freight Company SOC Limited, 2016). Furthermore, it was reported that on a continent still widely challenged by social inequalities, food insecurity and persistent job losses, a transition to a futuristic digital paradigm seems remote (Freight Company SOC Limited, 2016). However, it was embraced that this change is exactly the fertile soil from which emerging technologies, entrepreneurial ideas and tenacious digital innovations will grow and thrive, leapfrogging the growing pains experienced by developed economies through technological advancements (Freight Company SOC Limited, 2016). In response, Freight Company intends to thrive in this new paradigm and was enlightened that to be successful, the company must both simplify and ramp up its current operations to meet the one consistent feature of this new landscape, which is unprecedented change (Freight Company SOC Limited, 2016).

The following top 10 business and strategic risks were noted (Freight Company SOC Limited, 2017):

1. "Macroeconomic environment"
2. "Energy supply"
3. "Capital execution"
4. "People management"
5. "Pricing"
6. "ICT infrastructure"

Chapter 5: Summary of case organisations

7. "Productivity and efficiency"
8. "Operational readiness"
9. "Regulatory"
10. "Volume growth"

The evolution of Freight Company's corporate strategy between 2005 and 2019 demonstrates the company's ability to respond to internal and external factors in order to remain resilient and sustainable in the long term. The process was an inside out transition which sought to build internal capability while responding to market needs. The evolution from improving financial and operational stability to focusing the MDS strategy illustrates that Freight Company is forward looking. This is supported by the evolution and introduction of Freight Company 4.0 which seek to position the company to align and respond to the digital era.

The corporate strategy and focus of the Freight Company evolved between 2008 and 2017 with the organisation moving from establishing the Four-point turnaround strategy to improve its financial stability between 2005 and 2007, to Quantum leap and growth strategy to improve operational stability between 2008 and 2012, to implementing the Market Demand Strategy (MDS) to drive the growth of the business between 2013 and 2019. The Freight Company is currently at the early stages of implementing the Freight Company 4.0 with objective of enabling the organisation to operate and take advantage of the digital revolution.

5.2. Research and Development

The review of the integrated reports of the organisation from 2011 to 2017 as well as the interviews which were carried out with the representatives from Research and Development Company revealed that there were two areas of focus for the organisation as illustrated in Figure 5.3 below:

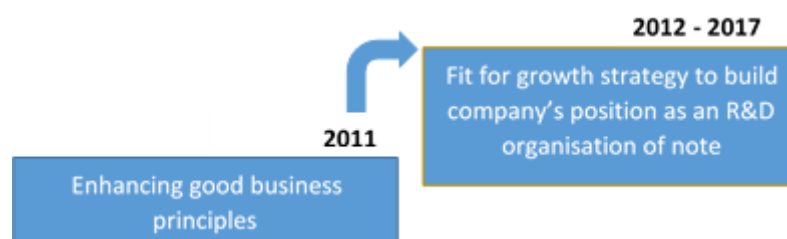


Figure 5.3: Corporate's strategy evolution between 2011 and 2017

Chapter 5: Summary of case organisations

Organisation's approach to executing strategy

The corporate strategy is developed based on Research and Development Company's Mandate thus focusing on what is required. Consideration is given to what is happening in the Mining Sector and this will inform the strategic objectives of the organisation. The corporate strategy is developed on what the business requires at the time i.e. Vision 2020 focusing on R&D and Technology, Research and Development Company 4.0 focusing on repositioning the business and acquiring skills of the future. The corporate strategy is centred on research and development since this is the primary activity of the organisation and will be aligned to Research and Development Company's mandate. The development of the strategy starts in November each year and the company works towards October of the following year. The corporate strategy was structured around four to five pillars (strategic thrusts) that pulls the strategy of the organisation together.

Vision 2030 provides the broad strategy of Research and Development Company. It takes into consideration what has happened historically. Management hold annual strategic sessions which are held generally in November and these occur on a 3 year term. This session would take into consideration the national priorities based on the macroeconomic policy of the country (i.e. NDP). The Department of Mining Resources (DMR) and the Department of Science and Technology (DST) would make presentations which speak about the national priorities, what their broad strategic objectives are and how Research and Development Company could fit and contribute to these areas of policy taking into account the macroeconomic factors. A Research and Development Company representative would deliver a presentation on the outcome of the market scan and assessment in order to contribute to the strategy development process. The plan focuses on the coming year and the output of these sessions is the Compact with the Shareholder (DMR). The Compact contains the scorecard targets, KPA and KPI which the company needs to achieve. The strategy is broken down into yearly KPA and KPIs that Research and Development Company needs to achieve. It covers priority areas, scorecard and targets for the year.

The management team conducts research and uses a formalised process to compile work packages (portfolios) for various divisions (research clusters). There are normally multiple projects that make up a work package. The research clusters are defined by the long term view of what is strategic for the organisation to research. There is a framework (funnel type) which is used to select research projects that will be funded. In the initial rounds there are more projects proposals that are evaluated at cluster level by technical experts. The shortlisted ones will be passed on to the adjudication committee which is made up of General Managers who would assess the merit of the work package and balance the projects against the funding available, capacity of each division to execute, technical capabilities and corporate priorities (work package motivations).

Chapter 5: Summary of case organisations

There is a multi-dimensional matrix that is used to evaluate the proposals and work packages for various clusters, they are categorised based on a number of things such as the impact of the project, resources, job creation, process optimisation, level of technology, commodity, national priorities linked to the NDP. There is an ideal distribution of projects that is targeted and this will be used to evaluate the final portfolio of selected projects. At the beginning of the year work package leaders could apply for changes which may include changes of budgets. Once the portfolios are finalised then an Enterprise Resource Planning system workflow embedded in web-based collaboration platform would route the budget to Finance for consideration and approval based on the available budget. Funds that are left over or come from terminated projects would be made available to accommodate other proposals.

The process to evaluate the work packages is intense, includes motivations (narrative) by the cluster leaders and those who made proposals. The summary document on the approved projects would be made available at the beginning of the year (January/February). The initial strategy session, which highlights the broader and key issues would have been concluded before the project proposals are adjudicated thus enabling the GMs to approve the work packages in accordance with the corporate strategy for the year. This enables the alignment of the outcome of the adjudication of the work packages to be aligned to the corporate strategy.

In the research proposal the divisions would document the background of the project, specific objectives, outcomes (what will be delivered as impact), budget, resources including people. Objectives are what will be used to evaluate and prioritise the proposals. The budgets for the different work packages would be rolled up to make up the budget for the division. A summary is presented for each division based on the budget. There is a workflow incorporated in the SharePoint system that is used by Research and Development Company to manage their portfolio of projects.

The strategy planning session involves senior management, executives, half the Board, and the main stakeholders (DMR, DST). There is normally a facilitator that would guide the team and the process. Managers, Executives, Board of Directors, a facilitator of the strategy session and the New Business Development Unit would consolidate the draft corporate strategy document. There are usually presentations by market players to share insights on prevailing market conditions. The session would have an industry representatives who would make presentations but do not participate in the planning sessions.

After the strategy session the management team would have a consultation process to check the outcome of the long term strategy. The company has strict time frames to complete the process in that the strategy session is held in November and by January of the following year the company should have a draft Compact document and together with the budget must be submitted to the Minister for approval before the end of

Chapter 5: Summary of case organisations

February. The strategic plan is an internal plan, which is deemed as a working document, and is normally revised every three to four years. The business however report on both the Compact and the Strategic objectives which are reflected in their annual report.

Project Portfolio

The analysis of annual reports indicates that Research and Development Company focused on business improvement, R&D and industry support projects in 2011, which is in agreement with the observation of the evolution of the strategy of the organisation. The focus shifted from 2012 to 2014 to capacity building, R&D and industry support projects. It was also noted that the focus for 2015 to 2017 was largely on R&D and industry support projects (Figure 5.3).

Table 5:3: Strategic project portfolios between 2011 and 2017

Strategic portfolios	2011	2012	2013	2014	2015	2016	2017
Business improvement							
Capacity building projects							
Research and development projects							
Industry support projects							

It is observed that the portfolio of projects that is reported on in the annual reports is strategic in nature and cover key areas in the business. It was however, noted that business improvement projects were largely reported on in 2011 which links to the evolution of the corporate strategy where the focused was on enhancing good business principles as a foundation for growing the organisation. While between 2012 and 2014 the organisation focused on capacity building projects to position it as a Research and Development organisation of note.

Key challenges and market factors experienced by the Research and Development Company

The review of the integrated reports shows that in 2011 Research and Development Company focused on enhancing good business principles as a foundation for growing the organisation. It was noted that between 2012 and 2017 the organisation pursued a strategy that was fit to build Research and Development Company's position as an R&D organisation of note.



Chapter 5: Summary of case organisations

The following market changes and internal factors were noted during the review of the organisation's integrated reports in the quest to appreciate the dynamics that affected the performance and turn of events within Research and Development Company:

The global economic crisis that prevailed during 2011 had a negative effect on the profitability of the organisation (Research and Development Company SOC Limited, 2011). However, the organisation managed to achieve a 2% saving in costs, implemented the mining, mineral process and beneficiation objective of the New Growth Path (NGP) and considered the development of new technology aimed at handling issues such as Acid Mine Drainage (AMD) (Research and Development Company SOC Limited, 2011).

The global economic uncertainty persisted into 2012 however, the organisation was resilient delivering better than budget revenues, gained from cost saving initiatives and ended the financial year with a surplus cash of R43m (Research and Development Company SOC Limited, 2012). In the quest to remain afloat, the organisation explored growing its revenue pipeline by exploring commercial projects and bidding for work (Research and Development Company SOC Limited, 2012).

The year 2013 saw water and energy constraints which Research and Development Company sought to support the mining industry with through efficiency projects (Research and Development Company SOC Limited, 2013). Furthermore, Research and Development Company increased the volume of research work it conducted, entrenched a culture of cost savings to improve profitability and improved on its collection strategies in order to recover funds from customers (Research and Development Company SOC Limited, 2013).

The year 2014 proved to be an interesting one in that the global mining industry was positioned to enter a period of distinct structural change since the African continent became the new destination for exploration of untapped and largely unexplored resources (Research and Development Company SOC Limited, 2014).

The world economy in 2015 showed a decline in commodity demand and prices that led to a concomitant drop in projected income which was expected to prevail throughout the year (Research and Development Company SOC Limited, 2015). However, the downward spiral in mining activity was expected to ease somewhat during the latter part of 2016 (Research and Development Company SOC Limited, 2016) which bode well for the organisation given its focus on R&D projects that sought to benefit the mining industry. In 2016 the resilience of the mining industry continued to get tested by low commodity prices thus leading to Research and Development Company's commercial activities being placed under severe strain (Research and Development Company SOC Limited, 2017). However, the market sentiment was changing since industry analysts suggested that the downward spiral had bottomed

Chapter 5: Summary of case organisations

out and the outlook was upbeat from the beginning of 2017 (Research and Development Company SOC Limited, 2017).

The following top business and strategic risks facing the organisation in 2017 were noted (Research and Development Company SOC Limited, 2017):

1. “Loss of commercial revenue”.
2. “Operational incident causes injuries, destruction of building and equipment or loss of licence to operate scheduled processes”.
3. “Failure to attract and retain skilled personnel”.
4. “Changing Government policies and priorities”.
5. “Surge in operational costs”.

The review of Research and Development Company’s annual reports revealed that the organisation survived difficult external and market conditions over the period of review. It is commendable that Research and Development Company was able to remain afloat while contributing to the mining industry and its clients during this time.

The journey of the Research and Development Company between 2010 and 2017 reflects that the organisation was focused and intentional in establishing its approach to execute the corporate strategy through project portfolios although in the absence of striving to achieve its strategic intent (reason for existence or mandate of the organisation). This largely illustrates how the Research and Development Company applied the conceptual model developed for the research although the link between business value and the strategic intent was inadequate.

It was emphasised by representatives during interviews that the CEO was extremely focused on developing systems, measuring success and reporting on the performance that was achieved across the organisation. The CEO started, in his early years, by streamlining how things are done. It was also shared that the CEO applied a leadership style that focused on compliance thus providing the necessary resources to achieve compliance and this resulted in the organisation achieving clean audits.

It was noted from the case study results that the Research and Development Company has a defined corporate strategy which it executes through the use of projects, the organisation does evaluate its performance against the strategic objectives and targets as well as link the achieved performance to its mandate as defined in the Compact.

5.3. Mining

Mining Company was registered as a legal entity in May 2005 and started trading in November 2006, following the unbundling from Mining Company Resources Limited. The company reported for a full year at the end of 2007. The evaluation of Mining Company was done from 2007 to 2017, covering a period of ten years. It was noted

Chapter 5: Summary of case organisations

that from 2007 to 2010 the company focused on increasing its production throughput from 45Mtpa to 70Mtpa by 2019. The strategy shifted to increase the target to 80-90Mtpa by 2020 through exploration of life of mine (LOM) expansion projects. The environment in which Mining Company operated become more stringent resulting in the change in strategy to operate a lean operation with a resilient operating mode. The evolution of Mining Company's operating strategy over the period of review is depicted in Figure 5.4.

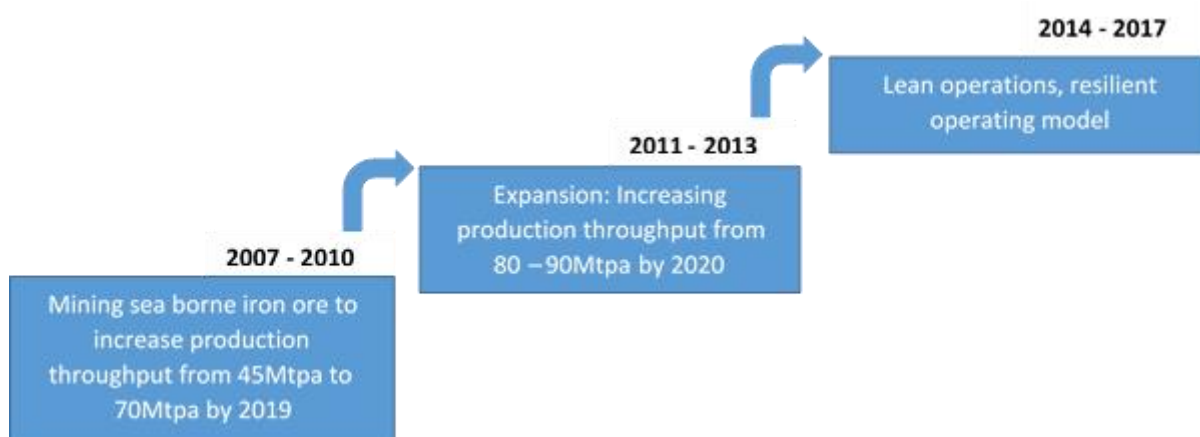


Figure 5.4: Corporate's strategy evolution between 2007 and 2017

Organisation's approach to executing strategy

Strategy formulation for Mining Company is triggered through the Resource Development Plan (RDP) by exploring an area where the organisation seeks to develop its mining asset and be in the first quartile of the margin curve. The company assesses the full potential of the area they are in including assets which the business does not own, opportunities for growth and expansion i.e. mining rights that they could gain to extend the life of mine (LOM), Mergers and Acquisitions (M&A), Joint Ventures (JV), New Technology, New Business Development, etc. The consideration is broadened to look at things that the organisation knows, opportunities for mergers, how technology could unlock opportunities and other aspects which the company has not identified.

The organisation would devise strategies around LOM execution, M&A JV, technology, and exploration. Mining Company normally develops the RDP within the context of where the company would like to be as a business. Mining Company currently has Primary Business Unity at 10 – 15 years LOM and the ambition is to extend it to 20 years plus. When the company evaluates opportunities it would then assess whether the region could achieve a 20 year plus LOM and what could be done to achieve this ambition as guided by the CEO. The company would then explore options that would enable it to achieve the ambition.

Chapter 5: Summary of case organisations

Mining Company has a LOM plan which the company runs and monitors annually. The organisation has developed targets on the RDP and LOM, on which it applies options (Mergers and Acquisitions (M&A), Joint Ventures (JV), New Technology, New Business Development, Exploration, others) to assess their contribution to the realisation of the aspiration. Each one of these options has a long term effect (generally in the next two years) on the strategy and as such the company has a Project Support Office (PSO) to guide the process of developing these strategies over time. The RDP sets the strategic direction of the business and once the company has secured mining rights it would bring the asset into the LOM process.

Mining Company can only schedule and mine assets which are owned by the company. The acquired asset would then be assessed based on the level of confidence. If it is at a high level of confidence then it goes straight to feasibility after which it is added to the LOM then it proceeds to the next cycle which is the LOM process, alternatively it goes through the studies which are either an exploration process or a study process which entails concept, pre-feasibility and feasibility. Once the project has successfully passed the feasibility stage then it becomes part of the LOM process.

The strategic planning process starts with the review of where the steel market it is going since the iron ore that Mining Company mines goes into steel. The company would look at where the steel market is going across the world and then decide what strategy to follow given what the steel market does. Mining Company would then decide what strategy the company is going to follow. The strategy planning process would look at what the steel market does which is then tied with the resource which the company has in the ground (resource). The objective is to match what the company has in the ground and what could be produced (production throughput) which would then be tie to iron ore supply and steel demand.

In the strategy planning process Mining Company looks at the type of product that the company is going to supply, when and to which customer, and marry that to what is coming out of the ground to assess what the projection means in terms of supply. Furthermore, consideration is given to the long term iron ore prices because the price dictates on how deep the pit should be. Mining Company subscribe to a number of forecasters and price analysts who will have a view of the benchmarked indexed price for iron ore is. The company would adopt the forecasted price for the business plan as well as the Life of Mine (LOM).

The iron ore price dictates the strategic thrusts on the mining approach the company would follow not only for operations but for new capital the company will deploy since ROI that could be achieved given the prevailing market conditions is one of the key considerations in the investment decision. The ROI needs to consider the exchange

Chapter 5: Summary of case organisations

rate and its volatility. The company would also consider the political and regulatory climate since these have a bearing on the strategy.

The corporate strategy is structured around the life of mine and linked to the five year plan. The corporate strategy is derived from the LOM, brought into a five year view and then brought into an annual view. The corporate strategy originates from the CEO's office and delegated to the different BUs. It is required that the objectives and targets are communicated and must filter through to the business units across the organisation. The BUs must then develop their own plans in line with the strategy issued from the CEO's office. This message will then be reflected in the different business unit's or department's plans in terms of numbers for the next five years (horizon) and the following year (annual plan). The financial strategy will dictate the financial ambitions which translates into operations ambitions for the BUs.

The BUs and different divisions would then compile their plans which will articulate the daily targets which should be achieved in order to realise the targets in the corporate strategy. The process would include conducting a scenario planning process to assess the effect of the different actions on the set targets to estimate the outcome and their effect on the bottom line, capital profile, balance sheet, stock levels, mining costs, etc. The process involves an interaction between technical and finance. The outcome will then be reviewed against the prevailing performance so that they could refine the corporate strategy if necessary. The scenario planning would consider different options from which the best scenario would be selected which will then be tested or compared to the projected performance.

Once the scenario planning process is complete, the outcome would be assessed against the strategy to test whether the projected numbers are supported or not, and whether the strategy is sound or not. This process would consider the planned capital investment and how much could be spend by the business in the different portfolios i.e. stay in business, growth and/or studies. The outcome would also reconcile the projected spend (capex and opex) to the performance which the company may achieve once the funds are invested. This process will then inform the prioritisation and portfolio optimisation given the projected performance and affordability.

Mining Company has a formalised risk management process that sits under the CEO which is reviewed on a monthly basis to assess business and strategic risks, to identify which risks are affecting the strategy and which ones the company introduces by making certain decisions. At a board level Mining Company has an Audit and Risk committee that looks at the strategic and business risks. The board of directors monitors a list of top five risks and the Exco Level will manage the top 15 risks. On a monthly basis, the risk profile is tracked to monitor how they are changing so that decisions would be made to manage and mitigate them.

Chapter 5: Summary of case organisations

Project Portfolio

The Mining Company's commercial activities are informed by the Corporate Strategy Guiding Document which directs when things need to be done and thus this specifies the business priorities at the time. The Corporate Strategy Guiding Document reflects objectives and details such as when the company needs to be working on, financial target, level of complexity, ease of hitting the target, etc. which then feeds into the planning process. The Mining Company uses ranges and sensitivities to assess the most likely performance in order to manage uncertainty on the performance that could be achieved. The Monthly Operations Plan (MOP) process is also an insightful process beyond being mechanistic because other things could be analysed based on intuition given what has happened or is happening in the business (insightful experience).

The MOP is the formal process which is used to manage the execution of the strategy. The MOP draws from demonstrated performance that was achieved by the business. The company has different MOPs for its targets that track how the business is doing against budget. In instances where the business is running, corrective action is carried out to achieve or get closer to budget. The business would source the services of the Business Improvement (BI) unit which has the capability to support the business in this but where specialist skills are required they could be procured.

The Mining Company has adopted a portfolio approach which is used to select and execute projects that are key to the delivery of the corporate strategy. The following projects, noted from The Mining Company's annual reports, were executed between 2010 and 2017 in order to realise the set corporate strategy and its thrusts (Figure 5.4).

Table 5.4: Strategic project portfolios between 2010 and 2017

Strategic project	'10	'11	'12	'13	'14	'15	'16	'17
Mine expansion project 1 mine construction								
Mining Company expansion projects								
Business Unit 1 Jig plant								
Business Unit 1 concentration brownfields project								
Business Unit 1 lower grade project								
Business Unit 2 expansion project								
Phoenix project								
Mine expansion project 2								
Mine expansion project 3								

The experience in projects vary at The Mining Company and thus there is recognition that portfolios are dynamic with projects performing at different levels with others failing while others succeeding. The organisation holds the view that there needs to be a large enough portfolio which will enable the organisation to manage the value realised from the portfolio. There is a need to have a good stream of ideas (potential projects) to

Chapter 5: Summary of case organisations

enable one to effectively manage the value expected from a portfolio. This is an area where The Mining Company needs to improve. There are a lot of great ideas but these have not been translated into projects in pre-feasibility and feasibility stages. There is a need for a good pipeline of projects and these need to be advanced through the project lifecycle beyond concept stage and get through to pre-feasibility to feasibility. This will enable the company to identify projects which could be advanced given their capital budgets and capabilities (projects, rail, equipment, etc.). The overall approach is to explore brownfields projects and then greenfields projects in order to manage the demand on the capital expenditure.

It was noted during interviews that The Mining Company has a formal project portfolio structure that is used to select projects to execute the corporate strategy. There is a defined evaluation criteria that is used to select optimum projects given the corporate strategy. The project are then executed in a structured way, however it was highlighted that the approach is not consistent as there are pockets of excellence throughout the organisation (head office and business units) given the experience and competency of the project manager that is responsible for the delivery of the project.

Key challenges and market factors experienced by Mining Company

The following market changes and internal factors were noted during the review of the organisation's integrated reports in the quest to appreciate the dynamics that affected the performance and turn of events within Mining Company:

The company operated in a buoyant market during 2007 which was expect to persist into 2008 with spot prices into China, with a consumption of 45% of global seaborne iron ore, still much higher than contract prices as well as market fundamentals that support a significant price increase in excess of 65% for the 2008/9 iron ore year (Mining Company, 2007). Locally there was an acute shortage of skills and infrastructural constraints, from electricity supply to transport facilities, where there were risks of curtailing the country's economic growth potential and this was expected to be exacerbated by any negative developments internationally, such as a recession in the United States (Mining Company, 2007).

In order to achieve its target of doubling export production capacity by 2013, the focus for Mining Company in the coming five years was going to be on developing the iron ore export channel further in partnership with Freight Company and other stakeholders, securing regulatory approval for the South African expansion projects such as Primary Business Unity South, and a first-stage development outside South Africa such as the exploration under way in Guinea (Mining Company, 2007). It was reported in Mining Company (2007) that the company's project pipeline was healthy and balanced, with projects in the Northern Cape, elsewhere in South Africa and in Africa offering the

Chapter 5: Summary of case organisations

potential to grow towards 70Mtpa and beyond, with continual review of the project pipeline to consider operating and market conditions.

The year 2008 saw the drop in the commodity price and what appeared to be an end to a commodity price boom due to the dropped demand for iron ore, amidst a prevailing global economic meltdown with 30% drop in production cuts at major steel mills and slowing demand in steel from the South African environment (Mining Company, 2008). It was further reported that low demand in iron ore was expected to decrease until the economy recovers. Mining Company managed to secure a new order mining right for the Primary Business Unity South project which bode well for improving throughput to achieve the target of 70Mtpa, as the company was poised to weather the market volatility by keeping a watchful eye on costs and improving asset optimisation, and also finalised an agreement on expanding iron ore export channel with Freight Company (Mining Company, 2008).

Sound long-term fundamentals of iron ore industry with positive demand from China were noted in 2009 (Mining Company, 2009). While in 2010 an additional value was captured across the value chain by achieving exceptional prices for niche products and once again making additional profits on the shipping business (Mining Company, 2010). Despite the economic environment, Mining Company managed to deliver record earnings due to the climate for iron ore, a substantial increase in export prices and increased sales volumes and finalised an agreement on expanding iron ore export channel with Freight Company (Mining Company, 2010).

Mining Company noted that 2011 was a year of two halves, a strong start in the first six months with a weaker finish, in which China accounted for 68% of Mining Company's export sales and global crude steel production rose by 6%, up by 7% in China and up by around 4% in Mining Company's traditional markets (Europe, Japan and Korea) (Mining Company, 2011). It was reported that the Eurozone contagion presented a threat that could affect demand in a manner similar to that following the market crisis of 2008, with the prevailing view at the time being that the situation would be temporary, although there was the potential for a negative effect on steel prices, giving rise to production cutbacks, with a consequent impact on iron ore demand and pricing (Mining Company, 2011). Furthermore, it was reported that Mining Company had noted European production reduced by up to 20% towards the end of 2011, however was noted that mills appeared to hold less iron ore stock than was the case in 2008 thereby potentially muting the overall impact on demand (Mining Company, 2011).

The outlook on the trading environment in 2011 was that fundamentals of the global iron ore industry had been excellent for the previous three years and Mining Company believe that this environment would persist for the foreseeable future, albeit at somewhat subdued levels (Mining Company, 2011). However, it was reported that the

Chapter 5: Summary of case organisations

market supply/demand relationship had been tight especially on the price of iron ore, with supply of iron ore constrained amid rising demand from the global steel industry (Mining Company, 2011). Furthermore, the company experienced solid demand growth from China, with a positive outlook on growing demand for iron ore due to envisaged demand for steel to support continued urbanisation and infrastructure development (Mining Company, 2011).

Mining Company's strategy evolved during 2011 as the company moved from being a South African company focused on growth, to becoming an African growth company, with the potential for much more ambitious growth from a second, African footprint (Mining Company, 2011). It was reported that the company had set its sights on the mineral-endowed west and central African region (Mining Company, 2011).

The year 2012 was a difficult one with 23% decrease in realised average export iron ore prices of US\$122/tonne, however the declining iron ore prices in the first three quarters of 2012 gave way to a pleasing recovery in iron ore prices in the latter part of the year including global crude steel production rising to 1.6 billion tonnes which was primarily driven by China (Mining Company, 2012). The volatility of the global markets, particularly the slowing economic growth in China which affected the demand for and prices of iron ore, as well as the protracted impact of the global financial crisis, combined with the Eurozone sovereign debt crisis, played a role in the company's mixed fortunes during the year (Mining Company, 2012). Mining Company remained resilient with the outlook anticipating firm prices, a stable demand counter-balanced by growth in seaborne iron ore supply, with the likelihood of softening iron ore prices in the second half of 2013 (Mining Company, 2012).

Unfortunately, labour unrest that was experienced in the fourth quarter of 2012 at Primary Business Unity mine was unexpected given the historical state of employee relations within the group, and was viewed as disappointing by Mining Company given that employees had benefitted significantly from the Envision programme (Mining Company, 2012).

The year 2013 for Mining Company was one of transition in which the company revised its strategy given the significant change in the landscape and strengthened its purpose amidst business challenges and successes, and believed that an essential part of strategy implementation was to ensure that every member of the company understood the strategy and their role in it (Mining Company, 2013). It was reported that external influences included the volatility in the market demand and the general sentiment in South African mining, and internal factors encompassed the redesign of Primary Business Unity, the continued ramp-up of Secondary Business Unity, the final judgment from the Constitutional Court, and the new supply agreement signed with a Steel Producing Company (Mining Company, 2013). The goal was to effectively optimise current operations and grow the South African pipeline, with the development

Chapter 5: Summary of case organisations

of the second footprint elsewhere in Africa remaining a long-term priority (Mining Company, 2013). The company was pleased with the judgment that was given by the Constitutional Court in December 2013 regarding the 21.4% Primary Business Unity mining right which represented a win for both Mining Company and the Department of Mineral Resources (DMR) since the judgement provided welcomed clarity on their mining rights, and the role of government in the awarding of mining rights (Mining Company, 2013). Furthermore, Mining Company applied to the DMR for the outstanding 21.4% Primary Business Unity mining rights with the expectation that they will be granted in the first half of 2014 (Mining Company, 2013). In 2013 there was an upswing with market prices exceeded expectations as supply from Australia and Latin America grew at a faster rate than demand, improved economic conditions in the US improved, stabilised in Europe, and an expected stronger growth in China (Mining Company, 2013).

Mining Company in 2014 reported a substantial increase in production in Australia and Brazil that has coincided with a slackening of growth for imported ore from China's steel industry, leading to an oversupplied market and significantly lower prices with indications of this being the new normal for the market for at least the next few years (Mining Company, 2014). The response to the turn of events was setting of productivity targets and focusing on efficiencies that will allow the company to optimise the value of current assets (Mining Company, 2014). The company continued to target the expansion of operations in order to leverage off existing infrastructure and sound knowledge of the areas in which they mine with the expectation that this expansion will provide Mining Company with replacement resources that will ensure the sustainability of the business (Mining Company, 2014). The long term strategy was to extend Mining Company's reach outside South Africa in partnership with the Parent Group subject to the direction in which the iron ore market develops (Mining Company, 2014).

Mining Company went through a difficult time and towards the end of 2014 it responded by making a number of decisions with the first of these choices involving organisational restructuring, which saw a 40% reduction in the number of people at the corporate office, which equates to around 140 people, 70 of whom had taken voluntary separation packages (VSPs) (Mining Company, 2014), with Phase 2 of the redesign commenced at the mines in the first half of 2015, focusing on the support functions (Mining Company, 2015). It was noted that few companies are able to survive around a 50% drop in prices and the effects it has on profitability but Mining Company pledged to continue to provide returns to its shareholders, which require tough decisions like these ones (Mining Company, 2014). The second fundamental review that was considered was the viability of the Tertiary Business Unit mine which following the conclusion of a supply agreement with a Steel Producing Company in 2013, Mining Company planned to examine how the company might reconfigure the mine and further extend its life since it was no longer a 'captive' mine and iron ore could be

Chapter 5: Summary of case organisations

delivered to ArcelorMittal SA from any Mining Company mine at a Primary Business Unity-related cost (Mining Company, 2014). It was reported that at that stage, the options available to the company were: to see if there is a viable way to mine, placing the mine on care and maintenance, closing the mine or selling it (Mining Company, 2014).

Mining Company experienced a year that was gloomy in 2015 due to the unparalleled fall in the iron ore price as a result of continuing supply glut combined with softening demand, primarily in China, the principal price-setter for most global commodities leading to a negative outlook in which the company could not expect an upturn in the commodity cycle any time soon (Mining Company, 2015). The company's response to the steep fall in price and increasingly volatile global markets was to fundamentally review its business, change the life of mine plans and implement restructuring across the group to introduce a refined Operating Model that significantly resets the Company's cost base (Mining Company, 2015). Included in this was the initiation of the process of closing its operations at Tertiary Business Unit, restructuring of the Primary Business Unity pit to a lower cost shell, and increasing production at Secondary Business Unity (Mining Company, 2015). Furthermore, additional stringent capital austerity measures were introduced with capital expenditure down 20%, while significant savings were achieved on overheads, project and technical study costs, and headcount thus moving from a volume (increasing waste and production volumes) to a value (cash generating) based strategy, reconfiguring its mines to reduce the amount of waste mined and save costs in all operational areas (Mining Company, 2015).

It was reported in Mining Company (2016) that the year was a particularly turbulent year not only for Mining Company and the mining sector generally but also globally at a geopolitical level and across financial markets. The tough times led to Mining Company commencing in February with the Primary Business Unity retrenchment process as part of a significant reconfiguration of the Primary Business Unity pit regrettably culminating in a 32.5% reduction in headcount at the mine (Mining Company, 2016). The changes were accompanied by further restructuring and a strong efficiency drive across Mining Company, the closure of the Tertiary Business Unit mine and an agreement to transfer the mine to a Steel Producing Company, as well as important progress towards completing the relocation of the adjacent mining community neighbouring the Primary Business Unity operation, against the backdrop of uncertain and volatile iron ore prices (Mining Company, 2016). Although the company saw a material improvement in iron ore prices during the second half of the year, it remained cautious about the market outlook with fundamentals suggesting that prices may be subdued over the short and medium term (Mining Company, 2016).

In 2017, Mining Company (2017) reported that internationally the volatility in the iron ore prices were accompanied by a further flattening of the producer cost curve and continued pressure on margins while in South Africa the mining sector continued to

Chapter 5: Summary of case organisations

operate in the context of regulatory and policy uncertainty. The gazetting of the third version of the Mining Charter in June 2017 and the subsequent legal impasse have negatively impacted market capitalisation of listed mining companies and resulted in some hesitance to take large-scale, long-term investment decisions (Mining Company, 2017).

Mining Company (2017) noted that the year had been eventful in the global and local operating environment, characterised by further volatility in iron ore prices, rising non-controllable costs, and continuing uncertainty in the national regulatory and policy context. The price growth was driven by healthy demand and lower than expected supply growth with analysts forecasting iron ore prices in a mid-term range of US\$50 to US\$70/tonne (Mining Company, 2017). It was noted that the volatility in iron ore prices was accompanied by the first depreciation in the US Dollar for five years while rising oil prices contributed to an increase in freight rates, especially in the last quarter which Mining Company was particularly exposed to given their proximity from its customers and a strengthening of the Rand against the US Dollar (Mining Company, 2017). Furthermore, the company faced a challenge that its assets had short remaining life and that without a change in pit shell or growth projects, operations would close in 13 to 14 years.

The following top 10 business and strategic risks were noted (Mining Company, 2017):

1. “Commodity markets and exchange rate fluctuations”
2. “Safety and health”
3. “Third-party infrastructure”
4. “Mining legislation and regulatory compliance”
5. “Socio-economic and current governance challenges”
6. “Stakeholder relations and social licence to operate”
7. “SIOC empowerment status”
8. “Cyber risk”
9. “Resource depletion and securing our growth”
10. “Managing change (transformation of the business)”

Mining Company weathered severe storms over a ten year period which led to the business making tough decisions to enable its sustainability amidst turbulent market conditions. The business turned about due to prudent management and refinement of its corporate strategy in order to remain focused on growth and sustainability. It was noted that the changes in market conditions as well as the internal climate have a bearing on the top risks that are facing the business.

Chapter 5: Summary of case organisations

5.4. Telecommunications

The review of the Telecommunications Company's integrated annual reports indicates that the corporate strategy of the company from 2011 to 2017 (Figure 5.5) changed from focusing on achieving the vision for 2014 to the growth and development of the communications network in the quest to improve customer experience.

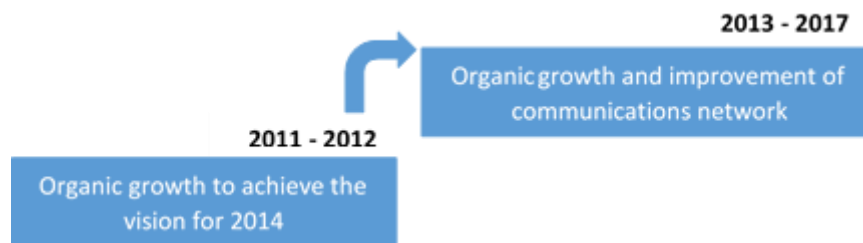


Figure 5.5: Corporate's strategy evolution between 2011 and 2017

Organisation's approach to executing strategy

Telecommunications Company has established a formal approach to the formulation and planning of the corporate strategy. The strategy formulation and planning process is informed by the review of the long term plan which covers a three (3) year horizon. This would be reviewed in the middle of the year i.e. June /July with the Executive Committee (Exco) in preparation for strategy review with the Board of Directors in December. The midyear (June/July) review involves executives from the different business units (BU), including the research team. The corporate strategy is developed in consultation with key roles within the organisation such as BU executives, C-suit executives, Group strategy, Research team, Local shareholders. The Parent Group is accommodated and contributes through some of the C-suit executives that are part of the Parent Exco. The process is collaborative among the participating stakeholders. Communication at operational level is done by the BU members of the Exco.

The process is facilitated by the Group Strategy unit. All work by the BU teams are done upfront and discussed at the Exco breakaway. The organisation uses the CEO get away session to shape, form and decide on the strategic thrusts. Each area will discuss the outcome in their business unit. The research team contributes the market intelligence which they have gathered given the trends in the market, regulatory requirements, issues of national importance, the requirements of the macroeconomic development plan, localisation requirements, and local listing. Each business unit will conduct their own preparatory work which will be presented and contributed at the two day planning session. The different business units would bring their proposal given key areas they would like to be considered and the performance of the previous year. The focus is on the review including the formulation of the strategy and assessment of the competitiveness of the organisation.

Chapter 5: Summary of case organisations

The corporate strategy is aligned with that of Parent and considers the Parent Group strategic objectives. The outcome of the two day planning session is the strategic thrusts (big bets) for the organisation i.e. Digital transformation, Internet of Things (IoT), etc. These will be prioritised and the selected ones will inform the strategy for the year. The budget cycle runs concurrently and is aligned to the outcome of the strategy formulation process (objectives and targets). The strategy includes the mission statement, strategic objectives, strategic thrusts, key performance indicators and key focus indicators (implementation and performance KPIs) together with the budget including the key financial indicators. Targets and KPIs drive the investment prioritisation for the next year. The company has a long term plan which is three years and an annual plan. Although developed, the five year plan is a bit vague but the three year plan is a bit clearer. The Board of Directors (BoD) approves the strategy in January/February.

Project Portfolios

Portfolios and projects are defined at the business unit (BU) level and aligned to the strategy. Each BU will prepare a list of priority areas and areas they will be focusing on, and a budget would be developed for the delivery of the business unit plan. Competitive edge and variables that are considered may cover national priorities, network modernisation to improve efficiencies, technology push, and performance, social responsibility considerations such as bottom and top of the pyramid customers, rural coverage obligations, customer complaints, etc. These elements will be considered in the development of the BU plans and priority list. Since the organisation needs to obtain the best return on investment, BUs will collaborate with other BUs to maximise their efforts i.e. the network and infrastructure team will work closely with the Information Technology (IT), Consumer and Commercial teams. The collaboration between BUs enables individual BUs to rank their activities, since they cannot cover everything, in order to maximise the return on investment and fulfil of their obligations. This would be the master plan which is an ongoing plan that will be revised as the year unfolds. There is a technology/commercial guidance document that is provided around November before the board meeting in December by Parent Group, to its group of companies, that stipulates the commercial priorities, level 1/2/3 KPIs and things which the group needs to focus on. These are classified for the European and the Middle East, Africa and Asia Pacific (MEAAP) markets considering their maturity.

There is no formally adopted framework nor Programme / Project Management Office (PMO) that drives strategy or a portfolio management function that is enterprise wide. Each business unit has their Programme Managers. The programme managers in the BUs will be aware of the programme and reporting requirements. The PMOs are responsible for driving the achievement of the BU programme (BU plan and the

Chapter 5: Summary of case organisations

execution of the strategic projects in line with the strategic objectives, this is the business-as-usual).

It was noted during the review of Telecommunications Company's annual reports that the company had executed projects to deliver on the themes reflected in Table 5.5 below over a range of years. It was further noted that these projects were central to the strategy of the organisation at the time.

Table 5.5: Strategic project portfolios between 2011 and 2017

Strategic portfolios	'11	'12	'13	'14	'15	'16	'17
Network infrastructure							
Customer service							
Operations efficiencies							
Expansion programme							
Parent Group Global CARE							
Digitalisation							

It was reported during interviews that the organisation has not formally implemented a project portfolio structure despite using projects to drive the execution of its corporate strategy as evidenced by the themes reported in table 1 above. The lack of a formal project portfolio structure, as depicted in figure 14 below, has led to the organisation not defining a suitable criteria for use in the evaluation of the strategic fit and establish alignment of projects that are executed to deliver the corporate strategy. However it was noted that the other three case organisations that were evaluated had formalised the project portfolio structure as well as the criteria used to structure the portfolio as well as ensure its alignment and fit with the corporate strategy. It was reported that the organisation does use projects to execute on its strategic objectives as depicted in figure 14 and established through table 1. It was reported during interviews that the approach used to execute projects within the organisation is not formalised although it is structured with different business units using a project management office to oversee the execution, reporting and delivery of projects.

Key challenges and market factors experienced by Telecommunications Company

The following market changes and internal factors were noted during the review of the organisation's integrated reports in the quest to appreciate the dynamics that affected the performance and turn of events within Telecommunications Company:

Telecommunications Company reported for the first time in 2011 on the new strategy that replaced the four (4) pillars of strategy which are having the best network; getting a device into every customer's hands; offering affordable value across all segments; and providing more reason to consume data through the provision of content

Chapter 5: Summary of case organisations

(Telecommunications Company Group, 2011). The company continued to struggle as a result of the need for additional spectrum while planning the expansion of their network as well as its focus on growing the business in Africa through acquisition strategies through the Parent Group (Telecommunications Company Group, 2011).

The company took a knock in 2012 as a result of growing mobile termination rates (MTRs) in South Africa (Telecommunications Company Group, 2012) which continued to persist in 2013 (Telecommunications Company Group, 2013). However, Telecommunications Company maintaining good stakeholder relations which benefited the organisation, its operating licence and gained access to spectrum to deliver on its broadband 2020 goals (Telecommunications Company Group, 2013). Furthermore, it made a concerted effort to secure people with the necessary competency to deliver on the strategy (Telecommunications Company Group, 2013). Telecommunications Company in 2014 saw an improved coverage and penetration in its international operations and sought to launch mobile money sending facility in South Africa to mimic what was achieved in its international operations (Telecommunications Company Group, 2014).

In 2015 the macroeconomic conditions remained tough while competition intensified in all the company's markets, while the need for additional spectrum continued with spectrum of 2.6GHz and 800MHz remaining unavailable (Telecommunications Company Group, 2015). It was reported in Telecommunications Company Group (2015) that although data was growing rapidly in all operations the weaker Rand affected margin on data devices. The focus was on investing in broader range of service offerings and differentiation of services by providing the best quality, coverage and capacity provides a competitive advantage (Telecommunications Company Group, 2015). Telecommunications Company saw that MTRs continued to decline in all of their markets with an expectation of negative impact on revenue, margins and profitability (Telecommunications Company Group, 2015).

Telecommunications Company decided to terminate the Business Expansion deal but continued to pursue a fixed-line business (Telecommunications Company Group, 2016) while in South Africa the company was able to add 2.1 million new customers to reach 61,3 million active subscribers with contract (post-paid) churn reduced to 8.5%. The enterprise business performed well with demand growing for cloud, hosting and virtual private network (VPN) services (Telecommunications Company Group, 2016) while the company's collaboration with an international technology company, extensive fixed and mobile infrastructure, the pan-African and global footprint, as well as its investment in data centre infrastructure provided the ideal platform and environment to deliver cloud services to large and multinational enterprises.

Telecommunications Company continued to increase investment in new services, including insurance, Internet of Things (IoT), previously machine-to-machine (M2M)),

Chapter 5: Summary of case organisations

fibre and content, with dedicated 'acceleration units' established to drive further uptake in these areas in order to maintain long-term growth (Telecommunications Company Group, 2016). Furthermore, the company made excellent progress in driving the uptake of data which is its key engine for growth as predicated the four pillars strategy: having the best network; getting a device into every customer's hands; offering affordable value across all segments; and providing more reason to consume data through the provision of content (Telecommunications Company Group, 2016). Harsh operating conditions such as inflation, currency volatility, an increase in number of sites, and rising electricity and other input costs, required the company to place a strong focus on driving operational efficiencies across the Group (Telecommunications Company Group, 2016).

The first report on Telecommunications Company's Vision 2020 strategy which seeks to reposition the company as an overtly digital organisation was reported on for the first time in 2017 (Telecommunications Company Group, 2017). The company acknowledged that digitalisation offers valuable opportunities for its ability to extend revenue streams beyond connectivity, and requires rethinking the networks and technology of the future, redefining customer engagement and developing a company culture that attracts the best digital talent (Telecommunications Company Group, 2017). In its quest to expand across the African continent, Telecommunications Company Group agreed terms with Parent to buy an interest of 34.94% in Kenya's market leading telecommunications company which is a high growth, high margin, high cash generating business that operates in a high growth market with 28.1 million customers (Telecommunications Company Group, 2017). It was noted by the company that the sovereign debt rating downgrade, the continuing political uncertainty and weak levels of job growth, have placed a strain on the economy also negatively affecting the levels of business and consumer confidence (Telecommunications Company Group, 2017). Furthermore, it was reported that international operations had a challenging year feeling the impact of high exchange rate volatility and changing regulatory reforms in most of its markets (Telecommunications Company Group, 2017). The company noted that its strong overall performance was achieved through the successful execution of its strategy that mandated investing significantly in network infrastructure, providing segmented and personalised pricing plans, as well as targeting revenue growth in data, electronic money transfer method and enterprise, underpinned by continuing drive in cost-efficiency (Telecommunications Company Group, 2017). The company continued to see an extended 3G and 4G population coverage to 99.2% and 75.8% respectively, expanded high-speed transmission to 92.1% of their sites, and made good progress in fibre deployment by entering into strategic wholesale agreements with other network providers (Telecommunications Company Group, 2017). The company reported that it is set in the pursuit of its digitalisation strategy that aims to drive enterprise growth as it focuses on three principal investment areas: building market leadership in IoT; realising growth opportunities for digitalisation in the

Chapter 5: Summary of case organisations

SME sector; and scaling converged services through their targeted investment in fibre, fixed wireless capillarity and next generation networks (Telecommunications Company Group, 2017).

The following top 10 business and strategic risks were noted (Telecommunications Company Group, 2017):

1. "Electronic communications amendment bill (ECABill)/Spectrum"
2. "Spectrum / Licence renewal"
3. "Adverse regulatory pressures with regards to data pricing"
4. "Market disruption"
5. "Adverse political measures and regulatory pressures"
6. "Failure to deliver on strategic projects in regards to fibre and convergence"
7. "Technology failure"
8. "Cyber-threat"
9. "Unstable economic and market conditions"
10. "Non-compliance with laws and regulations"

It was observed from the Telecommunications Company's annual reports that the organisation evolved its strategy in line with market trends, which enabled the company to grow commercially through focusing on providing offerings that are relevant to its customers. Furthermore, the company is aware of the challenges that exist in the environment which it operates in which are reflected in the list of its top ten business and strategic risks so that they do not erode the benefits and value expected from the corporate strategy.

6. Results

The proposed conceptual model presented in Section 3.2 was tested at the four case organisations that were selected for the study. The questions of the questionnaires were structured to cover the proposed conceptual model as described in Section 4.7.

The results presented in this section were gathered during the:

- Review of annual reports published by the case organisations;
- Review of documents compiled by the case organisations, where access was granted; and
- Interviews conducted with representatives of the case organisations.

6.1. Profile of the participants

The participants who were interviewed in the study were executives and senior managers that were integral in two key areas of the study i.e. the management of project portfolios, and the execution of the corporate strategy of the organisation. The integration and collaborative approach used by these two functions was noted since it is key to a seamless strategy execution process.

The study sought to consult with executives and senior managers in the corporate strategy and project management functions at case organisations. The following roles were interviewed at the case organisations during the data gathering process:

Freight:

- General Manager: Corporate Strategy and Business Modelling
- Senior Manager: Strategy and Planning
- Executive Manager: Shareholder Relations and Company Performance

Research and Development:

- General Manager: Research and Development
- General Manager: Corporate Services
- Manager: Analytical Services
- Manager: Small Scale Mining
- Manager: Measurement and Control

Mining:

- Executive Manager: Technical and Projects
- Head: Strategy
- Executive Manager: Stakeholder Affairs
- Manager: Project Management Portfolios

Telecommunications:

- Executive Head: Technology Strategy & Planning

Chapter 6: Results

The following is the profile of the participants, in terms of work and professional experience that participated in the study (Figure 6.1):



Figure 6.1: Profile of the participants in the study

The work experience of the participants was between ten (10) and more than twenty (20) years. They had experience in the corporate strategy and projects environment of between five (5) and more than twenty (20) years. Five (5) participants were in the senior executive (C-suite) level while eight (8) were in the tactical level in operations, as reflected in Figure 6.2.



Figure 6.2: Rank of participants in their organisations

Most of the participants in the study are senior in their organisation and their experience is long enough to enable them to meaningfully contribute and adequately

participate in the study given the objectives of the research and complexity of the subject matter.

6.2. Leadership and governance

It was noted from the review of integrated annual reports and management reports that governance structures were established at all four of the case organisations. The leadership team which comprises of executive directors as well as the board of directors were noted to be providing the prescribed leadership as defined in traditional governance practices. A review of the duration for which the Chairperson of the Board of Directors, the Chief Executive Officer (CEO) and Chief Finance Officer (CFO) or Finance Director/Manager were in their role was assessed from the integrated annual reports. It was observed that the turn-over of the three roles over a period of seven (7) years varied from organisation to organisation. It was only at the Research and Development organisation where the CEO and the CFO were the same for the seven years. It was at the mining company that the three roles changed three times over the period of seven (7) years. The observed turnover is important since it has a bearing on the stability of the organisation since the Chairperson of the Board of Directors and the CEO define and set the strategy of the organisation while the CFO finance its execution. The observed trend on the turnover of the Chairperson of the board, the CEO and the CFO is presented in Figure 6.3 below:

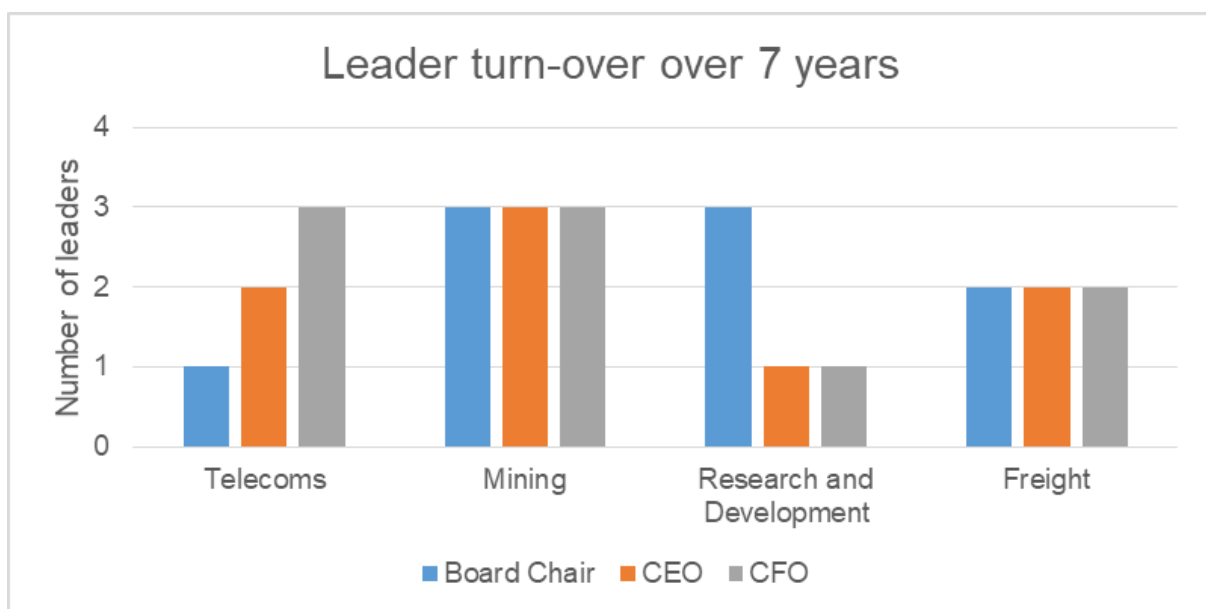


Figure 6:3: Turnover of the Board Chairperson, CEO and CFO at case organisations

Two representatives of the Research and Development Company were complementary of the leadership the organisation received from the CEO which helped the organisation to return to a state of compliance. One representative shared that *“the CEO was extremely focused on developing systems, measuring success and reporting*

Chapter 6: Results

on it across the organisation.” She added that “the CEO adopted the strategy that streamlined how things are done through the leadership that focused on compliance thus giving the organisation what it required: clean audits, consistently.”

The assessment of established governance structures at the four case organisations using integrated annual reports and management reports indicate that there is a formal governance structure that was adopted to guide the activities of the business. It was noted from internal and publicly available documents on the case organisations that governance structures were established from the board of directors to the operations level. These governance structures were applied to the strategy execution, projects used to implement the strategy and reporting structures on the performance of the organisation. A sound and functioning governance structure is key in strategy execution. The establishment of governance structures at strategic and operational levels enabled the management and control of the process used to execute the strategy in order to create value for the organisation given the approved corporate strategy.

It was noted from the review of integrated reports that all four case organisations had a board of directors in place that was supported by board committees. Furthermore it was noted from the review of management reports that various committees were established within the case organisations to see to the realisation of the mandate of the committee including adherence to the governance requirements within the organisation. It was shared by the participants that were interviewed that the formal governance structure that is established within the organisation is well defined and it was only the Telecommunications Company that indicated that the governance structure was appropriate for some of the activities of the business.

The observation made from integrated annual reports as well as the management reports at case organisations showed that the board of directors and executive managers are aware of both internal and external risks that face the organisation. All four case organisations had business risk management structures which enabled for appropriate action to be taken to mitigate against internal and external risks. A participant from the Freight Company shared that *“the management of business risk is critical to the organisation and it is thus included in the Corporate Plan”*. Furthermore, reporting on the management of business risks was included in the governance structures creating awareness to different levels of the organisations so that they could take appropriate action given their delegated authority. A representative from the Freight Company highlighted that the organisation uses a heat map of top 10 risks to help the organisation visualise its risk profile.

In all case organisations it was shared that there is a formal risk management committee that is accountable to the board of directors that was established to oversee the management of the business risks through a formalised risk management process.

Chapter 6: Results

Only top risks (5 or 10) were presented to the board of directors for awareness and to obtain the required resources to mitigate against severe risks where they exist. It was concurred during the interviews that the effectiveness of the risk management structure is well defined and appropriate for all business risks. The changes in the business environment, both internal and external, presents risks to the organisation and it is thus imperative that these are not only monitored but mitigated taking into consideration what the strategic aspirations of the organisations are. The establishment of risk management committees and the incorporation of risk management at operational level made the risks visible so that they may be mitigated through the adoption of appropriate risk mitigation steps.

Communication was highlighted by representatives from a number of case organisations as key in the implementation of strategy. A representative from the Research and Development Company emphasised that *“communication during stakeholder engagement should cover items such as the business model, growth and sustainability of the organisation and seek to obtain buy-in from staff emphasising the role they should play in realising the strategy”*. She also shared that *“the information is made available through the intranet and ERP system. There are roadshows where staff are engaged to present the strategy of the organisation.”*

The responses on governance and leadership which were obtained from the participants from the case organisations is consolidated and summarised in Figure 6.4 below:

	Legend			
	Yes	Somewhat	No	
				

	Telecoms	Mining	Research and Development	Freight
Leadership and Communication				
Governance and Oversight				
Articulated Business Model				

Figure 6:4: Summary of the leadership and governance traits

The active involvement and establishment of a formal governance structure that is effective bodes well for effective strategy execution since the board of directors and executive directors are concerned about the value that is created by the organisation. The ability to measure and evaluate how well the organisation is functioning in executing its strategy and also in the management of business risk enables the board of directors and executive managers to make informed and appropriate decisions in order to maintain the organisation on the right course.

Chapter 6: Results

The importance of the effectiveness of the case organisations in realising their corporate strategy was critical in the realisation of the business model of the organisations. It is imperative that the organisation understands its business model (how the organisation creates, delivers, and captures value) so that it is able to drive delivery of value to different stakeholders. It was also important to appreciate how the business model is affected by the changes in the market and the need to develop capabilities within the organisation. It was noted from the review of integrated annual reports that the four case organisations were cognisant of their business model. It was an important observation to make since a well-defined business model that is managed as the business grows is imperative for its survival. It was the view of the participants (Figure 6.4) from the mining and telecommunications companies that their organisations have articulated their business model well, while the participants from the research and development as well as the freight companies that there is a need to refine the business models so that the value that is created by the organisation as it carries out its business activities is enhanced. This is a key observation given the importance and implication of a well-understood business model to an enterprise.

The participants from the Research and Development as well as the Freight Companies reflected that the lack of a well-defined value which the business is creating may have a bearing on how well the organisation articulated its business model. It was also shared that this limited the outlook which the organisation had during the corporate strategy execution thus dwarfing the value that is created and realised by the business. It is the view of the participants from the Research and Development as well as the Freight Companies that the business model is adequately defined as depicted in Figure 6.5 below.

Articulated Business Model

			
			
Freight	Research and Development	Mining	Telecommunications

	Well defined
	Adequately defined
	Inadequately defined
	Not clearly defined

Figure 6:5: Effectiveness of an articulated business model (degree to which it is defined)

Although the view on the prevalence and formalisation of the business model differed between the case organisations, the representatives from all four case organisations believed that the business model could be improved since it was appropriate for some of the business activities as displayed in Figure 6.6.

Articulated Business Model

			
			
Freight	Research and Development	Mining	Telecommunications

	Appropriate for all
	Appropriate for some
	Inappropriate for some
	Inappropriate for all

Figure 6:6: Effectiveness of an articulated business model (level of effectiveness)

It is thus important that the leadership and management of the business does not only focus on effective strategy execution but that the enhancement of the business model form part of management activities in order to improve the survival of the organisation.

Conclusion

The observed leadership traits and management system to oversee governance and business risk are aligned to what is reported in the literature. Ramakrishnan (2012) pointed out that boards are formed to oversee the performance of the organisation and ensure that stakeholders' expectations are met or exceeded while complying with the statutory and regulatory norms of society where the organisations operate. He also shared that Board of Directors must ensure that the business is not only legally compliant, but also delivers on the expected performance. It is thus the view of the researcher that the effectiveness of the leadership team and management systems are fundamental in corporate strategy execution through project portfolios.

6.3. Strategic intent

The review of the literature on strategic intent was coded using an electronic qualitative analysis tool AtlasTi in order to identify key elements that needs to be tested during the study. The outcome of the literature analysis that informed interview questions is depicted in Figure 6.7 below:

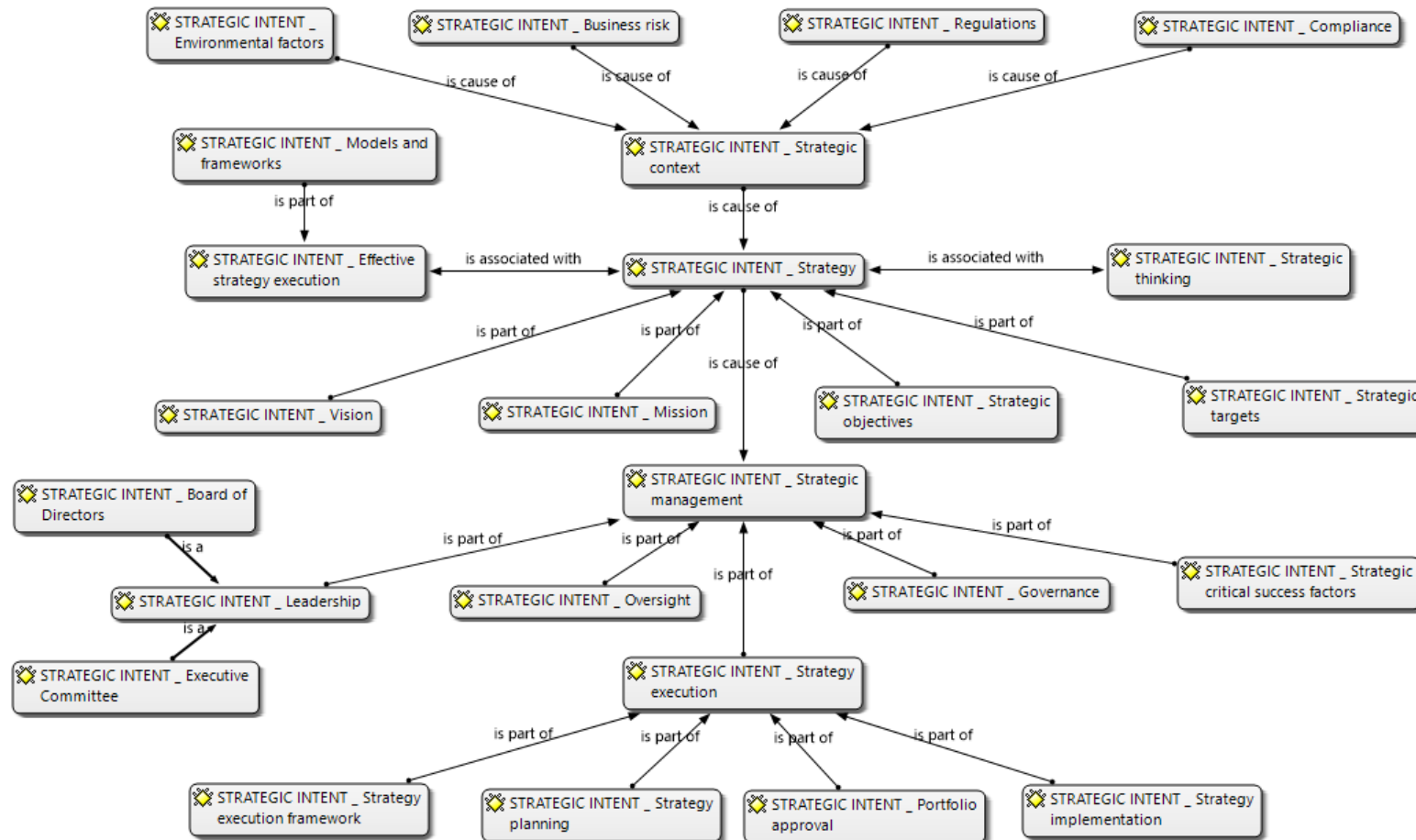


Figure 6.7: Outcome of the literature review on key aspects of strategic intent

Chapter 6: Results

The elements that were noted from the analysis of the literature were incorporated into the approach that was used to carry out the assessment of the Strategic Intent process at case organisations. This was applied to integrated annual reports published by the organisations, the management reports which were issued on a periodic basis, and in the interviews which were conducted with the representatives from the case organisations.

An analysis of the coding of quotations from the review of the literature and the results of the interview questionnaires was done to assess whether there are differences in the pattern of the two sources. The codes were consolidated and refined during the review of the literature in order to improve the quality of the results. This took into consideration the aspects which were going to be tested during the data gathering stage. Figure 6:8 presents the outcome of this analysis:

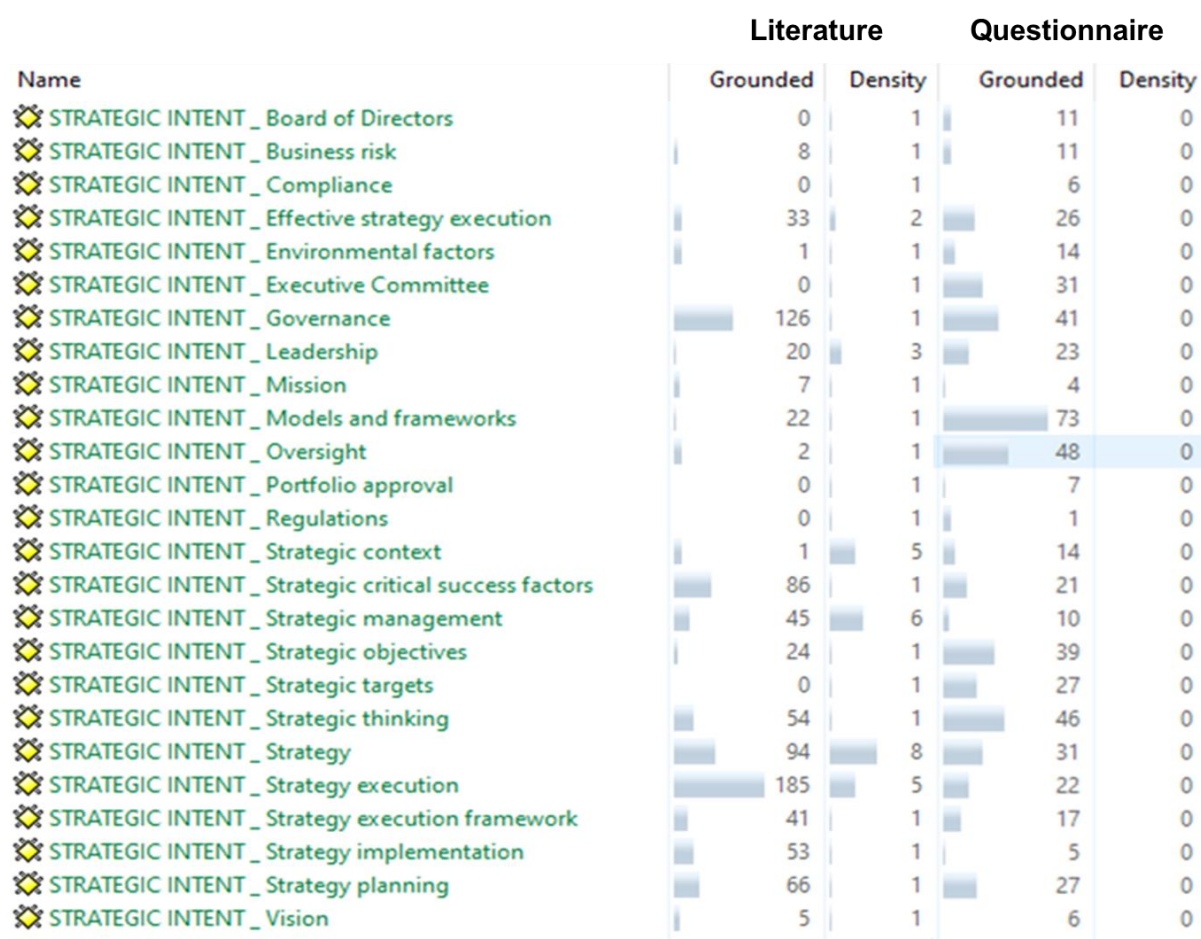


Figure 6:8: Code grounding and density for literature review and interview questionnaire for Strategic intent

The results presented in Figure 6.8 indicate that there is an even spread across the codes from the analysis of the data gathered through the interview questionnaire and zero density when compared to the results of the literature review. This is due to the questionnaire being designed primarily to test different aspects of Strategic Intent

Chapter 6: Results

which were expected to be discussed with participants and obtain a view on them. The profile when comparing the results of the literature review and the data gathered through the interview questionnaire also points to areas which were found to be key in both instances (literature review and interviews). Areas that featured prominently during the review of the literature were largely less prominent during interviews. This may point to the direct and focused testing of the research element (Strategic intent) with the case organisations.

A number of models and frameworks on strategy execution and project portfolios were identified during the review of the literature and it is interesting to note that the use of models and frameworks featured prominently at case organisations. It was observed at the four case organisations that the process of strategy execution considered external and internal context to develop the corporate strategy, which was translated into organisational processes for the implementation of the strategy in order to realise the intended outcome as articulated in Figure 2.4. It was noted that the four case organisations used the approach of linking strategic objectives to shareholder value which is outlined in Figure 2.7 and Figure 2.8. All four case organisations used the balanced scorecard to plan and present the performance achieved through the execution of the strategy through projects. A representative from the Freight Company confirmed that *“the organisation adopted a strategy execution framework in 2013/2014 which was formally adopted by Exco which consists of seven steps, one of them focusing on defining strategy implementation programmes.”* However, a representative from the Research and Development Company shared that *“the lack of a strategy execution framework leads to inconsistent reporting which fuels bias reporting.”* This may indicate that businesses do explore tools that may support their efforts in order to improve on how things are done. This was one of the gaps which were identified from the review of the literature and it was the aim of this study to close it.

The consolidated results of the prevalence of the elements of the Strategic Intent component of the conceptual model indicate that the case organisations have largely implemented the elements that were assessed as reflected in Figure 6.9. The individual results of the case organisations are discussed in detail further down in this section.

		Legend			
		Yes	Somewhat	No	
					
		Telecoms	Mining	Research and Development	Freight
Strategic Intent	Formalised Corporate Strategy				
	Formally Defined Strategic Objectives				
	Performance Measures (Targets)				

Figure 6:9: Prevalence of the Strategic Intent component of the conceptual model

Chapter 6: Results

It was noted during the responses provided by the participants in interviews and the review of management reports that the strategic intent at case organisations was developed in a collaborative process that involved key stakeholders. A representative from the Telecommunications Company indicated that *“Group Strategy is responsible for facilitating the workshop with different stakeholders. They are responsible to ensure alignment of the strategy and that there is a collaborative approach in order to manage interdependencies among business units while we follow a structured framework.”* Similarly a representative from the Research and Development Company said that *“there are a number of different stakeholders that are invited to the strategy session. We invite senior managers, Exco, the Board of Directors, the DMR and DST. We have a strategy facilitator that guides the process. We have experts that present on the state of the country and prevailing national imperatives such as Phakisa.”* In other case organisations, external stakeholders were invited to bring a perspective given insights gained from their daily duties. The participation of external stakeholders was viewed by the participants that were interviewed as a source of invaluable insights that enriched the corporate strategy formulation and planning process. It was particularly critical for the Research and Development Company in which one of the participants shared that *“the organisation is migrating into the fourth industrial revolution since it requires skills of the future and as a result we are collaborating with international players to reposition the organisation”*. It was thus confirmed that all four case organisations had a formal process which was followed to formulate and plan how to execute the corporate strategy. A representative from the Research and Development Company stated that *“Every November we hold a strategy session where managers, Execs, and the Board of Directors are invited to look at the issues at our company. We do an environmental scan and trend analysis. We look at where we should go as an organisation. The strategy session is a 3-day session and gives an input into the medium to long term strategic plan. The new business development unit consolidates the outcome of the workshop which is done in collaboration with an external facilitator. The final document used to consult all the divisions.”* The views of the participants that were interviewed are depicted in Table 6.1 below.

Table 6.1: Prevalence of defined strategic intent

	Freight	Research and Development	Mining	Telecoms
Formal corporate strategy	✓	✓	✓	✓
Formal strategy formulation	✓	✓	✓	✓
Stakeholder involvement	✓	✓	✓	✓

It was noted that one of the case organisations adopted a process in which the outcome of the external corporate planning process would be circulated to the management team that was not part of the external planning process in order to obtain their input and further refine the corporate strategy. The process is facilitated by an external professional service provider and the outcome of the consultation process is

Chapter 6: Results

presented to the executive team for consideration and approval prior to a presentation to the Board of Directors. A representative from the Mining Company emphasised that *“we annually review the strategy based on the life of mine and the strategy around it. This is brought into a five year view that is brought into a plan for the next 12 months. The strategy for the year would then be presented to the CEO’s office and then the functional units. We normally have themes for the planning 12 month period. Each functional unit will then align their plans to the annual plan. This is how the strategic message reflects in the BU strategies.”* He also added that *“the CEO sets the strategic direction, the CFO is responsible for the financial aspect.”* He elaborated that *“once there is sign-off on the 5 year strategy, then there is structuring and planning of deployment of projects. This is followed by the development of estimates and budgets. The organisation applies rigor in how the capital will be deployed. This will be done based on the BU strategy while delivering the corporate strategy.”* It was noted that in all case organisations the corporate strategy was presented to the Board of Directors for consideration and approval prior to adoption and execution. A formalised corporate strategy is critical in cementing the strategic direction of the organisation. Furthermore it enables the business leaders to communicate a single message to stakeholders on what the strategic aspirations of the organisation are so that they are able to contribute meaningfully through their participation during the strategy execution phase. It was observed during the review of the literature that the disconnect between the strategic and operational level on the understanding of the corporate strategy may dwarf the expected results and it is thus fundamental to not only formalise the corporate strategy but also communicate it throughout the organisation.

It was critical to verify through a number of sources that the corporate strategy was indeed documented and approved by the executive team and the board of directors. The verification was done through the review of internal reports, during interviews with participants and reporting through the annual reports. This was a critical check point for the study given that strategy formulation is outside of the scope of the study. It was noted from the review of the documents compiled and published by all four case organisations that the corporate strategy was indeed formalised as noted from the responses provided by participants during interviews. It was noted from the input provided by the representative of the Mining Company that the corporate strategy place a crucial role in the strategy planning process in which he emphasised that *“the RDP plays a critical role in defining the strategy taking into consideration the timeframe, targeted values, complexity of initiatives and ease of execution. We use ranges and sensitivities to assess scenarios given the probabilities and proven practice. We have adopted a system with buffers in it that has technical and performance limits. However, we are more conservative in the budget looking at the minimum requirements to make this thing work. We look at the probability of realisation taking into consideration the risk and opportunities presented by the scenarios. However, this is not yet a formal process”*.

Chapter 6: Results

It is the view of the representatives that were interviewed that the formalised corporate strategy is well defined and appropriate for some of the corporate activities. This was noted to be the case due to some of the business as usual activities that were necessary and would not reflect in the corporate strategy but were managed through the normal operations processes and reported on through the management structure.

It was noted that the strategic outlook in terms of planning horizon of the four case organisations was similar (Figure 6.10) with the exception of the mining company which based the long term corporate strategy on the life of mine (LOM). This meant that the different planning horizons were closely managed based on the remaining LOM, potential LOM expansion, and current year strategic objectives and targets.



Figure 6:10: Strategic outlook at case organisations

All four case organisations applied the same corporate strategy execution horizon of five (5) years and managed the execution on an annual basis. This means that five (5) year strategy execution plans would be developed and informed the focus for the current year (annual plan). This practice is imperative in ensuring that the plans that are executed on an annual basis are informed by the five year plan so that the organisation does not drift away from their overall corporate strategy. It was furthermore noted that some of the case organisations would evaluate the performance of the current year (annual plan) in the context of the five year plan which perpetuated the evolution of the corporate strategy and helped the organisation to maintain focus. The focus of the mining company on the LOM (20 years) enabled the organisation to make decisions given the reserves that could be mined as they sought to achieve the objectives and targets. This approach was different from that which is adopted by the other three case organisations since they were not faced by a finite source of mineral

Chapter 6: Results

resources (reserves in the ground). It was therefore a consideration by the mining company to not only meet their production targets but seek opportunities to extend the LOM through acquisitions and exploration projects.

Conclusion

It was encouraging to observe that the case organisations involved more than senior executives and the Board of Directors in the finalisation of the strategic plan that will be executed by the organisation as reported in literature. It was noted that there was purposeful involvement of managers in the finalisation of the corporate strategy in one of the case organisations. This is in agreement with what is reported in literature where Cocks (2010) promotes that strategy formulation should not end at executive level but needs input from the operational level to bring reliable insights into organisational capabilities and resource constraints. He advocates for this to encourage meaningful participation of operational people as a result of the understanding of why the strategy is implemented the way it is thus gaining support and buy in.

It was observed that the execution of the corporate strategy was in line with what Townsend (2009) concurred with in that a company's strategy determines the course it will try to pursue over several years and thus guides the allocation of resources – financial, physical, and human. It was noted that the planning process spanned different horizons which enabled execution to be done in tranches. It was also noted that the execution of corporate strategy does not exist in a vacuum as noted by Getz and Lee (2011) who reported that management do not realise that managing strategy execution requires well-orchestrated management processes and need to thoughtfully manage the way the strategy is implemented.

The observation from the approach adopted by the case organisations was that defined processes on how to execute on the corporate strategy enabled a focused approach due to a common vision. It was noted that the case organisations had learned from what Dandira (2012) cautioned on in that “there is a knowledge vacuum since most top managers do not really know what they are supposed to do with the strategic plan; generally they lack knowledge about strategic management as a whole given that they only have fragments of information”. The management teams at both strategic and tactical levels of the organisation participated and contributed to the corporate strategy which enabled buy-in and the ability to rally around the executive team and the Board of Directors during the execution process in order for the organisation to realise the corporate strategy.

6.4. Project portfolios approach

The review of the literature pointed to a number of salient elements that needed to be evaluated in assessing the prevalence of the use of project portfolios in effective strategy execution. These elements are presented in Figure 6.11 and were also noted during the data gathering process.

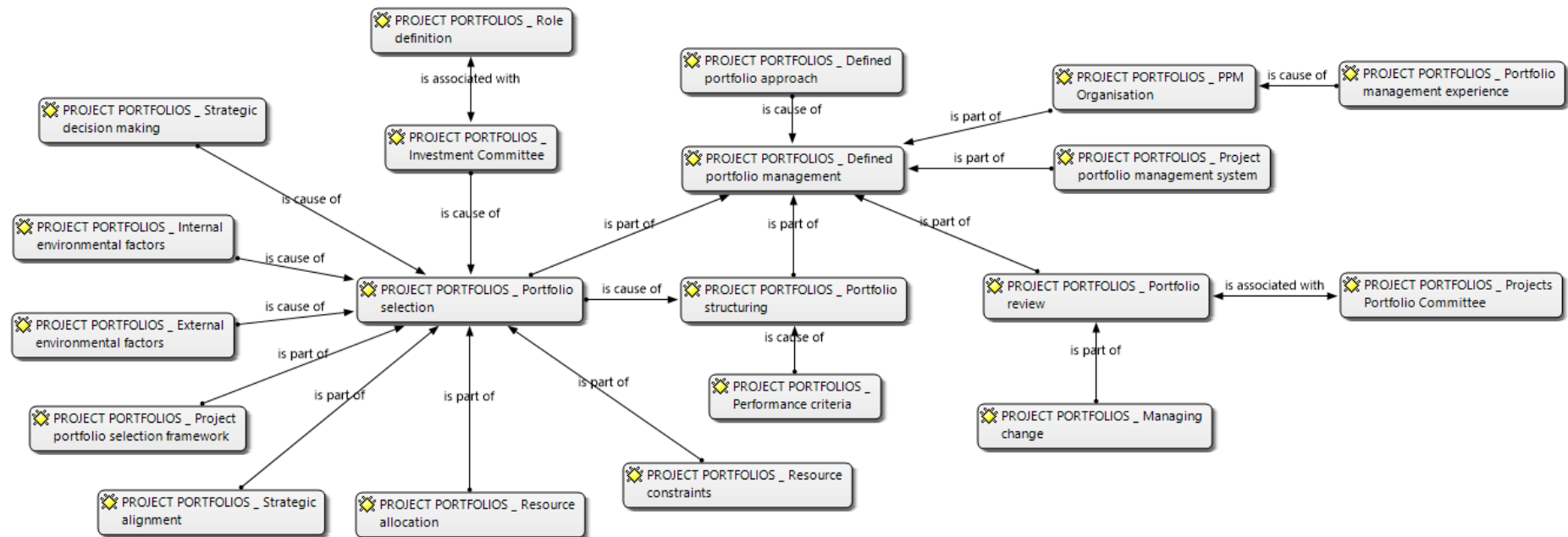


Figure 6:11: Outcome of the literature review on key aspects of project portfolios approach

Chapter 6: Results

The use of project portfolios is a complex area since it appears to be a fine balance between science and art. It was noted during the review of the literature that portfolio managers need to be competent and experienced in their profession in order to maximise the value which could be built into and realised from a portfolio of projects, given their importance in the realisation of the corporate strategy. It was therefore crucial to gain an understanding of how the case organisations manage this aspect and the extent to which automated tools are used to improve the controls around the management of project portfolios. Where an organisation used a manual process it was further noted whether management was aware of the areas which could potentially diminish the effectiveness of the project portfolio management function. It was noted from the review of annual reports, management reports as well as the responses obtained during interviews of representatives of case organisations that projects established by the companies were aligned to the corporate strategy. However, there were differences in how the project portfolios were managed. The projects which were noted as key in the execution of the corporate strategy for the case organisations are noted in Table 5.1.

The results of the analysis done using AtlasTi for Project portfolios approach which are presented in Figure 6.12 indicate that there is a spread across the interview questionnaire codes and zero density compared to the results of the literature review. This is due to the questionnaire being designed primarily to test different aspects of Project Portfolios which were expected to be discussed with participants to obtain a view on them. The profile also points to areas which were found to be key in both instances (literature review and interviews). Areas that featured prominently during the review of the literature were largely less prominent during interviews. This may point to the direct and focused testing of the research element (Project portfolios approach) with the case organisations.

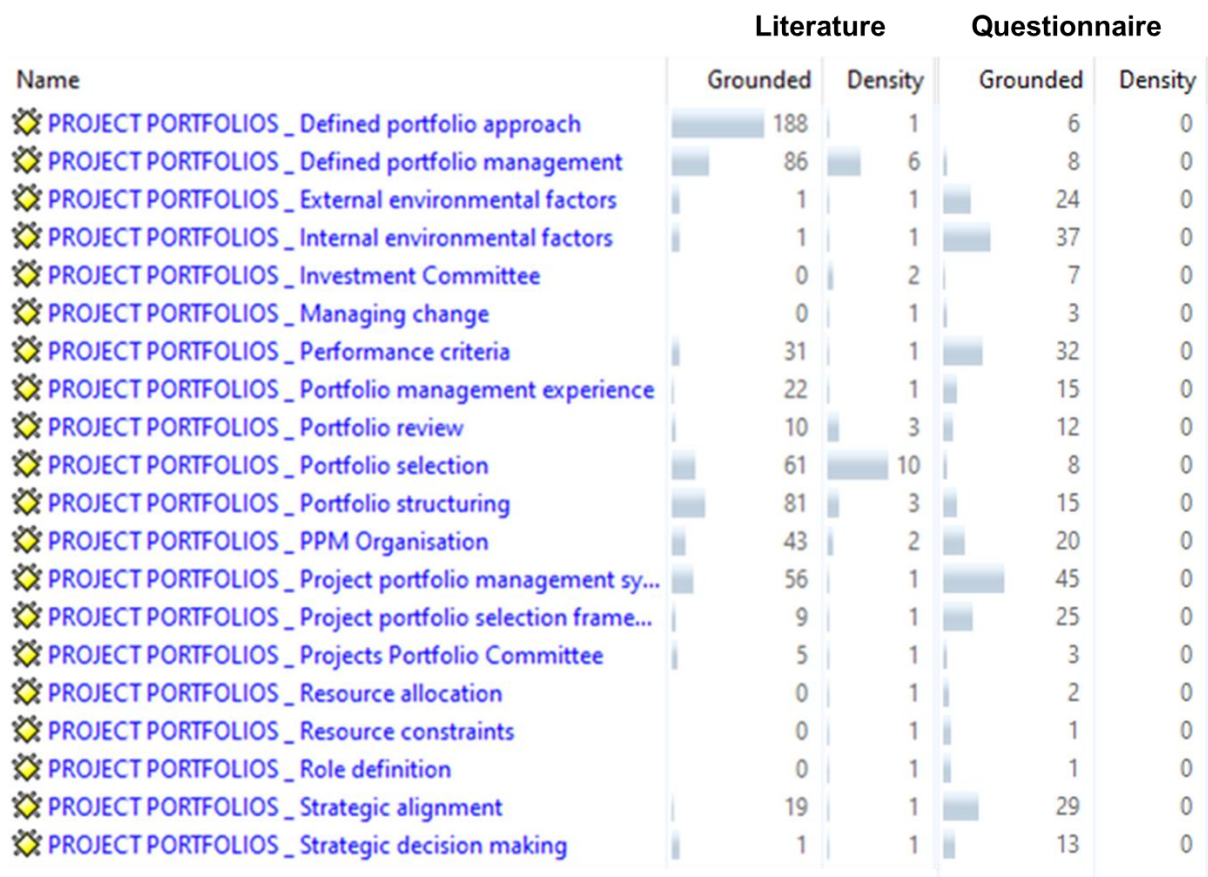


Figure 6:12: Code grounding and density for literature review and interview questionnaire for Project portfolios approach

Portfolio management system was cited the most since there was a need to establish whether case organisations has a defined and formalised approach for managing project portfolios. Furthermore, it was the aim of the study to assess its effectiveness given that it is the vehicle used to drive strategy execution.

The consolidated results of the prevalence of the elements of the Project portfolios approach component of the conceptual model indicate that the case organisations have largely implemented the elements that were assessed as reflected in Figure 6.13. The individual results of the case organisations are discussed in detail further down in this section.

		Legend			
		Yes	Somewhat	No	
					
Project Portfolios Approach	Strategic Alignment	Telecoms	Mining	Research and Development	Freight
	Business Risk				
	Project Portfolio Structuring				
					

Figure 6:13: Prevalence of the Project portfolios approach component of the conceptual model

Chapter 6: Results

It was noted during interviews that two of the case organisations have a formal function that is responsible for the management of project portfolios while two embedded the use of project portfolios in the standard practice of managing the business. A representative from the Research and Development Company shared that *“we use the cluster model to define, evaluate and execute projects through the leadership of cluster co-ordinators.”* It was also shared during an interview with a representative from a Mining Company that periodically the criteria used to structure the portfolio of projects was refined over time. He shared that *“the improvement was due to the growth in capital projects, gaining of industry experience not only in our commodity, growth in the business, incorporation of lessons learned, learning from the Parent Group, maturing project management practices, evolving to become more scientific in our approach and using dedicated project teams.”* It was reported by the representative from the Telecommunications Company that the organisation had not adopted a formal project portfolio approach although they are managing their projects in accordance with project management practices that are in the market (Figure 6.14). It was observed during the review of the literature that business leaders do not know how to execute their corporate strategy even though it is understood that it is a source of their competitive advantage. This lack could be overcome through the adoption of a framework to guide how projects are linked to the formalised corporate strategy, then the structuring of the project portfolios to realise the corporate strategy, how the project portfolios should be managed to deliver the expected value and how the performance of the project portfolio could be reported in order to improve the visibility of the achieved results.

It was further reported by the representatives from the case organisations that the use and management of project portfolios was not mature to a large extent. This observation was anticipated given what is reported in the literature on project portfolios and the unclear role of projects in the execution of corporate strategy. However, all four case organisations reported that projects which were executed by the business found their meaning in the corporate strategy (Table 6.2). This is critical since a gap between the strategy and the adopted projects could create a disconnect between where the organisation needs to go strategically and what is happening in the operational level. Literature indicates that the lack of a link between the corporate strategy and the projects has an impact on the execution of the corporate strategy. A representative from the Research and Development Company stated that *“it was an adopted practice that the project portfolios once defined would be reviewed and linked to the strategic objectives and the Compact since the projects that are implemented are evaluated against the Compact.”* This is a critical observation since enterprises could waste invaluable resources where projects are run by the organisation which are not linked to the corporate strategy thus limiting the value realised from the corporate strategy due to shortage of resources due to their focus on non-value adding activities.

Table 6:2: Prevalence of project portfolio formalisation

	Freight	Research and Development	Mining	Telecoms
PPM System	✓	✓	✓	✗
Evaluation Criteria	✓	✓	✓	✗
PPM Framework	✓	✓	✓	✓
PMO	✓	✓	✓	✓

It was also necessary to establish how the case organisations defined the link between corporate strategy and projects established to realise the corporate strategy given the findings from the literature which cautioned on the importance of a clear link.

It was reported by the representative from the telecommunications company that *“although the organisation does not have a formal project portfolio management approach, it has adopted the use of projects in the execution of its corporate strategy”*. It was reported that the organisation is structured by function and each function focuses on key activities that contribute to the business. The business functions are established and linked to the group through a mandate determined by the long term corporate strategy. The business functions would then execute their projects to achieve their mandate and thus contribute towards the realisation of the corporate strategy. This is unique to the Telecommunications Company since the other three case organisations had adopted a formal approach in managing their portfolio of projects. It was noted however that the practice which was adopted by the Telecommunications Company worked for the organisation and did not limit the quality of the outcomes which were achieved through the execution of projects.

It was reported during interviews that three of the four case organisations had a formal project portfolio management approach (Figure 6.13) which informed how projects were evaluated and selected to constitute the different portfolios. Furthermore, it was reported that evaluation criteria were defined although these were defined to varying degrees. A representative from the Freight Company shared that *“the organisation has implemented a project prioritisation tool”* and that *“guidelines are provided by the Strategy unit based on the strategy focus area without being prescriptive.”* The effectiveness of the level to which the PPM evaluation criteria was defined at the case organisations is reflected in Figure 6.14 which depicts the degree to which it is defined and Figure 6.15 that show how it is defined below:

PPM Evaluation Criteria

			
			
Freight	Research and Development	Mining	Telecommunications

	Well defined
	Adequately defined
	Inadequately defined
	Not clearly defined

Figure 6:14: Effectiveness of project portfolio management evaluation criteria (degree to which it is defined)

PPM Evaluation Criteria

			
			
Freight	Research and Development	Mining	Telecommunications

	Appropriate for all
	Appropriate for some
	Inappropriate for some
	Inappropriate for all

Figure 6:15: Effectiveness of project portfolio management evaluation criteria (level of effectiveness)

Chapter 6: Results

It was reported during interviews that three of the four case organisations had a formal project portfolio management approach which informed how projects were evaluated and selected to constitute the different portfolios. Furthermore, it was reported that evaluation criteria were defined although these were defined to varying degrees. Representatives from the Freight Company reported that there was a distinction between capital projects and smaller projects which were managed through the PMO. The distinction provided was that capital projects tend to be organisation wide while smaller projects were largely specific to a business unit or at operations level. It was the belief of the representative that this distinction led to different levels of focus and diligence with capital project being better managed given the level of effort and attention they received due to the large investments that were involved compared to those managed through the POM. Furthermore, smaller projects were managed differently depending on their nature and the competency of the project manager. It was shared by some of the representatives from the Freight Company that the value expected from some of the smaller projects was not always realised due to this disparity. Therefore, the evaluation criteria of the project portfolios is clearly defined for capital projects while it differed for projects that are managed through the PMO. It was reported by the representatives from the Research and Development and the Mining companies that the evaluation criteria for the project portfolios were adequately defined.

The case organisations had defined a framework on how to manage the project portfolio. This framework is structured in a manner that allows the identification, evaluation and selection of projects given the corporate strategy. This was highlighted as an important aspect by some of the interviewed representatives in that some of the projects are executed over a number of years and would thus be aligned to the long term strategic plan of the business while being evaluated on an annual basis for relevance. However, it was noted during interviews that this contributed to the ease of making a decision to terminate projects since they would have consumed resources over time and thus their termination may be viewed as losing value due to waste.

The reported age of the project portfolio framework adopted by the case organisation indicates that Freight and Research and Development Companies had adopted this approach the longest, followed by the Mining Company at five (5) years while the Telecommunication Company had been using this approach for about three (3) years (Figure 6.16).

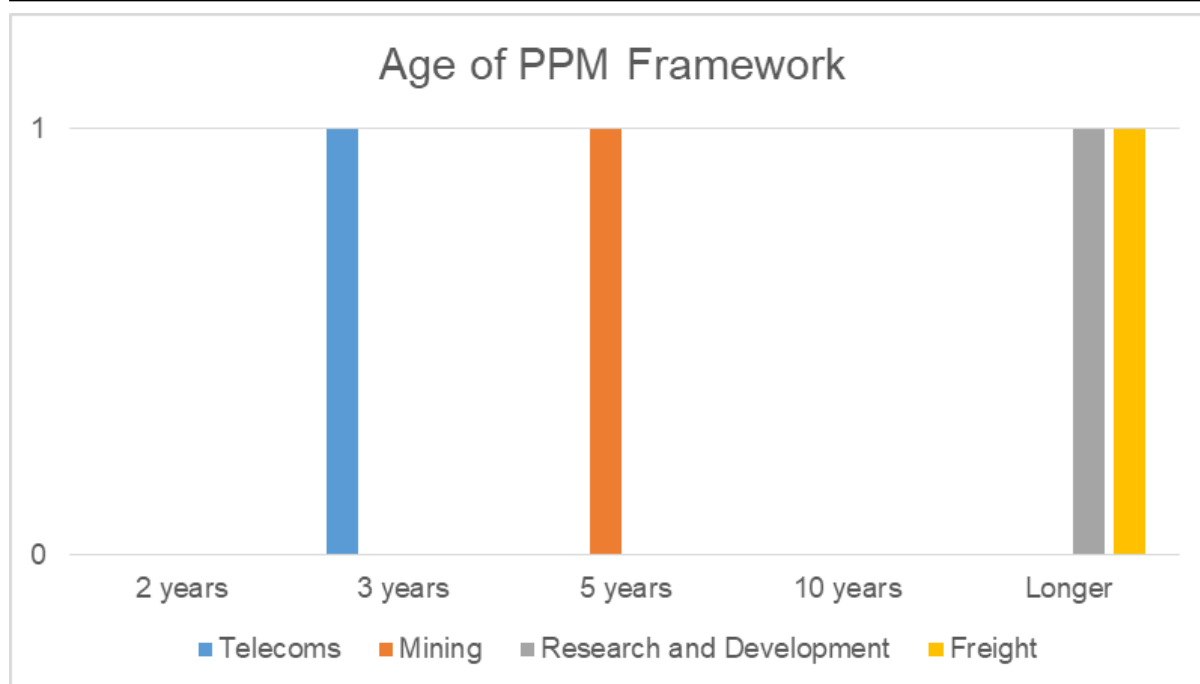


Figure 6:16: Age of project portfolio management framework in case organisations

It was also noted that the four case organisations had established project management offices (PMOs) to manage the execution of projects across the organisations. A representative from the Freight Company confirmed that “*projects are derived from strategy*” thus enabling the creation of a link between what happens at operations level to the strategy level. He further emphasised that “*the decision to embark on MDS required a PMO to deliver the MDS due to the specialised skills it required.*” Another representative confirmed that the organisation has established a Project Support Office (PSO) “*in order to manage mega projects that are geared towards the implementation of the corporate strategy.*” A representative from the Research and Development Company emphasised that “*the structured and standardised approach complemented by electronic tools used by clusters has led to the effective execution of projects across the organisation.*”

However, the applied arrangement manifested in different ways in different organisations. The telecommunications company used PMOs extensively since this supported the management of project portfolios by the business functions. It was reported by the representatives from the Mining Company that strategic and capital projects were complex and thus required a formalised and structured approach which is achieved through the use of a PMO, while small projects which are largely executed at operations level were managed by project managers who are competent and skilled to deliver on the project. The Research and Development Company had established a cluster model to structure and manage the execution of projects across divisions through the leadership of divisional heads supported by senior managers that had varying competency in project management. However, the organisation has adopted an electronic system that is custom made for the organisation to enable the effective

Chapter 6: Results

management of projects that comply with the requirements and rules of the business. These are built into the workflow structure that incorporates an approval process by senior managers and cluster co-ordinators to ensure that all milestones are adequately executed to deliver on the outcomes expected from the project. The Freight Company has a capital projects division that manages the execution of investment projects established to deliver on the corporate strategy. The organisation has also established PMOs to oversee the delivery of projects by project managers at divisional level. Governance structures are established for overseeing and reporting on both capital and operations projects so that they are executed to deliver on the expected value.

It was reported in Section 6.2 that all four case organisations had adopted risk management as a component of the governance structures adopted by the organisation. The risk management process is critical since it enables the organisation to appropriately react to changes in both the internal and external environment within which the organisation functions. Furthermore, this impact enables the organisation to be agile and responsive through the adoption of appropriate change management practices. The ability for an organisation to be aware of their changing environment and to respond appropriately enables it to preserve the value expected from the corporate strategy.

The review of the literature indicates that projects should be executed to not only meet the three tenants of performance which are scope, time and cost but to also deliver on the outcomes that are expected from them. This will enable the organisation to not only be effective and efficient in the execution of projects but drive the realisation of value from such projects. This will in turn enable the organisation to achieve the planned results and deliver on its corporate strategy. The management of the realisation of the value expected from the execution of projects is thus imperative to strategy execution. It was therefore crucial to note the prevalence and maturity of the use of benefits realisation in the management of value created and managed from projects that were implemented by case organisations. It was tested during interviews to see how long the case organisations had been using benefits realisation as a concept and the results are depicted in Figure 6.17 below. This was important since the review of the literature indicated that value is derived from allowing the outcomes that were expected from projects to mature. Some benefits are at times realised when the project is closed while others may be realised after some time.

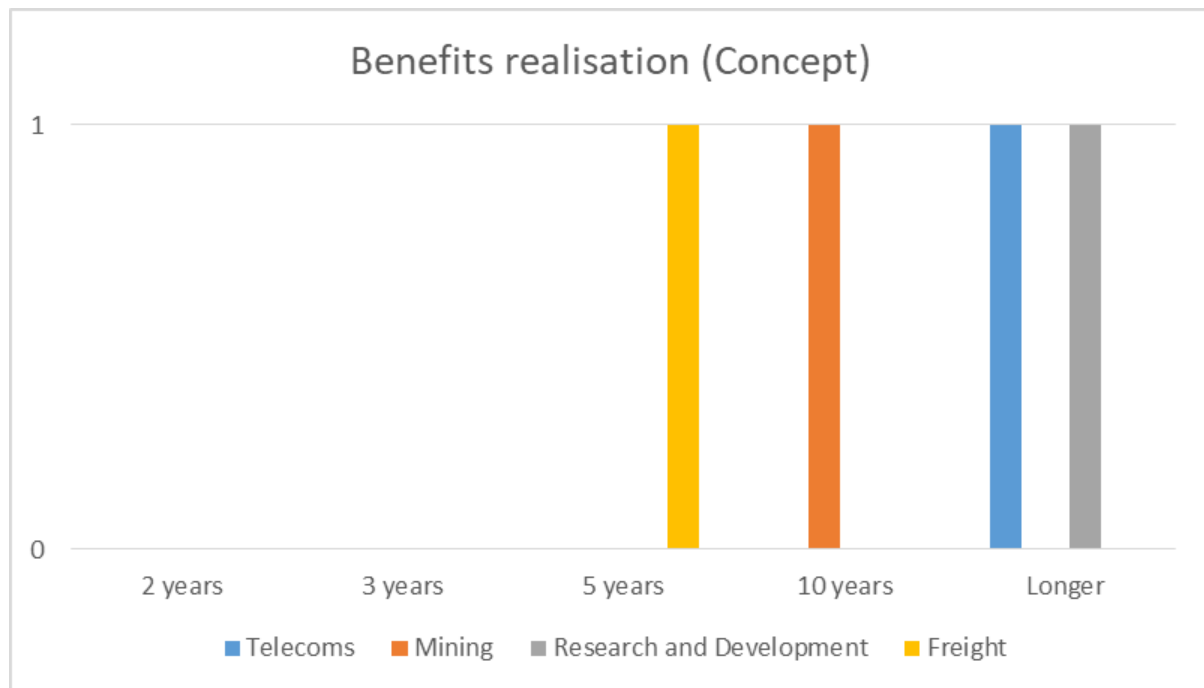


Figure 6:17: Number of years in applying the concept of benefits realisation at case organisations

It was noted from the feedback provided by the representatives from case organisations that the adoption of benefits realisation varied from case organisation to case organisation (Figure 6.18 and Figure 6.19). The pattern is concerning, given that the outcome of projects and thus the value derived from projects inform the value derived by the organisation from projects that are executed to achieve the strategic objectives and their targets. This aspect requires improvement by all four case organisations since it has the potential to enhance the value derived from projects executed by the company. It was noted from interviews that representatives from the Mining and Telecommunications Companies believed that benefits realisation criteria was well defined for projects while the sentiment was different at the Research and Development as well as the Freight Companies. The Freight Company reported that the benefits realisation criteria is not clearly defined primarily on PMO projects while it is well defined for capital projects.

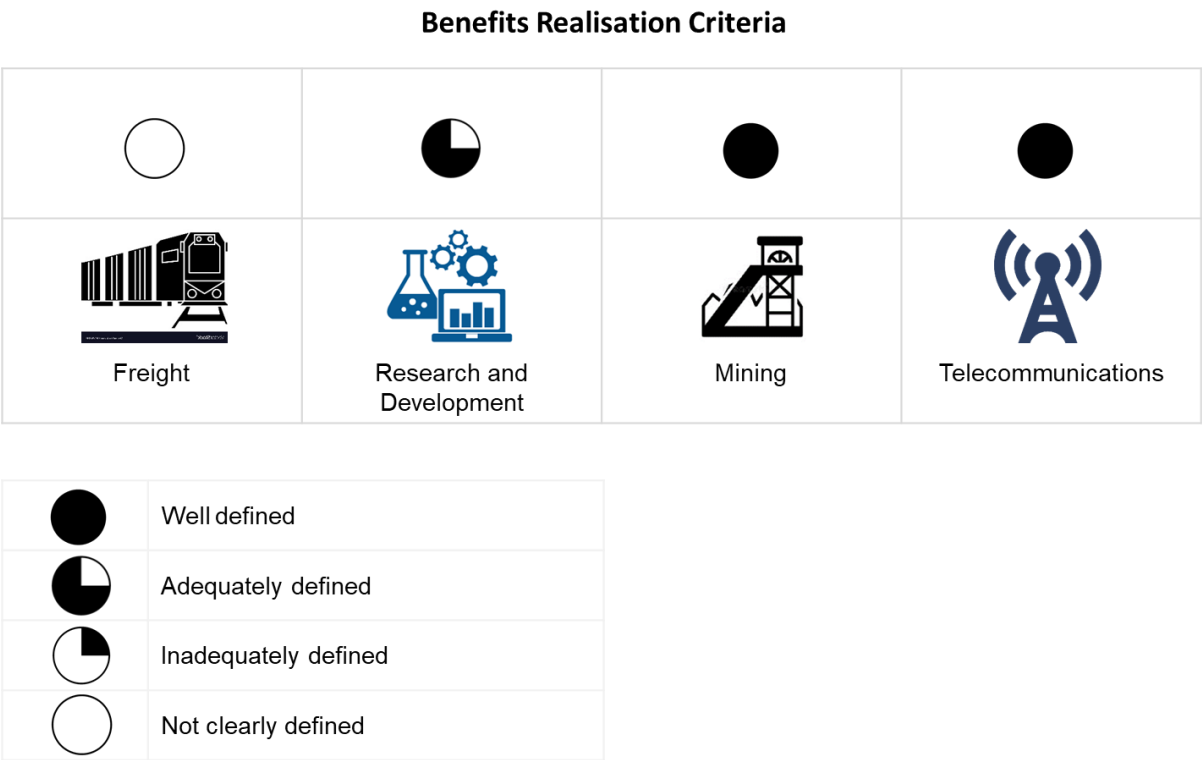


Figure 6:18: Effectiveness of the use of benefits realisation criteria (degree to which it is defined)

It also follows that representatives from the Freight and Telecommunications Companies believed that the benefits realisation criteria was inadequately defined for some of the projects, while those from the Research and Development as well as the Mining Companies believed that it is appropriately defined for some of the projects. This is to a large extent influenced by the nature of projects executed by the organisations and the level of importance that is ascribed to the different projects. For example, it was reported by the representatives of the Freight Company that the expected benefits are clearly defined for capital projects while they tend not to be defined for small projects that are managed through the PMO.

Benefits Realisation Criteria

			
 Freight	 Research and Development	 Mining	 Telecommunications

	Appropriate for all
	Appropriate for some
	Inappropriate for some
	Inappropriate for all

Figure 6:19: Effectiveness of the use of benefits realisation criteria (level of effectiveness)

Targets are developed for strategic objectives and these are normally defined in terms of key performance indicators (KPIs). It is the experience of the researcher that over time it is necessary to define performance measures that enable appropriate measurement of the expected performance. This is critical since the instrument which business managers use to evaluate the progress made by the organisation in realising its corporate strategy is the results achieved from business activities. The evaluation and improvement of key performance areas and indicators is thus imperative in order to improve the quality of the measurement of business performance. The prevalence of the process of refining performance measures, as depicted in Figure 6.20, was assessed during the study. Furthermore, the approach used to carry out this practice was also tested.

Refinement of Long- and Short-term Measures of Success

			
 Freight	 Research and Development	 Mining	 Telecommunications

	Yes
	Somewhat
	No

Figure 6:20: Prevalence of the refinement of long and short term measures of success

It was reported by some of the case organisations that this aspect is done to some extent and not purposefully. Only the Telecommunications Company consciously carries out this practice due to the maturity of their performance management system. It was noted from the responses shared by the representatives from the case organisations that some level of benchmarking was done and the review of the measures by senior management to refine performance measures. Two of the case organisations indicated that benchmarking of technical aspects was difficult due to the lack of appropriate peers to benchmark against. However, they do engage global players that share insight on some of the aspects that could be measured in their operations to obtain meaningful insight. It was shared by the representatives from most case organisations that this activity was done mostly during the strategy planning process when targets are set. The process is informed by the need to establish the most appropriate measure for the target as well as the relevant quantum.

All four case organisations reported that they have adopted a formal reporting process across the organisation which is aligned to the governance process since performance needs to be reported throughout the organisation to the Board of Directors including external stakeholders. The representatives from the case organisations shared that they have steering committees that oversee the execution of projects at operational level and have executive committee meetings where the results from the steering committees are reported in order to provide feedback to the Board of Directors. It was noted that the formalisation of governance processes enabled the reporting process both for top-to-bottom as well as bottom-to-top sharing of information.

Chapter 6: Results

It was however noted that the Research and Development and Mining companies have an automated tool with a database that is used to gather and report the performance information (Figure 6.21). The other two organisations use reports that are manually compiled through word processors and spreadsheets. It is the experience of the researcher that the use of word processors and spreadsheets are prone to human errors and tend to be an administration burden especially as complexity in organisations increases. It is thus necessary for case organisations that apply this method to consider automating the reporting functions so that they could benefit from efficiencies derived from automation and the use of analytics in decision making.

Automated Reporting Tool

			
			
Freight	Research and Development	Mining	Telecommunications

	Yes
	Somewhat
	No

Figure 6:21: Prevalence of the use of automated reporting tool

It was reported by the representatives from the case organisations that the measures that are tracked and reported on as well as the tools used in reporting are well defined and work with the exception of the Research and Development Company that shared that the effectiveness of the automated tool is appropriate for some of the reporting activities (Figure 6.22).

Automated Reporting Tool

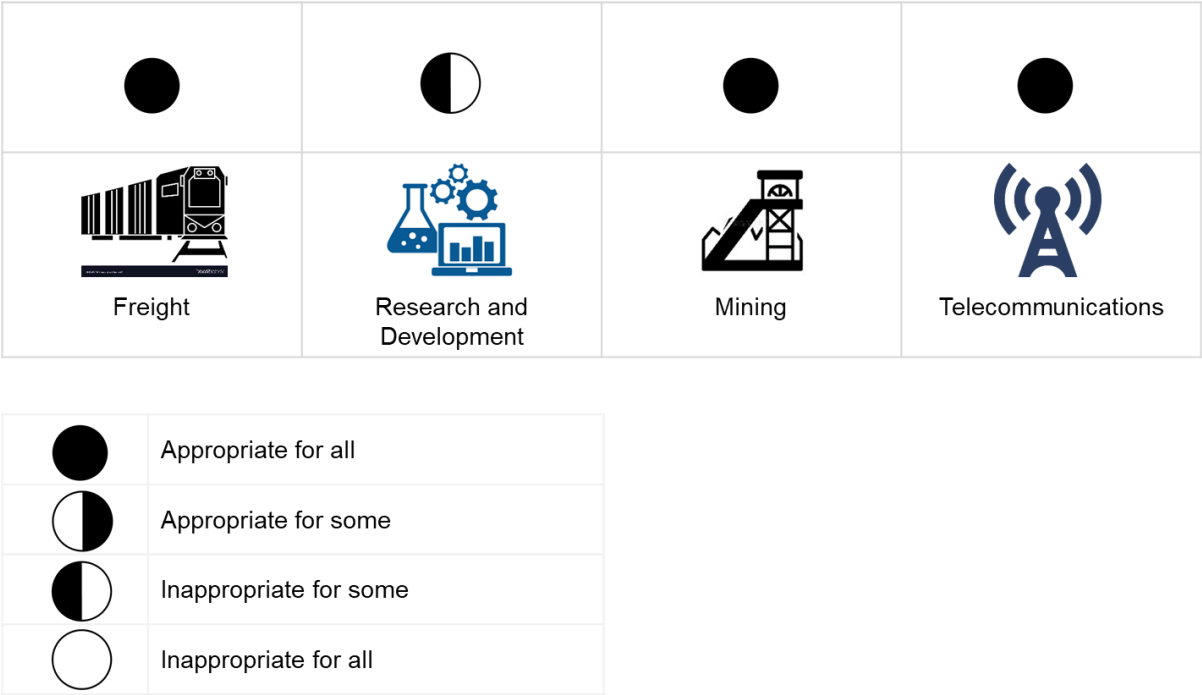


Figure 6:22: Effectiveness of the automated reporting tool (level of effectiveness)

This is an interesting observation given the advantage of adopting an automated reporting tool to gather, process and report on the performance achieved by the organisation. It is the view of the researcher that this response emanates from the exclusion of reporting on performance aspects that are not linked to strategic objectives since these would be managed outside of the automated reporting tool since they are not catered for. It is thus necessary for the organisation to assess and review this aspect in order to make a decision on how to manage this aspect appropriately. It is however imperative that the organisations first understand how they measure and report on the performance that it achieves prior to automating this process. This will improve their understanding of the results that are obtained from the automated reporting tool when they are analysed. The understanding of mechanisms which leads to these results are key hence the recommendation that organisations should first understand how their performance management system works prior to automating it.

Conclusion

The importance of projects in strategy execution is emphasised by Crawford, Hobbs & Turner (2006) who found that organisations are increasingly realising that corporate strategy is delivered through projects, and so project management capability is key to their ability to deliver their strategic intent. The advantage of using project portfolios is that it creates a link between the corporate strategy and the projects that are executed

Chapter 6: Results

by the organisation. The criticality of this aspect is shared in the literature where it is reported that organisations need to ensure that they can implement their chosen projects right—to deliver the right projects right (Crawford *et al.*, 2006). This sentiment is echoed by Kock and Gemünden (2016) who say that the right projects are the ones that provide maximum value, achieve a balance and are aligned to strategy.

It was noted from the review of the literature that project portfolio management is a complex area which has received extensive research in order to improve the knowledge and understanding of how it functions. This is supported by Patanakul (2015) who reported that “project management literature in general discusses project portfolio management from management perspective and indicates maximised value, portfolio balance and strategic alignment as three main goals of project portfolio management”.

The formalisation of a project portfolio approach and its linkage to corporate strategy is crucial in effective strategy execution. This need and importance of the link between projects to the corporate strategy was noted by a number of authors. Martinsuo and Killen (2014) say that “project portfolio management presents a complex set of challenges to decision makers in that multiple projects must be configured and managed in a way that enhance the long-term strategic value of the portfolio while considering multiple criteria and interdependencies among the projects in the portfolio”. This is also supported by Maddalena (2012) who shared that “executive leaders can increase the effectiveness of their organisation’s strategic planning processes and improve accountability by incorporating project management principles during the implementation phase of the strategy”. He further adds that “executive leaders can increase the effectiveness of their organisation’s strategic planning processes and improve accountability by incorporating project management principles during the implementation phase of the strategy”.

It is observed from the case organisations that they have adopted different approaches in establishing project portfolios with a varying degree of formalisation and automation of the tools used in the management of project portfolios. The use of a structured and defined approach is necessary to improve control of how portfolios are established and managed. This is emphasised by Patanakul (2015) who indicates that “the focus of project portfolio management is to enable the accomplishment of an organisation’s strategic business objective, which is managed through the establishment of portfolio committees that are supported by the PMO”. The level of complexity of project portfolios and competency which the organisation possess is a key consideration in the quest to improve and mature this critical function that links projects to the corporate strategy.

Chapter 6: Results

6.5. Project portfolio success approach

Project portfolio success is a culmination of the successful delivery of individual projects which contribute to the realisation of the objectives and targets of the different project portfolios. It is the objective of this study to evaluate the value of project portfolios in the execution of corporate strategy to realise business value. It was thus established from the review of the literature that each project should be implemented with finesse so that the expected outcomes and benefits may be realised. In turn the successful delivery of individual projects does not only enable the realisation of the objectives and targets of the project portfolios but the effective execution of the corporate strategy.

It was however noted that different case organisations have adopted varying approaches to the management of projects. It was further noted that to a large extent projects were linked to the corporate strategy and some projects were managed to delivery on business as usual activities. The rigour with which projects were managed and evaluated depended on whether a project was classified as a strategic project or business as usual project. Albeit all projects were managed to deliver on expected outcomes although indications from representatives of case organisations was that the focus was more on strategic projects compared to the business as usual projects.

In light of the criticality of the effective delivery of projects, the outcome of the review of the literature on project success was analysed to identify critical elements that need to be taken into consideration when evaluating how well the case organisations deliver on their projects. It was enlightening to note from a representative of the Mining Company who acknowledged that *“projects cannot all be realised. The portfolio is dynamic. It is important to get the balance right since this has an effect on the strategy.”* He further added that *“we focus on the life of mine in order to maintain the alignment. Annually we review the list to ensure alignment to corporate strategy.”*

The outcome of the review of the literature on portfolio success is presented in the form of a network diagram in Figure 6.23. The elements that were noted from the review of the literature were tested through interviews to assess the extent to which they were imbedded in how project portfolios were managed and executed.

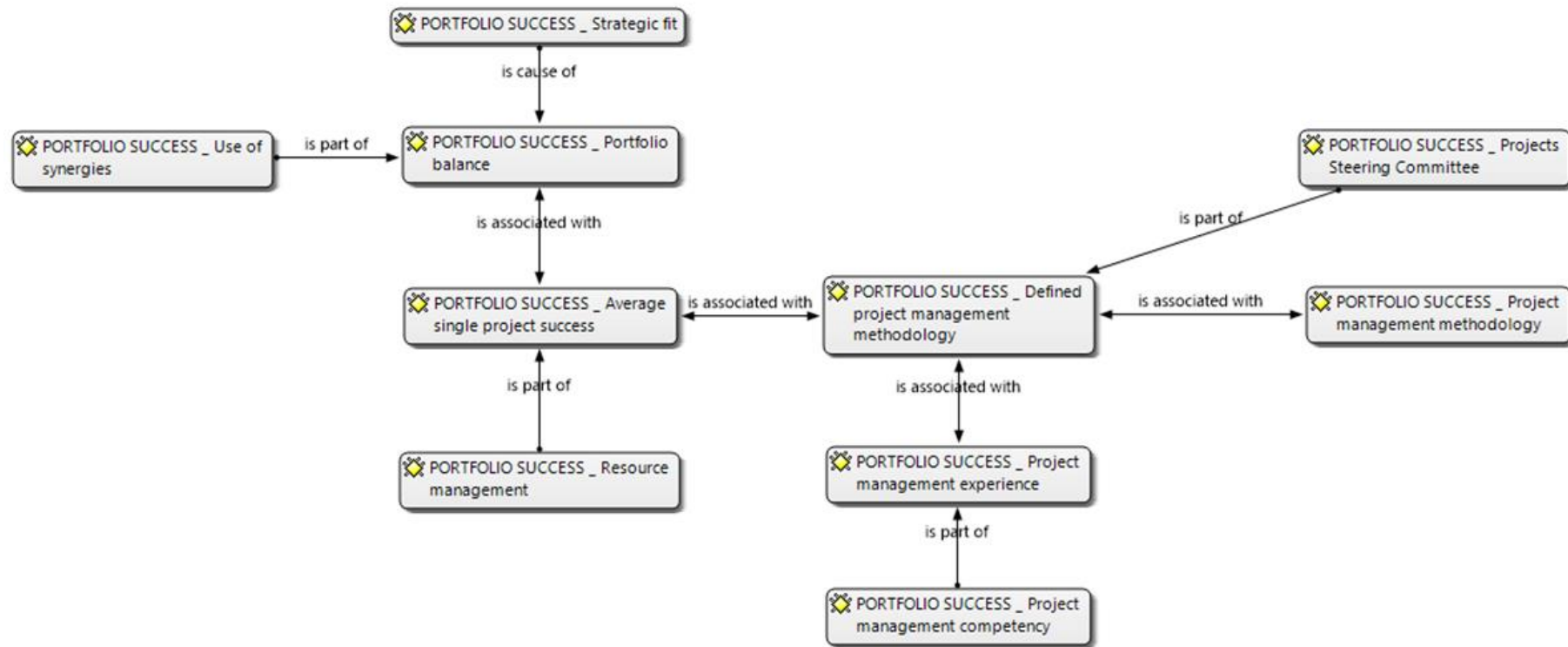


Figure 6:23: Outcome of the literature review on key aspects of portfolio success approach

It was noted from the review of management reports and responses provided during interviews that governance structures played an integral role in the manner which projects were managed and delivered. Governance processes differed between the case organisations where others had project committees that were led by executives to oversee the delivery of strategic projects, in other instances project support offices (PSO) were established, while in others PMOs were used. The nature of the governance structure and how it was constituted depended on the size, priority and complexity of the project. The observation was that project committees and PSOs were established for large capital projects while PMOs were largely used to oversee the delivery of small and operations projects that were aimed at business as usual activities.

Chapter 6: Results

The results of Portfolio success approach which are depicted in Figure 6.24 indicate that testing was not primarily focused on average single project success but on how well project portfolio success was managed by the case organisations including the effectiveness of the adopted approach. It is also noted that there is no code that stands out in this element which is not surprising. It is worth noting that although a question was asked on the use of synergies the response from the participants was affirmative and the focus of their responses was on the benefit of adopting the use of synergy given the interrelatedness of projects in the portfolio. The responses and results are therefore included in the other codes such as resource management and portfolio balance.

Name	Literature		Questionnaire	
	Grounded	Density	Grounded	Density
✖ PORTFOLIO SUCCESS _ Average single project success	152	3	1	0
✖ PORTFOLIO SUCCESS _ Defined project management met...	14	4	2	0
✖ PORTFOLIO SUCCESS _ Portfolio balance	6	3	10	0
✖ PORTFOLIO SUCCESS _ Project management competency	3	1	12	0
✖ PORTFOLIO SUCCESS _ Project management experience	1	2	13	0
✖ PORTFOLIO SUCCESS _ Project management methodology	21	1	12	0
✖ PORTFOLIO SUCCESS _ Projects Steering Committee	0	1	3	0
✖ PORTFOLIO SUCCESS _ Resource management	0	1	2	0
✖ PORTFOLIO SUCCESS _ Strategic fit	30	1	14	0
✖ PORTFOLIO SUCCESS _ Use of synergies	8	1	0	0

Figure 6:24: Code grounding and density for literature review and interview questionnaire for Project portfolio success approach

The consolidated results of the prevalence of the elements of the Project portfolio success approach component of the conceptual model indicate that the case organisations have largely implemented the elements that were assessed as reflected in Figure 6.25. The Mining and the Research and Development Companies were found to have fared better than the Telecommunication and Freight Companies.

		Legend			
		Yes	Somewhat	No	
					
Project Portfolio Success Approach	Average Single Project Success	Telecoms	Mining	Research and Development	Freight
	Strategic Fit				
	Portfolio Balance				
	Use of Synergy				

Figure 6:25: Prevalence of the Project portfolio success approach component of the conceptual model

Chapter 6: Results

The outcome of the interviews indicate that only the Freight Company identified a need to improve on the average single project success as presented in Figure 6.25. It was emphasised by the respondents from the Freight Company that the level of rigor and focus was high for capital projects while there is a need to strengthen controls around smaller projects which were run through PMOs. A representative from the Research and Development Company emphasised that *“the effectiveness of the management of projects across the organisation was well defined due to the Standard Operation Procedures (SOPs) that must be followed which are equipped with a stage gate process and approval activities that must be completed before moving on to the next step or milestone.”* She added that *“the automation of the process has led to efficiencies since mandatory documents that are required are linked to the stages including supporting information such as financial budgets, Work Breakdown Structure (WBS) and variance reports on the budget, which assist with planning going forward.”* It was observed that different aspects of effective project management were evident at case organisations given the prevailing level of maturity in the function. A representative from the Telecommunications Company emphasised that *“what is important is a competency culture driven by leadership where knowledge and skills of project managers is valued. We have competent people that are certified.”* Defining and adoption of a PMO and a project management methodology is imperative in driving the achievement of average single project success. The PMO institutes the necessary project governance structures to ensure that projects are executed according to the defined practices. On the other hand, the project management methodology warrants that the necessary controls and the management of project execution are preserved.

However, only respondents from the Mining Company were confident that the effectiveness of average single project success was well defined and appropriate for all projects while the representatives from the other case organisations believed that there is room for improvement on successful delivery of individual projects as displayed in Figure 6.26 and Figure 6.27. A representative from the Research and Development Company shared that *“projects were executed well since the company ultimately achieves the performance measures in the Compact.”* Another representative from the Research and Development Company raised a concern that *“although projects focused primarily on outcomes, we are experiencing a challenge with following through on the benefits realised from projects due to a lack of resources and time since the projects span a longer period of time.”*

Average Single Project Success

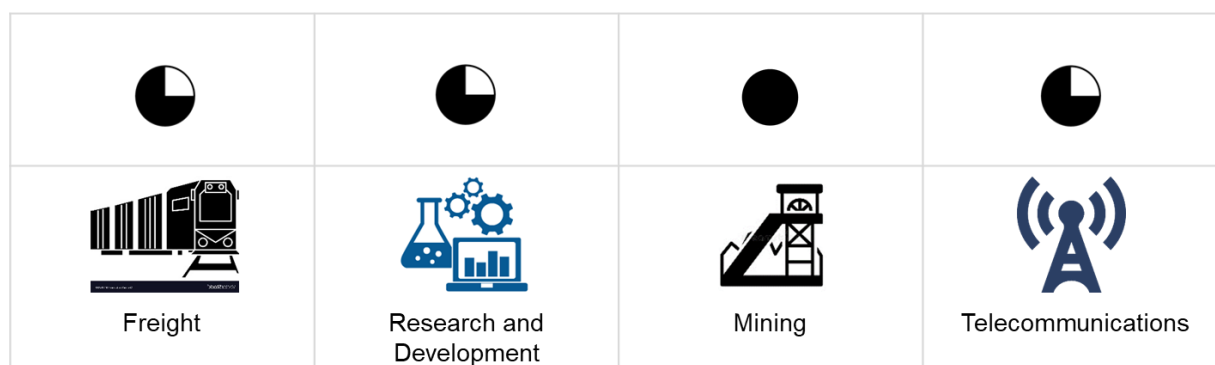


Figure 6:26: Effectiveness of the average single project success at case organisations (degree to which it is defined)

Average Single Project Success

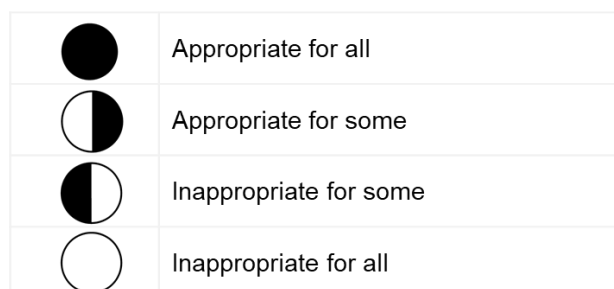
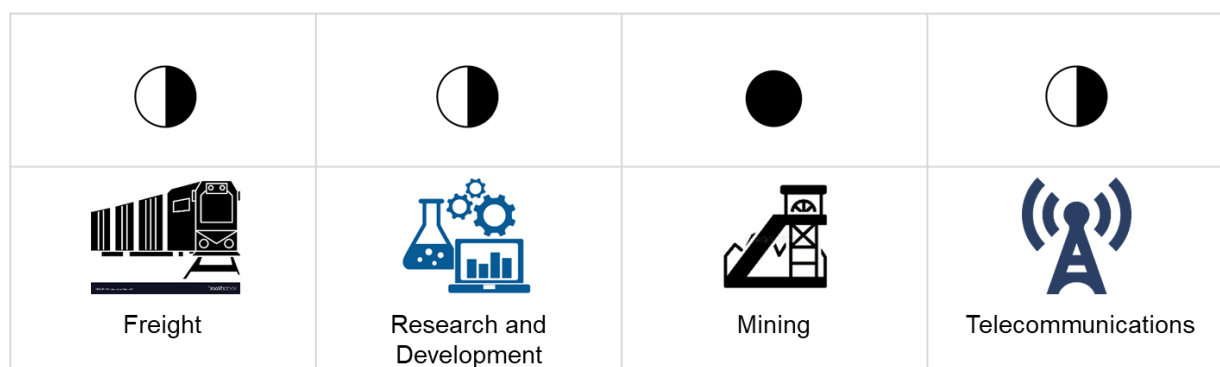


Figure 6:27: Effectiveness of the average single project success at case organisations (level of effectiveness)

Chapter 6: Results

It was noted during interviews that all four case organisations had established formal approaches and frameworks for the management of projects, despite their size and complexity but the difference was primarily on the level of focus given to projects. A representative from the Research and Development Company emphasised that *“the effectiveness of reporting process on the performance of portfolios in realising the strategy is a big challenge. We are currently putting focus on it to improve how we measure and show impact. At the moment revenues earned is an indicator of contribution but Treasury did an assessment on ROI and value for money. We came out strong but we currently do not have a good indicator that tells a full story.”* Capital (investment) projects were closely monitored and were allocated senior and experienced personnel while smaller projects would be allocated project managers that are available and deemed competent to deliver them. It was also shared that the level of competency and proficiency in project management tools differed between project managers. One of the case organisations implemented an Enterprise Resource Planning (ERP) system with embedded business rules and workflow to enable compliance and conformance to project management requirements. A representative from the Research and Development Company indicated that *“we have an ERP that is effective due to a built in workflow and embedded project management approach to enable the achievement of the different mandatory steps thus leading to good management of projects.”* She shared with pride that *“we use of the ERP system to preserve the portfolio of evidence for projects enabling reporting internally as well as to clients or funders.”* This approach was reported to be benefiting the project managers regardless of their competency since one could not progress to the next phase of the project without meeting the key requirements in the current phase of the project. It is noted that capital projects by nature of their cost, size and complexity requires close monitoring, however, it is important that organisations should define and adopt a scalable project management methodology which will enable close monitoring of each projects so that the benefits that are expected from each project are not eroded.

It was reported during interviews that a large majority of projects carried out in case organisations were strategic in nature and aimed at realising strategic objectives and targets. A representative from the Research and Development Company shared that *“commissions were established in 2017 and they are linked to strategic thrusts. They are geared towards focusing the business. They are used to also consider key skills and capabilities that are needed to keep with industry developments.”* Strategic fit was established through the link of projects to a specific portfolio aimed at delivering the strategic objective and targets or the project would be structured to deliver on the strategic objective and targets. No other approach was identified from interviews that was used by case organisations to enable the link between the strategic objectives and the project or project portfolios.

Chapter 6: Results

It is the view of the representatives from case organisations that the approach used to ensure that projects or project portfolios are linked to the strategy is well defined and appropriate for all projects that are aimed at delivering the corporate strategy. This is important since only projects that are linked to the corporate strategy should be executed and those that are underway must fit the strategy. It is generally observed that changes happen during the execution of projects and these could deflect the expected outcomes of project away from those that are planned. It is through the evaluation of the revised outcomes that one is able to evaluate the extent to which the project still fits the strategy and will be able to deliver on the strategic objective. Furthermore, this practice will enable the portfolio manager to evaluate how balanced the portfolio of projects is based on the criteria that was defined when constituting it. This activity will provide an understanding whether the portfolio will underperform or exceed expectation which is important for business managers to know.

The telecommunications Company had not formalised the portfolio management approach and as such it would not conduct activities to realise a balanced portfolio. However, the other three case organisations indicated that portfolio balanced was done to optimise the value that may be derived from the project portfolios (Figure 6.25).

Further probing to establish how well are the project portfolio balanced and whether there is a formalised criteria with some form of prioritisation and evaluation mechanism, indicated that this practice was not mature at all three case organisations that had adopted a formal project portfolio management approach. It was shared during interviews that portfolio balance in two of the case organisations was done largely through the use of a tool equipped with criteria. The third case organisations conducted technical evaluations which assessed, selected and prioritised projects based on the corporate strategy, industry requirements and affordability. It was shared by the representatives that standard financial and non-financial criteria were used. It was noted that affordability was a large determinant to the extent that two of the case organisations reduced the investment in capital projects when the organisations were performing poorly financially. It was shared that criteria such as NPV, ROI, Payback (project specific), Life of mine extension, increased volume, capital intensity, return on capital employed, profitability (EBITDA), compliance, safety, limited liability were used. It was emphasised by the respondents from case organisations that this is an area that requires improvement since it was deemed to be appropriate for some by all four case organisations.

Resources are limited for most organisations and as such the use of synergies was also explored to assess the extent to which case organisation leverage on the benefits derived from different projects to benefit other and thus save resources (Figure 6.25). It was shared by the representatives from the Research and Development Company that the use of clusters, which cut across divisions, helped with this to some extent although it was not common and purposeful practice. It was shared that the quarterly

Chapter 6: Results

meeting between cluster co-ordinators enables members to learn about the capability of others and what other clusters and the divisions that fall within them are doing thus allowing other members to derive value from the activities carried out by other clusters. It was however, indicated that this is an area that requires improvement. One of the case organisations has established a capital projects division which enables the use of synergies in projects although smaller projects that are delivered by the PMOs may not be taking advantage of synergies since they are managed using a decentralised model.

It was established through multiple sources that corporate reporting is in place for the four case organisations. The governance structures that are in place enable the reporting on project and performance against set targets (KPIs). It was observed that multiple committees were established to enable reporting from operational to strategic as well as at board level. However, it was reported by the representatives from all four case organisations that there is room for improvement since the use of synergies were seen to be appropriate for some of the projects.

It was noted from different sources i.e. integrated annual reports, management reports and interviews, that reporting was prevalent in the case organisations and the representatives from the case organisations supported this observation.

The review of corporate strategy presentations, strategy planning documents, integrated annual reports, management reports and demonstration done by one of the case organisations on the ERP system used to manage the activities conducted in the execution of strategy illustrated that projects are linked to corporate strategy. Furthermore, the reporting structures that are established within the case organisation showed that the focus was not only on the performance of the individual projects but considered their contribution to the corporate strategy. One of the case organisations shared that in the use of a Red, Amber, Green (RAG) approach, red was welcome so that the organisation could be aware of the performance in order to mitigate against any potential risk that may come as a result of the outcome.

Conclusion

The observation from the manner in which case organisations use project portfolios to execute the corporate strategy hinges largely on the effectiveness of strategy formulation and planning. It was suggested by Aubry *et al.* (2012) that “fit between organisational context and project management implementation may lead to the creation of value for the organisation”. It is necessary that the corporate strategy as well as the strategic objectives and targets are clear enough so that projects could be clearly defined to enable the achievement of the corporate strategy. This is so since it was observed by Aubry *et al.* (2012) that “one aspect of organisational project

Chapter 6: Results

management is that its components are network-based and spread out through the organisation and further states that this situation poses a difficult problem of alignment or fit between the components themselves, such as governance mechanisms, portfolios, programmes and projects”. The clarity with which the corporate strategy is defined would provide guidance as the organisation navigates challenges during execution.

The evaluation of the Project portfolio success approach component indicate that the implementation of projects to execute the strategy is informed by how well the projects are linked to the corporate strategy and the successful delivery of the individual projects. This observation is supported by Longman & Mullins (2004) who reported that “any strategy formulation session ultimately distils vision into critical business issues, and if the organisation is serious, these issues then are translated into projects, with discrete deliverables and back-up plans”. Furthermore, Ghapanchi, Tavana, Khakbaz, and Low (2012) suggested that effective project evaluation and selection strategies can directly affect organisational productivity and profitability. This speaks to the project evaluation and selection criteria which was found to be defined in the case organisations although there is room for improvement. It was noted from the study that the link between the corporate strategy and the projects implemented to execute the corporate strategy need to be clear. This is important so that the performance achieved from the execution of projects could be consolidated to report on the performance against the target that is directly related to the strategic objective. The ERP system that is used by one of the case organisations enabled this. The observed benefit was that it was easier for projects to be managed in the context of the corporate strategy and also to report on the performance against the corporate strategy.

It was argued by a number of authors that projects do not deliver strategy and the results from the study point that projects largely create a controlled and structured environment that allows the execution of the strategy. This phenomenon was noted by Serra & Kunc (2015) who explained that “business strategy, which implies organisational change, usually requires the development of projects, however organisations fail in implementing strategies even though they employ project, programme and portfolio management techniques”. It is thus key that further studies be conducted to establish how projects deliver the corporate strategy. This requirement was an outcome from the study conducted by Young and Grant (2015) who found that the contribution on the link between strategy execution and project management is smaller than expected and they also recommended that more research needs to be conducted to explore how projects can contribute more to strategy.

The finding of Srivannaboon & Milosevic (2006) that “traditional literature on aligning project management with business strategy is vague as the interactions between project management and strategy were not explained, further support the need to gain the mechanism through which projects enable the delivery of corporate strategy”. The

Chapter 6: Results

observation from this study is that projects were initiated to deliver on strategic objectives and targets. Furthermore, the four case organisations created the link by initiating projects that directly deliver on the strategic objective. This observation is supported by Srivannaboon & Milosevic (2006) who pointed out that “in the case where an organisation executes its strategy through projects, it is important to create a link between strategy and the project through defining the project strategy”.

6.6. Business value

The review of the literature asserts that business value is central to strategy execution since it is the result of how well the enterprise created and delivered value. It was at the back of this view that the business model of the case organisations was reviewed in order to gain an understanding how they intended to create business value. It was noted that the four case organisations linked their business model to the corporate strategy and articulated revenue streams in the financial reports. The study further explored how the projects which were implemented by the case organisations to execute on the corporate strategy were associated with the revenue streams. The finding on this aspect is that some of the strategic projects were implemented to enhance the revenue stream in a variety of ways i.e. improve productivity, throughput, develop technologies to stimulate revenue streams, explore new deposits, develop new markets, etc.

Another observation that was made in the literature was that business value is a nebulous concept since it means different things to different people. It was thus important to establish how case organisations defined and measured business value. This was critical since most organisations define strategic objectives and targets which are central to the performance management system. It was not clear to what extent organisations bear the concept of business value in mind and purposefully measure value given the interest of different stakeholders. A representative from the Telecommunications Company stated that *“business value is stakeholder based such as employees, shareholders in terms of ROI and sustainability, community development, the Foundation, industry support and the Government.”* It was noted from a representative from the Mining Company that *“business value is defined from a monetary perspective although other key measures such as operating a fatality free business, LOM and being an employer of choice are important.”*

It was noted that all case organisations had some form of a performance scorecard that is derived from the strategic objectives and targets but the link between the scorecard and the value created by the business was not apparent. The analysis of the reports issued by the company sought to identify how this is done and a question was included in the interview questionnaire to obtain insight from the representatives from the case organisations.

Chapter 6: Results

The analysis of literature on business value was done to gain an understanding on how the value created by the organisation is measured, reported and evaluated. Furthermore, it was the objective of the study to appreciate how organisations linked their corporate performance to the strategic intent of the organisation as a measure of the value in terms of its long term vision or reason for existence. The value of a defined approach was highlighted by a representative from the Freight Company who lamented that *“consistent reporting regardless of the reporting business unit was a bit of a problem due to the lack of guiding templates to structure the report.”* A representative from the Research and Development Company emphasised that *“the organisation has benefited from periodically reviewing the industry and the market for changing conditions. This has influenced the organisation’s Vision 2030 and the reengineering of the strategy process. We have developed pillars that will strengthen the organisation focusing on transformation, beneficiation, organisation’s structure on divisions, as well as skills and innovation”*.

The following network diagram, Figure 6.33, was developed based on the results from the review of the literature and incorporated in the questionnaire used in the study to obtain the views of the participants from the case organisations:

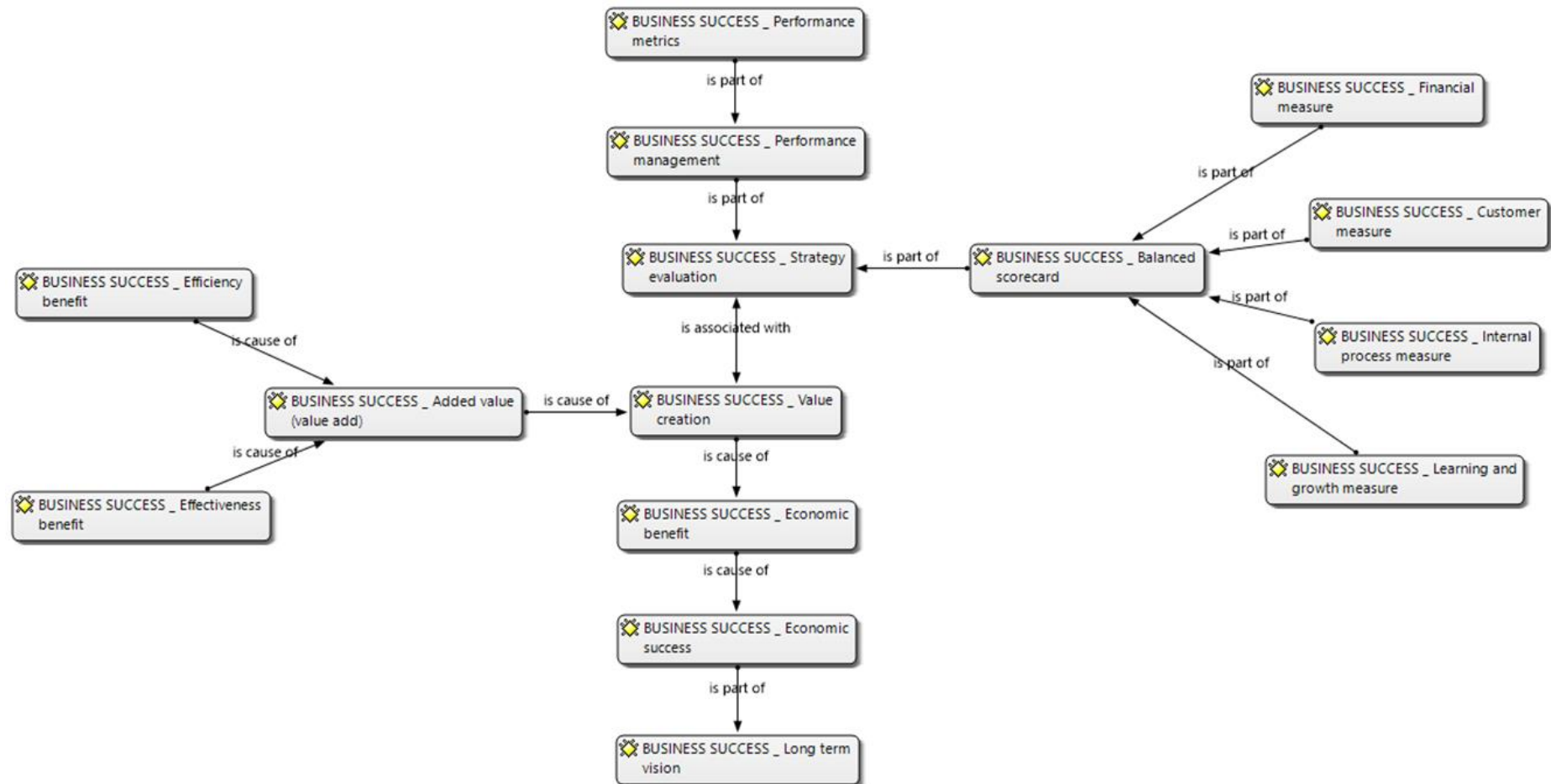


Figure 6:28: Outcome of the literature review on key aspects of business value

Figure 6.28 presents a view of the interdependency between different elements of business value and how these feed towards value created by the enterprise.

Chapter 6: Results

It was noted from the review of the literature that the value created by the organisation contributes to the economic benefit which defines the economic success of the business which contributes to its sustainability. This trend was thus analysed using the financial results achieved by the case organisations to assess to what extent they performed better than inflation.

The results of Business Success indicate that the prominent code for both the literature review and interview questionnaire is Performance management which business value is about (Figure 6.29). The results of the interview questionnaire expand further to show other salient aspects such as Performance metrics, the Balance scorecard, and Value creation which are key in this element.

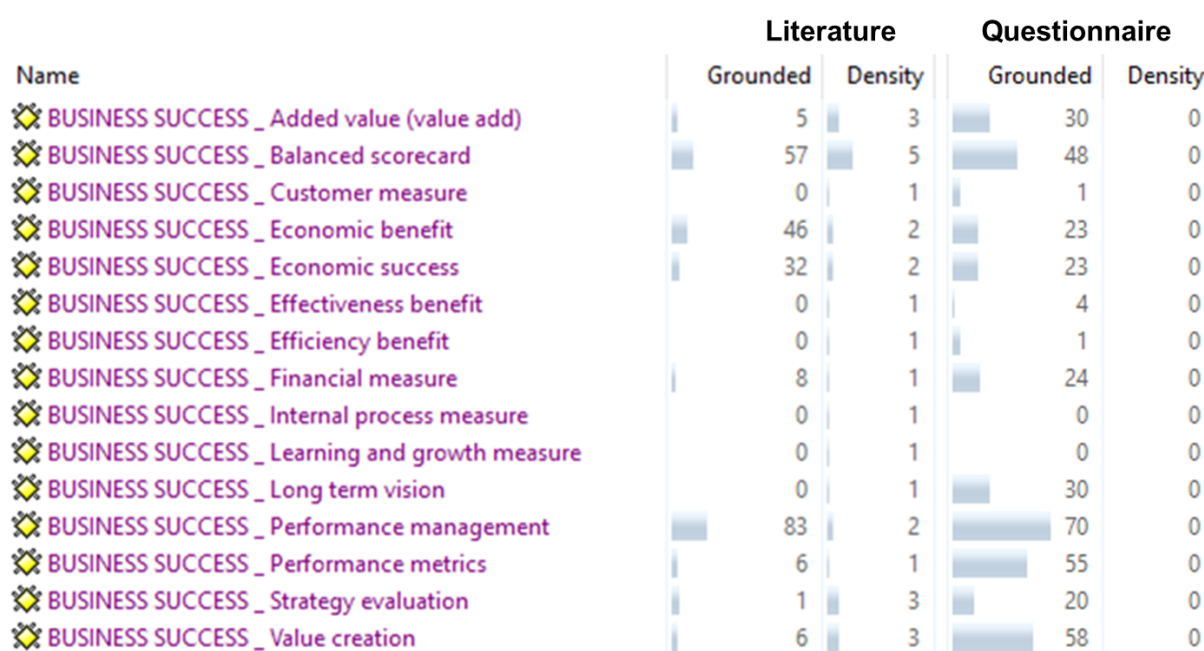


Figure 6:29: Code grounding and density for literature review and interview questionnaire for Business value

The consolidated results of the prevalence of the elements of the Business Value component of the conceptual model indicate that the case organisations varied in how they have implemented the elements that were assessed as reflected in Figure 6.30. The individual results of the case organisations are discussed in detail further down in this section.

		Legend			
		Yes	Somewhat	No	
					
Business Value	Economic Success				
	Long Term Vision				
		Telecoms	Mining	Research and Development	Freight

Figure 6:30: Prevalence of the Business Value component of the conceptual model

Chapter 6: Results

The indication from the individuals that were interviewed is that the consistent and formal defining of business value was clearly articulated for one of the four case organisations as reflected in Figure 6.31. It was noted in the integrated annual reports of the four case studied that there was some reporting to demonstrate value to different stakeholders over and above the value to shareholders. Aspects such as employee development and improvement of their wellbeing, sustainability of the environment, contribution to local communities, contribution to the fiscals through taxation, etc. were reported on. Two representatives from the Freight Company confirmed that *“the organisation has formally adopted the use of the Balanced Scorecard, with performance measures cascaded from Executives to individuals at operations level”*.

Consistent and Formal Definition of Business Value

			
			
Freight	Research and Development	Mining	Telecommunications

	Yes
	Somewhat
	No

Figure 6.31: Prevalence of consistent and formal definition of business value

A strong sentiment emerged during interviews that there is a need for the organisations to formally define value in terms of key stakeholders since measures were in place to actively manage stakeholder relations. It was reported during interviews that internal and external stakeholders formed part of the communications strategy of the organisation and that this platform would be suitable for managing the reporting on stakeholder value and also gain feedback from stakeholders on their views pertaining to this aspect.

It was further shared during interviews and also observed in the review of management reports that there was a proactive effort to communicate the need to create shareholder value including other key stakeholders i.e. local communities, employees, suppliers

Chapter 6: Results

and customers. Mechanisms varied between case organisations and were a balance between print and digital media.

It is the objective of the study to understand how the case organisations engineered the expected value from its business activities and not to determine what was achieved. In an attempt to gain insight into the impact of the use of project portfolios in executing the corporate strategy, the financial performance including spend on capital assets was analysed. This was done to see whether any of the case organisations achieved superior financial results as a result of the approach they have adopted in executing their corporate strategy through project portfolios. However, this is limited since the objective was not to evaluate what the use of project portfolios is in the execution of the corporate strategy to achieve business value. Therefore, the study did not measure performance from the portfolios that were adopted in strategy execution. However in an attempt to appreciate the performance that was achieved by the case organisations over the period of review, the financial results which were gathered from the annual financial reports were evaluated. The performance was evaluated by comparing the compounded annual growth rate (CAGR) achieved between 2010 and 2017 to the South Africa's Consumer Price Index (CPI). It is taken that superior performance is achieved in instances where the CAGR exceeds the CPI of South Africa. It is noted from Figure 6.32 that that South African PPI fluctuated during 2009 from where it was on an upward trend until 2014, it came down during 2015 and swung up again until 2018.

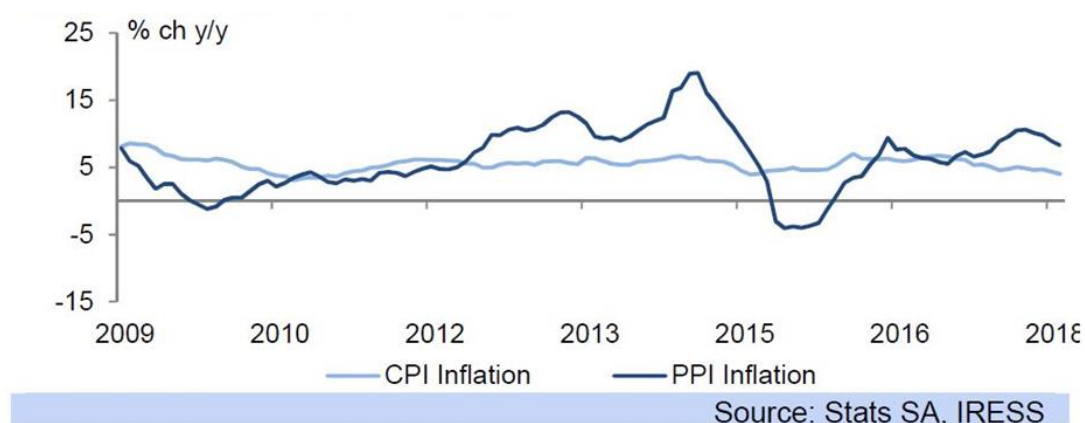


Figure 6:32: CPI and PPI between 2009 and 2018

According to Statistics South Africa (Stats SA) the annual CPI Figures between 2007 and 2018 were:

Table 6:3: CPI between 2007 and 2018

Index	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CPI	9.0%	9.5%	7.3%	6.4%	6.1%	5.7%	5.5%	7.1%	4.6%	6.8%	4.7%	4.5%

Chapter 6: Results

The analysis of the financial results of the case organisations in terms of profitability (EBIT), asset base (total assets) and capital expenditure (capex) are presented in Figure 6.33. The financial performance is evaluated between 2007 and 2017 during which the average CPI was 6.6%. The Freight Company was shy of performance above CPI on profitability and investment in capital expenditure. The performance achieved by the Research and Development Company almost matched CPI for growth in asset base while profitability was lower. The Mining Company exceeded CPI on profitability and growth in asset base but the growth in investment was lower than CPI. The Telecommunications Company performed better with only profitability shy of CPI. It is observed that three of the case organisations with the exception of the Research and Development grew their asset base higher than inflation.

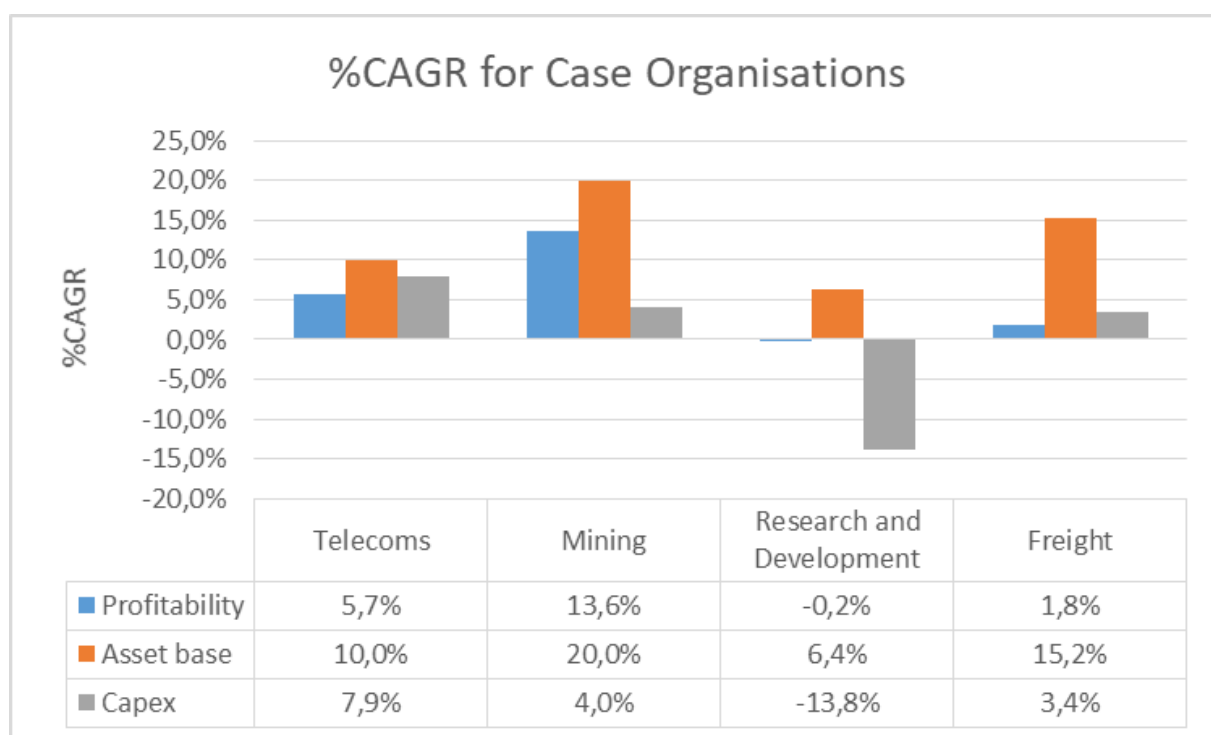


Figure 6.33: Financial performance of case organisations

The clarity with which business value was understood appear to have had a bearing on the definition of economic success (Figure 6.35) since this is a flow through from the adopted corporate strategy to the results achieved by the organisation. It is noted from Figure 6.33 that all case organisations with the exception of the Research and Development Company have achieved positive results to varying degrees. It was the view of the respondents that were interviewed that how the organisation defines business value needs to be improved. It is important that economic success and the value that is expected from the organisations are clear since these influence how decisions are made and which actions are taken at operations level as business activities are carried out.

Chapter 6: Results

In addition, it was indicated that, although measures of success in terms of the business scorecard were clear to members of the organisation, there was a need to link these to the long term vision and reason for existence of the organisation. The representatives from the Research and Development Company shared that there was a need to clearly articulate the contribution of the organisation to different stakeholders since this was affecting the effectiveness of the organisation in delivering value to them. The different view and sentiment from the other three case organisations are that economic success is well defined depicted in Figure 6.34 and Figure 6.35 below:

Economic Success

			
			
Freight	Research and Development	Mining	Telecommunications

	Well defined
	Adequately defined
	Inadequately defined
	Not clearly defined

Figure 6:34: Effectiveness of evaluation of economic success in terms of business value (degree to which it is defined)

Economic Success

			
			
Freight	Research and Development	Mining	Telecommunications

	Appropriate for all
	Appropriate for some
	Inappropriate for some
	Inappropriate for all

Figure 6:35: Effectiveness of evaluation of economic success in terms of business value (level of effectiveness)

It was necessary that the study explores the view of the case organisations on how clearly both the internal and external stakeholders understood the vision and reason for existence of the organisation (strategic intent). This was valuable since different stakeholders are able to define their role in contributing to the realisation of this vision. A representative from the Research and Development Company expressed a concern that *“the reason for our existence is not clearly defined. We need to measure the impact as a result of our existence using measures such as number of new mines that are opened, number of mines that are saved as a result of our R&D work.”* She further lamented that *“we do so much for the industry but do not have an understanding of the extent to which the mining industry has benefited from our work. This should be in terms of commercial impact such as number of projects and funding received since this will contribute to the health of our organisation.”* It was shared by representatives from the case organisations that the scorecards of the employees were linked to the corporate scorecard in order to facilitate personal and deliberate contribution to the realisation of the corporate strategy.

The review of the integrated annual reports showed that the four case organisations have used some form of a corporate scorecard to consolidate and report on the company performance. One of the objectives of the study was to seek to understand how the reported performance is taken a step further to present a view on how the organisation is doing in achieving its strategic intent. It is the view of the researcher

Chapter 6: Results

that the achievement of performance targets needs to be evaluated at a higher level where it is analysed in terms of the strategic intent of the organisation. This would provide insight on whether the organisation is delivering on its mandate (vision, reason for existence) and thus stimulate meaningful participation from different stakeholders. The view of the representative from the Telecommunications Company was that the organisation was proactive in this regard and thus key stakeholders appreciate what it was doing to meet the needs of different stakeholders i.e. improve network quality for customers, improve share price, create meaningful work for employees, etc. The representatives from the Research and Development Company were of a view that the organisation has lost its meaning and needed to re-establish its identity in the market since it was doing important work that contributes to the industry it served, the shareholder and communities. The representatives from the Mining and Freight Companies believed that although this is being done, there is room for improvement as depicted in Figure 6.36 below.

Link of Corporate Performance to Strategic Intent

			
			
Freight	Research and Development	Mining	Telecommunications

	Yes
	Somewhat
	No

Figure 6:36: Prevalence of the link of corporate performance to strategic intent

The effectiveness test shared that representatives from three of the four case organisations believe that the organisations are focused on achieving their long term vision while the representatives from the Research and Development Company believed that clarity on the reason for the existence of the organisation would contribute in clarifying the long term vision of the organisation. The different view and sentiment from the other three case organisations is that long term vision is well defined as depicted in Figure 6.37 and Figure 6.38 below:

Long Term Vision

			
			
Freight	Research and Development	Mining	Telecommunications

	Well defined
	Adequately defined
	Inadequately defined
	Not clearly defined

Figure 6:37: Effectiveness of consideration long term vision in business performance (degree to which it is defined)

Long Term Vision

			
			
Freight	Research and Development	Mining	Telecommunications

	Appropriate for all
	Appropriate for some
	Inappropriate for some
	Inappropriate for all

Figure 6:38: Effectiveness of consideration long term vision in business performance (level of effectiveness)

Chapter 6: Results

The evaluation of the case organisations demonstrated that there is an acknowledgement of the need to not only appreciate the performance of the organisation given the results of the corporate scorecard but that there is a need to also communicate the value delivered by the organisation to its key stakeholders.

Conclusion

The value of a performance management system is that it makes what needs to be achieved visible to everyone. However, it is the role of management to ensure that business activities are not only carried out to achieve performance but the most possible performance that could be achieved by the organisation given the resources at its disposal. Ramakrishnan (2012) explained that “enterprises are incorporated for performance and the decisive test of performance is the value created in relation to a promise made to the stakeholders”. He further adds that “achieving the value promise requires a clear, well-enunciated and measurable strategy, which is at the core of the performance dimension”. This is at the heart of business value since different stakeholders view value differently. It was noted that case organisations measured different performance areas and reported these from a performance scorecard perspective. This falls short of articulating value to stakeholders and thus a further report needs to be presented that demonstrate value in a manner that makes it visible to the stakeholders that are key to the organisation.

It is the view of the researcher that applying a different presentation format on the value created by the organisation will demonstrate to key stakeholders how well management has steered the organisation in creating and managing value. This sentiment is shared by Chau (2008) who emphasised that “strategic performance management is considered as an enabler of the steering of the organisation through the systematic definition of mission, strategy and objectives in order to be able to take corrective actions to keep the organisation on track”. Furthermore it is thus imperative for management to illustrate the outcome of their activities in a manner that is relatable by key stakeholders of the business. This may be a challenge since the work done by Srivastava & Sushil (2015) indicate that rich literature is available on performance measurement and management systems but there is limited studies showing how performance measurement systems ensure effective strategy execution. Furthermore, the study conducted by Chih & Zwikaël (2015) illuminates that “literature places an increasing emphasis on the management of project benefits to ensure organisational strategic goals are achieved”. It is thus recommended that future studies should explore this area in order to develop further insight which would benefit business leaders.

Chapter 6: Results

6.7. Salient factors

The review of the literature indicates that there are factors that are critical in effective strategy execution through the use of project portfolios which should be prevalent in an organisation in order to be effective in implementing strategy. A representative from the Freight Company emphasised that *“there are certain fundamentals that will remain regardless of the strategy that is in place.”* This was echoed by a representative from the Research and Development Company emphasised that *“there are key aspects such as systems, building synergies and interdependencies, aligning portfolios to strategy, valuing key stakeholders and stability of management that are important in strategy execution.”*

The salient factors presented in this section were therefore derived from the review of publicly available information on the case organisations, the outcome of the multiple interviews which were held with the representatives from the case organisations as well as the documents which were reviewed at the case organisations. The majority of them were thus identified during interviews as a result of following the research approach outlined in Section 4.7 given the conceptual model of the study and reported in Sections 6.3 to 6.6.

The factors covered in this section are some of the leading practices that were noted from the review of the annual reports published by the case organisations. The review was done over a period of seven (7) years and a list of observed leading practices was compiled per year. It was noted that the leading practices were intentionally emphasised and reported on by the case organisations. This demonstrated that the case organisations had adopted industry practices that are believed to be valuable to different stakeholders. The following are extracts, tabulated in Table 6.4, of the leading practices that were noted for the case organisations for the specified year in which the annual report was published:

Chapter 6: Results

Table 6:4: Leading practices noted from annual reports published by case organisations

Freight Company (2017 annual report observations)	Research and Development Company (2015 annual report observations)
• Views on achievements from the leadership of the organisation • Clear vision statement • The use of 'strategy maps' to communicate the strategy • Governance structures to provide oversight and management • Change management for competitiveness • Communication with stakeholders • Management of value for stakeholders • Effective strategy execution - focused on value for shareholders • Performance reporting based on the Balanced Scorecard model • Value based reporting	• Views on achievements from the leadership of the organisation • Clear vision statement • Governance structures to provide oversight and management • Communication with stakeholders • Use of performance management system • Building capabilities • Management of value for stakeholders • Effective strategy execution - focused on value for shareholder • Performance reporting based on the Balanced Scorecard model • Value based reporting
Mining Company (2017 annual report observations)	Telecommunications Company (2017 annual report observations)
• Views on achievements from the leadership of the organisation • Clear vision statement • Strategy execution plan • Strategy communication visualisation • Focused leadership • Effective governance structures • Evidence of the use of PPM Methods • Change management for competitiveness • People management strategy • Benefits realisation • Performance reporting based on the Balanced Scorecard model • Value based reporting	• Views on achievements from the leadership of the organisation • Clear vision statement • The use of 'strategy maps' to communicate the strategy • Governance structures to provide oversight and management • Change management for competitiveness • Communication with stakeholders • Use of performance management system • Building capabilities • Fair, competitive and transparent reward and recognition • Management of value for stakeholders • Effective strategy execution - focused on value for shareholders • Performance reporting based on the Balanced Scorecard model • Value based reporting

Documents, systems and reports were reviewed at three of the four case organisations in order to establish the extent to which key practices in the use of project portfolios to execute corporate strategy were adopted and applied. A representative from the Research and Development Company shared that “*Our ERP system and the use of a*

Chapter 6: Results

central documenting system stemmed from the focus of our CEO on compliance. The Compact is developed and generated from the system. We also use the same system to load projects that have been approved by the Clusters. Our project managers use the same system to track progress made on their projects so that we are able to report on the achieved performance. On a monthly basis we pull reports from the system to present the progress made on the projects to the committee of Cluster Leaders. The same system is used to generate reports that are presented to Exco and the Board. We generate our performance reports for the Shareholder, based on the Compact, from the system. It is all in the system!" The representative took the researcher through the electronic system to demonstrate how it is used to enable the link between the projects and the corporate strategy, how it is used to manage and report on projects and how it is used to generate the performance results based on the Compact which is structured based on the four perspectives of the Balanced Scorecard. The major observation made by the researcher was how the case organisation (1) implemented corporate governance principles to enable compliance with good business practices, (2) implemented two electronic systems that are integrated to enable the continued compliance and effectiveness in the process, (3) use the systems through clusters (project portfolios) to manage projects across the organisation, (4) generate different reports for various stakeholders (internal and external), and (5) preserve the link between the corporate strategy, the Compact and performance reporting which demonstrated how the strategy is being executed.

The researcher was allowed to review a number of reports (Exco Updates, Board Pack, Transformation Journey reports) at the Mining Company and the following are some of the items that were reviewed and noted from the Board Pack of November 2017:

- Review of the corporate strategy and its performance at that point,
- Case for Change: progress made on the mobilisation and communication efforts made by the organisation,
- Transformation agenda on the growth and development of the organisations,
- Key risks,
- Delivery of the corporate strategy.

It was noted that there was an evidence that the practices which were presented during interviews with the representatives from the case organisation and what was documented in the annual report are applied by the organisation.

The following salient factors (enablers) tabulated in Table 6.5 were noted from the study (from different sources of information reviewed for the four case organisations and feedback from representatives at case organisations) on the practices adopted by the case organisations in using project portfolios to execute the corporate strategy:

Chapter 6: Results

Table 6:5: Source of salient factors during the study

Component of the conceptual model	Review of documents	Interviews
Strategic intent		
1. Defined and formal corporate strategy	√	√
2. Articulated business model		√
3. Focused leadership by the Chief Executive Officer		√
4. Formal and effective governance structure including business risk management	√	√
5. Formal and structured corporate strategy planning process	√	√
6. Adopted strategy implementation framework	√	√
7. Visualisation of the corporate strategy for effective communication across the organisation	√	√
8. Communication of the corporate strategy with internal and external stakeholders	√	√
Project portfolios approach		
9. Defined project portfolio approach and criteria to select, manage and evaluate projects	√	√
10. Adopted electronic tool to select, manage and evaluate projects for defined portfolio/s		√
11. Alignment of projects to corporate strategy and strategic intent to achieve strategic fit	√	√
12. Understanding of the effect of portfolio balance and allocation of resources to projects	√	√
13. The use of performance management system	√	√
14. Management of the execution of strategic objectives	√	√
Project portfolio success approach		
15. Effective project management office/s for the organisation		√
16. Agility of the business given changes in the market conditions	√	√
17. Involvement of key stakeholders in strategic planning		√
18. Structured management of projects to achieve outcomes		√
19. The use of project management techniques		√
20. Management of project success	√	√
21. A process for defining and managing business case on projects		√
22. Standardised electronic tool for managing and reporting on projects and their outcomes		√
23. Evaluation of the outcomes of projects given the expected benefits	√	√

Chapter 6: Results

Component of the conceptual model	Review of documents	Interviews
24. Management of the realisation of outcomes and benefits from projects		√
Business value		
25. Focusing on realising commercial performance and financial results	√	√

The review of the literature indicates that it is imperative for management to be aware of salient factors that enable effective execution of the corporate strategy. The salient factors presented in this section incorporates the aspects of project portfolios that are key given the link created by project portfolios and the benefit of a structure approach that is presented by the use of projects during execution. These are tabled as a result the outcome of the work done by a number of researchers on salient factors to unlock the value derived for effectively executing on the corporate strategy. It was noted from a report by Srivastava & Sushil (2015) that they shared that “there is a lack of literature on strategic performance factors and their role in effective strategy execution, which turns out to be a barrier to the success of strategy execution”. It should be borne in mind that the study noted the factors presented by Cocks (2010) and their contribution to how they lead the execution of strategy in their organisations. Similar the work that was done by Hrebiniak (2008) and the outcome of his research was considered given that it presented a set of factors that demonstrates the vast areas which management should be conscious of during strategy execution. These were furthermore incorporated in the questionnaires that were used during interviews in order to purposefully establish the value of these factors.

The list of salient factors have value to organisations since they are able to use it as a quick reference guide to conduct a gap analysis of what has been implemented in the organisation and thus close that gap to improve the effectiveness with which the organisations executes its corporate strategy through projects.

Although the salient factors were identified from the outcome of the research, it is postulated that their importance to organisations in different industries may be different. It is therefore necessary that future studies should not only look at identifying factors that are key effective strategy execution through portfolios of projects but measure which factors are strategic given the dynamics i.e. maturity, level of competition, customer centricity, etc. in the industry. This insight would be valuable to business leaders since it would guide where they need to focus in order to derive much value from their efforts. Furthermore, the insight will be valuable since drivers of performance and impact are different from industry to industry.

Chapter 7: Conclusions and Recommendations

7. Conclusions and Recommendations

The conceptual model on the use of project portfolios in effective strategy execution, formed a sound base on which to conduct the study and was applied without variation at the four case organisations that were evaluated. It was thus invaluable in providing a single framework that did not require scaling to fit the size, nature and industry of the case organisation.

7.1. The value of the selected case organisations

The manner in which case organisations applied project portfolios in the execution of the corporate strategy met the selection criteria as outlined in Section 4.6. Furthermore, all four case organisations had dedicated senior roles that were responsible for corporate strategy and project portfolio management functions.

The following observations were noted from the engagement of the case organisations:

- **Freight Company:** The size and complexity of the organisation illustrated the importance of a structured approach that is guided by frameworks. The organisation has a strategy execution framework and has defined a library of guiding documents in order to standardise on the language used across the organisation including its business units. It also has a communication function that co-ordinates the communication strategy for both internal and external stakeholders. Although a lot of effort has gone into perfecting how capital projects are managed and delivered, due to their risk, the management of smaller projects need improvement. The organisation has also taken advantage of applying international best practices in order to improve the efficiency and effectiveness of executing the corporate strategy through projects.
- **Research and Development Company:** The research was conducted as the organisation was beginning to reap the rewards of focusing on compliance to improve how things are done across the organisation. The multi-year focus on improving compliance at the organisation led to the design, development and implementation of electronic systems (project management and ERP systems) which enabled better management of strategy execution through project portfolios. The electronic systems enabled visibility and integration of the efforts of the Research and Development Company which was valued and lauded by a number of the participants that were interviewed. The company was also able to take advantage of synergies across divisions given the cluster approach aided by the visibility of activities from the electronic project management system. The organisation took advantage of benchmarking and improvement of business practices from its participation and exposure in the global arena. A number of participants shared that the value and impact of the organisation in

Chapter 7: Conclusions and Recommendations

the industry is lost due to the lack of focus on its long term vision and mission (reason for existence).

- **Mining Company:** The focus on the LOM was a unique feature of the Mining Company presenting an interesting dynamic compared to the other three case organisations. This meant that the organisation was managed given the residual LOM thus impacting strategic decisions and the long term outlook on the business. By nature, projects were used to manage activities across the business lifecycle from exploration to growth, performance improvement including compliance with industry standards / practices. This led to the company being structured and benefiting from co-ordinated efforts. Furthermore the study was conducted at a time when the organisation had started maturing in its use of the PSO to drive strategy execution. It was highlighted by a senior executive that was interviewed that the PSO plays a critical and advisory role in guiding the organisation on strategy execution. Another valuable insight was on the use of mathematical modelling and scenario planning in the management of the portfolio of projects as the strategy is being executed. The organisation had adopted the use of sensitivities to make cost benefit analysis and decisions in order to maximise on the opportunities that are pursued by the business to realise its strategic objectives.
- **Telecommunications Company:** One of the primary observations that was made about the Telecommunications Company is that even though it has matured in its use of projects to execute the strategy, it had not adopted a project portfolio management approach. The organisation commissioned projects to execute the strategic objectives and applied a centralised governance process chaired by the CEO to oversee the management of the projects. The organisation improved its project management approach (project excellence) which it is deriving value from. Another prominent theme was the active acknowledgement and application of the business model to create value for the organisation. This provided a focused approach and enabled a meaningful decision making process. The organisation also benefits from being part of a global group that continually seeks better ways of doing things. Therefore, the organisation has benefited from adopting the international practices from its global parent company.

Prevalence and adoption of the elements and constructs of the proposed conceptual model by the case organisations was invaluable as it allowed the testing of the proposed conceptual model in an operational setting. It was also noted that the participants who were interviewed had a sound appreciation of how the organisation uses project portfolios to execute the corporate strategy thus participating meaningfully in the study. The candid feedback provided by participants from the case organisations allowed the researcher to test the validity of the proposed conceptual model, learn

Chapter 7: Conclusions and Recommendations

about how the constructs are managed in practice and identify salient factors in effective strategy execution through project portfolios.

7.2. The quality of the corporate strategy

It was noted that the quality of the strategy formulation process was critical and formed a sound trigger of the strategy planning, execution and evaluation processes. Furthermore it was critical for the identification of strategic projects which would be selected to form the project portfolios that are suitable for the execution of the corporate strategy. It is thus recommended that business managers should invest the time and effort required to craft a solid corporate strategy in order to improve the chance of selecting appropriate projects and successfully planning the execution of the corporate strategy. It is envisaged that the outcome of strategy formulation could also contribute to the process of refining the business model due to potential new or modified revenue streams that may be triggered by the outcome. Furthermore the outcome of the strategy formulation process will enable the evaluation of how well the organisation has done in effectively executing its corporate strategy to achieve its strategic intent.

7.3. Key leadership roles

The quality and calibre of leaders that oversee and steer an organisation are important. It was thus deemed necessary to note the turnover of the Board Chairperson, CEO and CFO including the effect of this change on the stability of the organisation. Three of the four case organisations had higher turnover of the three roles however, no adverse effect on the organisation was noted in the integrated annual reports given that they were reviewed for periods over seven (7) years. The review of the literature indicated that there may be a need to consider a suitable CEO given the stage of the company on the business lifecycle. There was also an indication that there may be a CEO that would be most appropriate for the organisation given its strategic direction. It was noted that the Chairperson of the Board and the CEO were key given that they are accountable and responsible respectively for setting the strategic direction of the organisation and its corporate strategy.

7.4. The importance of purposeful management of the business model

The study considered the value of a clearly defined business model given the need to improve the economic success of the business given the feedback which was provided by the company representative from the Telecommunications Company. It was observed that the Telecommunications Company was conscious of their business model. It is thus imperative for business managers to not only define the business

Chapter 7: Conclusions and Recommendations

model clearly but improve the understanding of the drivers that impact on the business model so that these are enhanced through business activities. It is anticipated that the improved understanding of the business model and its drivers would contribute to how the company defines the business value created through its business activities.

7.5. The strategy execution enablers

It was noted from the feedback provided by the representatives of the case organisations that corporate governance and communication stood out as key enablers of effectively executing the corporate strategy among others. Furthermore, it was noted that formalised processes provided a structured and controlled approach to managing business activities. It was noted that there is a need to improve the visibility of the approach that is used to execute corporate strategy through project portfolios. Communication and displaying such a framework would contribute to creating awareness on how the organisation executes its corporate strategy through project portfolios. All case organisations had adopted a communication strategy to share the results and other pertinent information on the corporate strategy. This process could be enhanced to include the communication of the framework adopted by the company on executing its corporate strategy through project portfolios. This would allow stakeholders to appreciate the framework and how they could contribute in entrenching it. It is recommended that organisations should also assess how they are maturing in the use of project portfolios to execute their corporate strategy as a way of driving continual improvement. It is therefore recommended that business managers should assess the extent to which these aspects are implemented in their organisations and how effective they are since this is where the value lies.

7.6. The use of project portfolios in strategy execution

The aim of the research was to ascertain “*How could companies use project portfolios to effectively implement and execute corporate strategy to create business value?*” The research question was explored through four sub-questions, which are answered below:

Research sub-question 1: What are the reasons why companies do not execute the corporate strategy effectively to create business value?

The outcome of the research, based on the insights gained from the review of the literature and assessment of the case organisations, points out that there may be a number of contributing factors to why organisations do not effectively execute their corporate strategy to realise value and there is a need to overcome the following limitations and barriers to effectively execute the corporate strategy:

Chapter 7: Conclusions and Recommendations

- It is imperative for the organisation to have a well formulated corporate strategy that informs the strategy planning, project portfolio selection, strategy execution and strategy evaluation processes ((MacLennan, 2011), (Hrebiniak, 2005), (Getz & Lee, 2011), (Speculand, 2011), (Getz, Jones & Loewe, 2009), (Srivannaboon & Milosevic, 2006), (Lukac & Frazier, 2012) and (Cocks, 2010)). Furthermore, the respondents from the case organisations emphasised that a formalised strategy execution framework was adopted to guide the organisations (Section 6.3).
- The review of the literature also shared that there is a need to shed light on critical factors that should be controlled, co-ordinated and managed during the execution of the corporate strategy ((Srivastava, 2013), (Cocks, 2010), (Hrebiniak, 2008), (MacLennan, 2011), (Al-Ghamdi, 1998)). These factors were identified in the documents that were reviewed for the case organisations as well as from the input that was provided during interviews by representatives from case organisations (Sections 2.6 and 6.7).
- There is a need for business leaders that are able to set the strategic direction, communicate effectively on how things are going, manage change and steer the organisation through turmoil market conditions so that it remains resilient. ((Casal, C. & Caspar, 2014), (Rothschild, 2013), (Ramakrishnan, 2012), (Mezger & Violani, 2011) and (Davis, 2013)). In addition, the representatives from case organisations emphasized the importance of communication and governance structure as key among other drivers (Section 6.2).
- There is a need for business leaders to co-ordinated the long and short term view of the organisation and ensure that the organisation remains focused on its mission as it executes the corporate strategy on the short term basis. ((Casal, C. & Caspar, 2014), (Rothschild, 2013) and (Mezger & Violani, 2011)).
- It emerged during the interviews with representatives from case organisations that a clearly defined business model is crucial to keep the organisation focused on creating and delivery value to different stakeholders (Section 6.2).
- The adoption and use of an approved strategy execution framework provides a defined approach on how the organisation uses project portfolios to execute its corporate strategy ((Lukac & Frazier, 2012), (Carroll, 1982), (Hrebiniak, 2005), (Dandira, 2012) and (Ghezzi, 2013)). Furthermore, the respondents from the case organisations emphasised that a formalised strategy execution framework was adopted to guide the organisations (Section 6.3).
- Projects were used by all four case organisations to execute the corporate strategy. The link was created between the strategic objectives and projects in order to ensure that projects that are implemented within the organisation are aligned to the corporate strategy ((Speculand, 2014), (Young & Grant, 2015), (Kazmi, 2008), (Meskendahl, 2010), (Martinsuo, M. & Killen, 2014), (Young & Grant, 2015) and (Kock, A. Gemünden, 2016)). The value of projects in strategy

Chapter 7: Conclusions and Recommendations

execution was indicated by representatives from case organisations as captured in Section 6.4.

- Corporate governance was used to enable a controlled environment within the organisations and allowed for centralised reporting on the performance that was achieved by the organisation as reported in Section 6.2.

Communication was highlighted as a critical requirement in the execution of the strategy as it enabled the sharing of information with different stakeholders on how well the organisation is doing in the execution of the corporate strategy. Furthermore, communication was used to obtain buy-in and participation from different stakeholders due to an improved understanding of their role and contribution in the realisation of the corporate strategy.

The outcome of the study indicates that the four case organisations that were evaluated apply project portfolios in strategy execution with the view to create business value. Opportunities to improve their approach in the use of project portfolios to execute the corporate strategy were identified as their approach is aligned to the proposed conceptual model. The research work done through the case organisations sought to test the conceptual model through the use of different sources of information in order to verify the findings. A conceptual model on the use of project portfolios in effective strategy execution to create business value was used to gain insights at case organisations on this matter. Four components of the conceptual model which are the Strategic intent, Project portfolios approach, Project portfolio success approach and Business value were explored in order to gain insights on how the case organisations use project portfolios to execute their strategic objectives.

It was established during the study that there were evidence of the link between the four components of the conceptual model that were tested at the case organisations. It was established that the link between the strategic intent and the portfolio of projects was created through defining projects in terms of its ability to deliver the strategic objective. Furthermore, the criteria which were defined to structure the project portfolio were aimed at realising the expected performance once the projects are delivered. The link between the project portfolio and the successful execution of projects in the portfolio was enabled through the use of a defined project execution (PPM) framework. Furthermore, the practice of defining expected outcomes from executed projects enabled business leaders to measure whether the projects had delivered the expected value or not. The study also tested whether case organisations reviewed how well they realised the strategic intent from the performance achieved as projects are executed.

However, it was noted that there is a need to evaluate how well the organisation is doing in realising the strategic intent. Although the proposed approach as defined in the conceptual model was followed, its effectiveness was dwarfed due to the absence of the evaluation of how the organisation is doing in realising its strategic intent.

Chapter 7: Conclusions and Recommendations

Furthermore, there was a need to define what the organisation define as business value. The lack of an organisation-wide definition of business value limited how everyone across the organisation contributes to value creation.

It was also found that business value was not formally defined within three of the case organisations and thus this appeared to have a bearing on the collective, focused and purposeful drive towards value creation.

Research sub-question 2: What are salient factors that enable effective strategy execution through project portfolios that enable an enterprise to create value for its stakeholders?

Literature indicates that there are strategic performance factors that are critical in strategy execution and these need to be considered by business leaders ((Srivastava, 2013), (Cocks, 2010), (Hrebiniak, 2008), (MacLennan, 2011), (Al-Ghamdi, 1998)). These factors are valuable since they provide insight and guidance on what needs to be monitored as the strategy is executed to realise value for the organisation. The factors highlight key aspects to consider as well as barriers that must be managed in order to improve the effectiveness of strategy execution. The research identified twenty five (25) salient factors in the use of project portfolios in effective strategy execution in order to realise business value. They were identified from the review of the company documents and also emerged during the interviews with the representatives from the case organisations. These are presented in section 6.7.

Research sub-question 3: How could project portfolios be used to drive the effective realisation of strategic objectives?

Literature indicates that a strategy execution model is critical in guiding business leaders on how to execute their corporate strategy ((Lukac & Frazier, 2012), (Carroll, 1982), (Hrebiniak, 2005), (Ghezzi, 2013)). The insights gained from the review of the literature were consolidated into a model which covers the approach that should be considered when project portfolios are used to execute strategy. The overall approach is presented in Figure 3.1 and the conceptual model presented in Figure 3.2. There are two primary themes which need to be considered and integrated to enable the organisation to define how it is going to use project portfolios to execute on its corporate strategy with the aim of creating business value. The first one is its strategic management process and the second one is the project portfolio management approach. Furthermore, Srivannaboon & Milosevic (2006) cautioned that there must be a link between the strategy and projects in order to ensure alignment. The contribution of the representatives from case organisations is captured in Sections 6.3 to 6.6. The development of a guiding model led to a proposed conceptual model that contains four elements and these are:

Chapter 7: Conclusions and Recommendations

1. Strategic intent,
2. Project portfolios,
3. Portfolio success, and
4. Business value.

The Strategic intent element is about defining the strategic direction of the business and the value that is expected from executing the strategy. It was observed that the strategic intent is dependent on the strategy formulation process which was deemed to be critical by the participants who were interviewed. It was shared that it is imperative that the strategic direction of the business is clear so that the strategy planning process may take a cue from it. It was noted from both the literature and the interviews that defined strategic objectives and measurable targets are central to the strategy execution process. It was further reiterated that the quality of the defined strategic objectives and measurable targets enable the refinement and structuring of the project portfolios. Furthermore, the evaluation process also enables the identification of warning signs of trouble so that management could devise mechanisms on how to overcome them.

It was observed during the research that case organisations created a link between the strategic objectives and projects which were implemented to realise the strategic objectives. It was reported and demonstrated by representatives from case organisations that the linking of projects to strategic objectives was purposeful. All four case organisations used project portfolios to execute their corporate strategy and had thus sought to mature in their project management approach particularly for capital projects. It was further noted that all four case organisations had established an organisation in the form of a project support and/or management office to oversee the execution of strategic objectives through project portfolios. The function and nature of the office differed between case organisations in that some played a governance and oversight role for the organisation since project management is decentralised and is the responsibility of business units or divisions that were responsible for implementing the approved projects. It was also observed that project management was formalised within the case organisation and a framework including electronic systems were adopted to define how projects must be executed. It was noted that this helped not only with defining the projects environment but enabled project managers to follow a structured approach to achieve the outcome/s of the projects.

Project portfolios are developed based on the corporate strategy, its objectives and measurable targets as well as the projects which are selected from a pool of project ideas which are evaluated systematically to arrive at portfolio/s that would be used to execute the corporate strategy. These projects are selected based on a defined criteria given the measurable targets. It was also pointed out that the number and quality of project ideas are important since these will improve the richness of the portfolio selection process. It was recommended that organisations need to encourage the

Chapter 7: Conclusions and Recommendations

identification and motivation of projects so that they may be considered during the portfolio selection process. It was also shared that the criteria used to select projects as well as the approach used to balance the portfolio need to be defined and communicated to relevant role players. It was shared that this would enable transparency, empower the evaluation committee and improve faith in the process since it is understood what is deemed as important by the organisation.

Project portfolio success is largely influenced by the maturity of the organisation and method used to execute projects. This was noted to be influenced by the extent to which the adopted PPM framework has been refined and improved over time and the competency of project managers at the case organisations. It was noted that all four case organisations had established some form of a projects management office which oversaw the improvement in the maturity, competency and tools in the execution of projects. Furthermore, the case organisations went on to define some form of a project management methodology based on professional practices in order to streamline and standardise how projects are delivered. It was also noted that case organisations had also considered good practices such as benefits realisation management, business case or proposal review process, etc. in order to improve the contribution and value realised from delivering on projects. Furthermore, automated systems were adopted to reduce the administration burden during the management of projects, enable tracking and monitoring of progress made, as well as reporting on outcomes achieved from projects.

The outcomes of project portfolio success, taking into consideration the company's strategic intent, were used to evaluate how well the organisation is doing in realising its corporate strategy as well as to express a view on the outlook on the future of the enterprise. It was however highlighted that this aspect was not consciously or purposefully done by some of the case organisations, and as such this limited the understanding of how it is doing against its strategic intent. Furthermore, it was shared by most of the representatives that were interviewed that there is no common understanding of what the organisation deems as business value. This was seen as a limiting factor since aspects that may be important to various stakeholders may be undermined since they are not formally defined and clear to all members of the organisation.

It is concluded from the outcome of the study that project portfolios and the use of projects enable a controlled environment and approach for the execution of the corporate strategy. Project management defines an approach that should be adhered to in order to improve the successful delivery of projects and this controlled and structured approach sets the tone for strategy execution. It was noted and is recommended that the realisation of benefits which contribute to the achievement of strategic objectives and their targets be explored in future studies in order to improve

Chapter 7: Conclusions and Recommendations

the understanding of how project benefits contribute to the realisation of the corporate strategy.

The observation from the review of documents provided by case organisations and the input provided by participants confirmed what was noted during the review of the literature where the following were hailed as important in the use of project portfolios in strategy execution:

- **Leadership** was highlighted as crucial in providing the vision, guidance and direction during the execution process. It was noted that the primary role that was expected from leaders was that of co-ordinating execution activities since there are multiple role players that need to be clear on what must be done. Furthermore, it was expected that business leaders would create the right conditions and culture for implementation. It also came out strongly that it was the role of business leaders to synchronise the long and short term view of the strategy for the organisation.
- **Communication** was another factor which was emphasised that there was a need for continual communication since this provided a clear plan on the progress made and how things ought to be done. The communication process would also allow the sharing of information to improve understanding on execution and adoption of lessons learned. It was emphasised by participants that value was derived from continual learning on what works and does not work as well as the reason/s why. Two case organisation shared that they were able to establish a common language on the strategic pillars/thrusts, objectives, measures and critical issues which enabled the organisation to establish a common vocabulary.
- **Project Management techniques** were indicated as the source of structure, control and predictability. They allow the crafting of individual programmes or projects. It was emphasised that the focus was on ensuring strategic fit and alignment. The use of project portfolios was seen as a way to integrate implementation through the management of resources in order to take advantage of synergies. It was shared that one guiding principle among others was the adoption of high value projects to form balanced portfolios for available resources. It was shared that it is critical to balance portfolios, programmes, and projects based on outputs, outcomes and results. The use of project management techniques was seen as a way to create value and in its management.

The structuring of the research questions as outlined in Sections 4.5 and 4.7 enabled the testing of the constructs of the conceptual model through case studies. Two questionnaires were used during the study with the first one establishing the context on how the case organisations use project portfolios to execute the corporate strategy while the second questionnaire tested the prevalence and effectiveness of the

Chapter 7: Conclusions and Recommendations

constructs of the conceptual model. The outcome of the interviews were used to respond to the propositions that were developed on the conceptual model. The following conclusions are therefore drawn on the propositions, based on the outcome of the interviews and the results of the study:

P1: Proposition 1 - Project portfolio success approach consists of average single project success, project balance, strategic fit as well as use of synergy and is positively related to business value consisting of economic success and determining the long term vision.

The results of the study demonstrate that case organisations purposefully selected and executed projects that were aimed at delivering the corporate strategy with the aim of creating business value in terms of economic success and long term vision. It was noted from the review of the literature and during the data gathering process that organisations need to engineer the value which they expect from executing their strategy through linking the projects that are implemented to the corporate strategy while ensuring that the expected outcomes are achieved to deliver on the strategic objectives. Furthermore the study found that there is a need for case organisations to link the performance that was achieved during the execution of projects to the strategic intent. However, the extent of the research was unable to quantify the effect of average project success on business value. It is therefore recommended that future studies should evaluate and quantify the effect of project portfolio success approach on business value.

P2: Proposition 2 – Project portfolios approach consist of strategic alignment, business risk and project portfolio structuring is positively related to project portfolio success approach.

The outcome of the study indicates that the use of project portfolios in the execution of the corporate strategy influences the importance with which projects are executed to achieve the expected outcomes and benefits. The successful execution of projects in portfolios was reported as important in the delivery of strategic objectives and targets by the representatives of the case organisations. Furthermore, the representatives at case organisations reported that the review of the performance achieved from the execution of projects was tracked, monitored and reported on at both operational and strategic levels.

P3: Proposition 3 – Strategic intent consists of strategy, objectives and targets have a direct influence on project portfolios approach.

The observations and outcome of the study points to the need for a link of the project portfolios to the corporate strategy. Participants from case organisations shared that their organisations prioritise the implementation of projects that are linked to and aimed at executing the corporate strategy.

Chapter 7: Conclusions and Recommendations

P4: Proposition 4 – Strategic intent is moderating the relationship between project portfolios approach and project portfolio success approach.

The outcome of the research indicates that case organisations derived projects in the portfolios from the corporate strategy given the defined objectives and targets and managed the successful execution of these projects to achieve outcomes that were defined in order to realise the strategic objectives and targets. It was noted at the Research and Development Company that the performance management formed a seamless link from the Corporate Plan, through to the Clusters (project portfolios) and the Compact, and to the Balanced Scorecard which was used to report on the Compact based on the performance achieved from implemented projects. This was enabled by an ERP system that was implemented by the case organisation to manage this process.

7.7. Proposed approach in the use of project portfolios in effective strategy execution

The review of the literature and insights gained from the study of the use of project portfolios in effective strategy execution led to the drafting of Figure 3.1 which was a sound approach that informed the field procedures and gathering of data during the study. This approach was observed at all four case organisations since they apply project portfolios to execute their corporate strategy. The approach was derived from the conceptual model outlined in Figure 3.2 which provides four elements which must be defined in the execution of the corporate strategy through project portfolios. Furthermore, salient factors which are articulated in Section 6.7 were noted during the data gathering process as complements of the approach on effective strategy execution through project portfolios that is illustrated in Figure 3.1.

7.8. Recommendations

The outcome of the study indicates that the conceptual model developed for the study is applied to a large extent by the case organisations that were evaluated. It is thus recommended that business leaders should use the conceptual model and the salient factors from the research to evaluate how well they have implemented and formalised the aspects in their organisations so that they may strengthen any area which may be a gap. It was also noted from the results of the study that the maturity in the use of project portfolios in strategy execution to realise business value differed from case organisation to the next. It is thus necessary for the case organisations to conduct a gap analysis based on the conceptual model and the salient factors that were identified from the study in order to develop an action plan to close the identified gaps. Furthermore it is also recommended that case organisations should candidly assess

Chapter 7: Conclusions and Recommendations

their maturity level in terms of effective strategy execution so that they could develop a roadmap on how to improve the strategy maturity level of the organisation to achieve the optimised level.

It was also noted that there were a number of aspects which were identified that require further study in order to improve their understanding and thus improve the body of knowledge. The following are recommended for future studies:

- It was noted from the study that the link between the corporate strategy and the projects implemented to execute the corporate strategy need to be clear.
- Organisations apply scorecards to report on the performance achieved by the business, which is largely used by shareholders. It was however not firmly established during the study how project benefits ensure organisational strategic goals are achieved and ultimately contribute to the strategic intent of the organisation. Furthermore there is a need to present the performance achieved in a format which enables different stakeholders to perceive how the organisation created value in a manner that they could relate to. It is thus recommended that future studies should explore this area in order to develop further insight which would benefit business leaders.
- It is recommended that future studies should explore how the successful execution of project portfolios create business value. It is also recommended that studies on salient factors should consider their level of importance in the industry in order to direct managerial efforts in organisations. Furthermore there is a need for a study that is aimed at developing and exploring the effectiveness of a strategy execution maturity model so that it could be improved over time to benefit business managers in different industries.

Additional recommendation - Strategy execution maturity model

The analysis of the case organisations over a period of seven (7) years indicated that there was some form of evolution in the maturity of the corporate strategy. These changes were as a result of the purposeful development of the organisation to improve its resilience in turbulent market conditions to adapt the corporate strategy as well as the improvement of the methodology used to implement programme and project portfolios. Some of the improvements were aimed at strengthening controls through defined processes and automation to improve efficiencies and reduce the administration burden of routine activities. It was also observed that other sources of improvements were as a result of changes in the external environment i.e. the onset of the digital era. It is therefore recommended that further work needs to explore how organisations mature in how they execute their corporate strategy through project portfolios. This would benefit business managers in that they will be able to drive the

Chapter 7: Conclusions and Recommendations

development and maturity of how they use project portfolios to execute the corporate strategy thus realising better performance from their efforts.

The insight gained from the study illustrates that strategy evolves over time focusing on aspects such as process, automation and collaboration among others. It was noted that one of the case organisations elevated the manner in which they manage the execution of the corporate strategy through improving the maturity of their internal process coupled with automation. Communication emerged as one of the key enablers given that multiple stakeholders have vested interest in the health and sustainability of the enterprise.

The overall observation from the results obtained from the review of the four case organisations is that strategy evolved at two levels. The first one was over a period of time as reflected in the seven year review which was done for all case organisations. The second one was over the short term planning and execution cycle. The long term cycle indicates that there is some level of maturity that takes place as the business is managed in a focused manner i.e. to realise its vision and mission. This is where the effectiveness of the strategy is seen since one would note how well the organisation is steered to achieve its strategic intent. The short term cycle shows a pattern which is similar among the four case organisations that were studied. This involves the review of the strategy executed in the previous cycle, planning of the coming cycle taking into consideration the strategic objectives or thrusts, measurable targets including internal and external factors that influence the business, development of the projects portfolio, a budget process as well as the review and approval of the annual strategic plan. It was noted that the project portfolio would be reviewed and aligned to the strategic objectives and targets so that the implementation of the projects would enable the execution of the strategy. It is therefore imperative for organisations to not limit themselves to the short term cycle given its prominence but continually review how well they are still on course to realise the overall corporate strategy (strategic intent). The proposed strategy execution maturity model (Figure 7.1) was developed with the aim of providing a roadmap which an organisation could embark on to improve the level of control and management it has on its strategy execution approach. It took into consideration the results of the study and the need for organisations to improve on their effectiveness is the execution of the corporate strategy through project portfolios. The process component incorporates both strategy execution and project management processes since these need to be integrated to yield a seamless process that is understood from end-to-end across the organisation. Automation is introduced gradually and usually adopted when processes are well defined and adhered to. The benefit of optimising processes is to take advantage of efficiencies and the reduction of the administration burden of routine activities. Collaboration is key to improve the participation and incorporation of contributions from different stakeholders so that insights are considered in decision making processes.

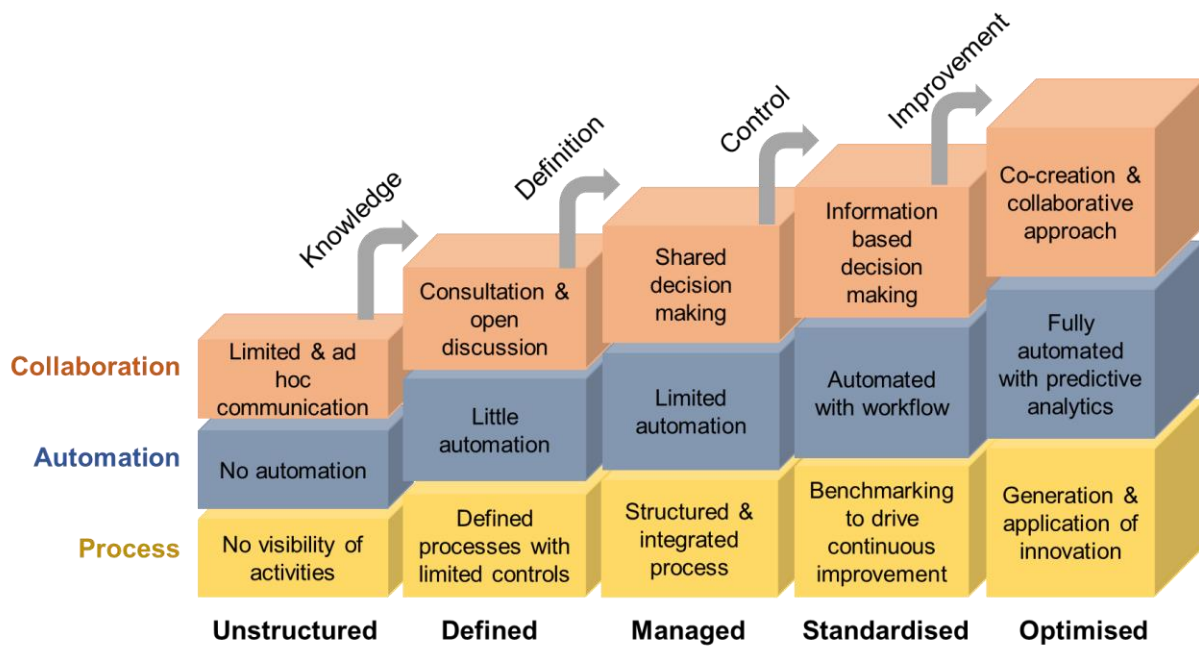


Figure 7.1: Proposed strategy execution maturity model

The search of literature did not return any results of a strategy execution maturity model and thus it was deemed necessary to develop one given the insights that were gained from the study. It is the view of the author that organisations could benefit from improving the maturity of their strategy execution process as they implement an integrated process that encompass project portfolios and strategic management. Insights gained from lessons learned from day to day operation of the business would be used to drive the maturity level as the organisation move from unstructured to optimised state. It is therefore recommended that future studies should explore the effectiveness of the proposed strategy execution maturity model so that it could be improved over time to benefit business leaders in different industries.

7.9. Contribution to the body of knowledge

The research sought to contribute to the body of knowledge through the testing of the conceptual strategy execution model proposed by Meskendahl (2010). It further sought to identify salient factors in the use of project portfolios in effective strategy execution in order to realise business value. The following subsections present the contribution from the research that is made to the body of knowledge:

Chapter 7: Conclusions and Recommendations

7.9.1. Tested conceptual model

The conceptual model proposed by Meskendahl (2010) was used to structure the approach applied to evaluate the use of project portfolios in effective strategy execution in order to realise business value. The conceptual model was documented to illustrate the thinking behind the study and the different constructs that were studied. It was noted from the review of the literature that the integration and linking of the corporate strategy with the portfolio of projects and back to the corporate strategy is crucial. It was noted that business leaders must be intentional in ensuring that projects that are implemented in the organisation deliver on the strategy since they consume precious and scarce resources. It was observed that although not all projects would be delivered, it is important for the organisation to understand the implication of this outcome and how it affects the realisation of the corporate strategy. Furthermore, there is a need for the evaluation process to consider more than just the achievement of performance measures but consider what the achieved performance mean for the organisation in terms of impact and reason for existence. Representatives from the case organisations that were interviewed emphasised that the image of the organisation in the market is judged based on the value it creates and impact it makes in the market or industry it operates in.

It is noted from the prevalence of the constructs of the proposed conceptual model that case organisations apply the proposed approach to execute their corporate strategy through project portfolios. Furthermore, the results obtained from the four case organisations were similar to a large extent as presented in summary Figures 6.9, 6.13, 6.25 and 6.30 with variations due to company specific preferences. The detail of the notable variations at case organisations are presented in section 7.1.

It is thus noted from the outcome of the research study that effective strategy execution could be defined as the implementation of the corporate strategy through defined objectives and measurable targets in a systematic, managed and controlled manner to achieve the company's strategic intent leading to the realisation of the desired business value.

7.9.2. Salient factors in the use of project portfolios in effective strategy execution

The analysis of the outcome of the evaluation of the results obtained from the case organisations, which is informed by the literature, yielded twenty five (25) salient factors for the effective strategy execution through project portfolios. These salient factors could be used in assessing the state of strategy execution through project execution to gain an understanding of the gaps which the organisation has in its approach in executing the corporate strategy through project portfolios.

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Appendices

Appendix 1 – Ethics clearance



Appendix 2 – Research consent letter

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Graduate School of Technology Management

Faculty of Engineering,
the Built Environment and
Information Technology

Graduate School of
Technology Management

04 May 2017

To whom it may concern

RE: Introductory letter for participation in interviews for a research study.

Ms Palesa A. Ramashala, a registered doctoral student at the Graduate School of Technology Management at the University of Pretoria, is conducting research for a doctoral thesis on an empirical study with the title: *The use of project portfolio management in effective strategy execution: a proposed approach to improve business success.*

Ms Ramshala needs to do a number of interviews to gain an understanding of aspects that enable the use of project portfolio management in effective strategy execution. We selected you as an expert in this regard to be interviewed.

It is however a requirement of the University of Pretoria that Ms Ramashala should obtain consent from you to participate in the study. She will contact you soon in this regard.

Please note that participation is voluntary, thus you can withdraw at any point from the study. The information that you provide, your role in the organisation, as well as the name of your organisation will not be disclosed to external parties without your consent.

We would like to thank you for your support and participation in this invaluable research. Your assistance in this regard is greatly appreciated.

Yours sincerely



Prof MW Pretorius
Also on behalf of Prof H deV Steyn
Research Supervisors

Provision of Consent to Participate

I hereby provide my consent to participate in the research for the purposes outlined above. Where necessary, I will provide supporting information and records to the researcher in order for them to conduct the research properly and arrive at a factually correct conclusion. I understand that due to the nature of the research study (case study), the sessions need to be recorded. The nature, objective, and ethical implications have been explained to me and I understand them.

I understand my right to choose whether to participate in the project and that the information furnished will be handled confidentially. I am aware that the results of the investigation may be used for the purposes of publication without disclosing the name of the organisation.

Company name:

Name	Date	Designation	Signature

Appendices

Appendix 3 – Research field procedures

Field procedure	Description	Requirement from the organisation
Introduction meeting	Meet with a representative from the organisation to: • Discuss the requirements of the research and clarify ethical requirements (NDA), roles, responsibilities and expectations. • Understand and obtain the organisation's requirements. • Discuss and identify participants given how the organisation is structured. • Obtain formal approval to conduct the study. • Agree the approach and timeframes.	One hour introduction meeting
Initial document review	Review of publicly available information in order to establish the context of the organisation's strategy and overall approach to strategy execution. • Annual reports • Company media articles	None
Interviews Semi structured – Contextual Semi structured – Effectiveness testing	Conduct three interview sessions to complete a draft questionnaire with representative/s from the organisation: • Session 1: Semi structured interview – Contextual (2 hours) • Session 2: Semi structured interview – first section (2 hours) • Session 3: Semi structured interview – second section (2 hours) Follow up session (optional): May be required should a need arise once the mandatory sessions are complete. (1 hour)	Estimated 6 – 7 hours total contact time to complete the interview questionnaires. The session will be recorded in order for the information to be properly recorded afterwards.
Second document review	Review of company records for evidence of the approach applied by the company. The following and other key documents highlighted during interview sessions are some of the documents that would be looked at: • Corporate strategy documents • Project portfolio management plans • Project portfolio management reports • Performance reports, governance reports / minutes of meetings held and supporting documents • Corporate annual reports	• Arrangement of access to the required information and contact person or people. • Provision of documents at an on-site location to review and make notes.
Observation/s	Attendance and observation of key meetings in order to gain an understanding and appreciation of how sessions are managed to manage and oversee the execution of strategic objectives.	Attendance of Project portfolio review meeting. One hour meeting with the PMO if one is established.

Appendices

Field procedure	Description	Requirement from the organisation
Case study draft	Documentation of the case study report for the organisation taking into consideration the different sources of information. The case study report needs to be verified and cleared with the company representative to ensure that it is factually correct, sensitive information have been sanitised adequately, the identity of the organisation is adequately protected, and that the outcome of the review fairly represents the objective of the study.	Review and feedback from company representative
Close-out meeting	Meeting to wrap up the field work, expression of gratitude for support and assistance, finalise organisational requirements as well as to discuss the way forward.	One hour session

Appendices

Appendix 4 – Research questionnaires

Semi structured Interview Questionnaire

Organisation:

Date:

Time:

What is your designation? _____

Interview session 1

1. How many years of work experience do you have?

- | | |
|--------------------------|--------------------------|
| Less than 5 years | ☐ |
| 5 to less than 10 years | ☐ |
| 10 to less than 15 years | ☐ |
| 15 to less than 20 years | ☐ |
| 20 years and more | ☐ |

2. How long have you worked in strategy execution?

- | | |
|--------------------------|--------------------------|
| Less than 5 years | ☐ |
| 5 to less than 10 years | ☐ |
| 10 to less than 15 years | ☐ |
| 15 to less than 20 years | ☐ |
| 20 years and more | ☐ |

3. Which level of the organisation do you function the most?

- | | |
|----------------------------|--------------------------|
| Board member | ☐ |
| Senior executive (C-suite) | ☐ |
| Operations - tactical | ☐ |
| Operations - execution | ☐ |

4. What is the approach that is followed when the long term (5 years) corporate strategy is developed (strategy formulation)?

5. What is the approach that is followed when the annual corporate strategy is developed (strategy planning)?

6. Who is normally involved in the corporate strategy development process (strategy planning)?

Appendices

7. How is business risk managed during strategy planning and execution?

8. How does the organisation manage the execution of strategy? Is there a formally adopted framework?

9. How are project portfolios for executing strategy defined within the organisation?

10. What is the process that is used to structure the project portfolio?

11. How is the portfolio balance achieved?

12. How is it ensured that the portfolio is aligned to corporate strategy?

Appendices

13. What is the process that is used to evaluate the performance of the portfolio?

14. What is the process that is followed to manage the process of realising benefits within the organisation?

15. What process has the organisation adopted for business case management and review?

16. Which tool or system does the organisation use to manage its portfolio?

17. Does the project portfolio take advantage of synergies across projects?

18. What is the effectiveness of project management across the organisation?

Appendices

19. What is the average project success rate in terms of the achievement of the project scope (quality, cost and time) within the organisation (using a scale of 1 – 10, with 10 being the best)?

20. What leads to the observed performance in the management of projects?

21. How effective is the process of managing key stakeholders during strategy planning, execution and evaluation?

22. How well do stakeholders understand the strategy, what needs to be achieved and their role in its realisation?

23. How well does the organisation monitor and control its portfolio to deliver on the strategy?

24. What is the effectiveness of the reporting process on the performance of the portfolio in realising strategy?

25. How is the long term success of the organisation catered for and managed proactively in corporate strategy management (defined, measured, monitored and reported on)?



Appendices

26. What are the other aspects that are key in effective strategy execution through project portfolios which you believe need to be noted?

Thank you very much for your support and assistance!

Appendices

Semi structured Interview Questionnaire

Organisation:

Date:

Time:

What is your designation? _____

Interview session 2

27. How many years of work experience do you have?

- Less than 5 years ☐
- 5 to less than 10 years ☐
- 10 to less than 15 years ☐
- 15 to less than 20 years ☐
- 20 years and more ☐

28. How long have you worked in strategy execution?

- Less than 5 years ☐
- 5 to less than 10 years ☐
- 10 to less than 15 years ☐
- 15 to less than 20 years ☐
- 20 years and more ☐

29. At which level of the organisation do you function the most?

- Board member ☐
- Senior executive (C-suite) ☐
- Operations - tactical ☐
- Operations - execution ☐

30. Please show me your organisation's well-defined long term strategy (i.e. 5 year strategy)?

Comments

31. What were the key processes that were built in during strategy planning that are key for effective execution?

32. How was the long term strategy (i.e. 5 year strategy) communicated across the organisation?

Comments

33. What were the key areas that needed emphasising during the stakeholder engagement sessions?

34. What are the measures of success for the long term strategy, are they defined and clear?

Comments



Appendices

35. What helped in ensuring that the long term strategy is well defined and clear to all stakeholders?

36. Where are the short term strategic objectives (i.e. annual plan) defined?

Comments

37. What helped in ensuring that the short term strategy is well defined and clear to all stakeholders?

38. How are the short term strategic objectives (i.e. annual plan) derived from and aligned to the long term strategy?

Comments

Project portfolio management

39. Has the organisation implemented a clearly defined project portfolio management system?

Yes ☐ No ☐

Comments

40. How long has the organisation been using project portfolio management?

41. What is the criteria for structuring and evaluating its portfolio that has been adopted by the organisation?

Comments

42. The criteria for measuring the benefits from the implementation strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

43. The criteria for measuring the benefits from the implementation of the strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

44. What has improved the effectiveness of defining the criteria for measuring strategic objectives?



Appendices

45. Please show me the approach and framework for the management of projects across the organisation?

Comments

46. The approach and framework for the management of projects across the organisation is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

47. The approach and framework for the management of projects across the organisation is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

48. What has improved the effectiveness of managing projects across the organisation?

49. Is there a functioning PMO for the management of projects across the organisation?

Yes ☐ No ☐

Comments

50. The PMO for the management of projects across the organisation is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

51. The PMO for the management of projects across the organisation is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

52. What has improved the effectiveness of the PMO within the organisation?

Benefits definition and measurement

53. Where are the benefits expected from the short term strategic objectives (i.e. annual plan) defined?

Comments

54. How long has the organisation been using the concept of benefits realisation?



Appendices

55. The criteria for measuring the benefits from the implementation strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

56. The criteria for measuring the benefits from the implementation of the strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

57. How is the concept of benefits realisation applied across the organisation?

Comments

58. What has improved the effectiveness of managing benefits realisation across the organisation?

Defined method to measure performance

59. Where are the measures of success for the short term strategic objectives (i.e. annual plan) defined?

Comments

60. The criteria for measuring the results of the implementation of the strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

61. The criteria for measuring the results of the implementation of the strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

62. How is the quality of the measures managed?

63. Where are the measures of success for the long term corporate strategy (i.e. five year plan) defined?

Comments

64. The criteria for measuring the results of the implementation of the strategic objectives is



Appendices

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

65. The criteria for measuring the results of the implementation of the strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

66. How is the quality of the measures managed?

Governance structure for the organisation

67. What is the governance structure to direct and manage strategy execution (implementation of the strategic objectives through project portfolios) which is used in the organisation?

Comments

68. The governance structure implemented is

Well defined ☐ Adequately defined ☐ inadequately defined ☐ Not clearly defined ☐

Comments

69. How does the organisation decide on how the different governance structures should be constituted?

70. The governance structure established for measuring the results of the implementation of the strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

Thank you very much for your support and assistance!



Appendices

Interview session 3

Tracking and monitoring of strategic objectives

71. What approach is used for tracking and monitoring strategic objectives across the company?

Comments

72. The approach for measuring the results of the implementation of the strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

73. How was this approach communicated across the organisation?

74. Which method or tool that is used for tracking and monitoring strategic objectives across the company?

Comments

75. The method or tool used for tracking and monitoring strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

76. The method or tool for measuring the results of the implementation of the strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

77. How is the tool used across the organisation? Single point of entry or multiple users with access control.

Reporting on performance

78. What process is used for reporting on the performance of strategic objectives?

Comments

79. The process for reporting on the performance of strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments



Appendices

80. The process established for measuring the results of the implementation of the strategic objectives is
Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

81. How is the reporting process structured to ensure consistent use by different business units?

Performance aligned to strategic objectives

82. Who is responsible for reporting on the overall performance of the organisation?

83. How is the reporting on corporate performance linked to strategic objectives?

Comments

84. The link between corporate performance and strategic objectives is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

85. The link between corporate performance and strategic objectives is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

86. How has the organisation ensured that the reporting on corporate performance is consistent regardless of the reporting business unit?

Effective strategy execution

87. Does the organisation assess corporate performance against the strategic intent?

88. What approach is used for assessing the effectiveness of corporate strategy execution?

Comments

89. The approach for assessing the effectiveness of strategy execution is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments



Appendices

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90. The method used to assess the effectiveness of strategy execution is

Appropriate for all ☐ Appropriate for some ☐ Inappropriate for some ☐ Inappropriate for all ☐

Comments

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91. How has the organisation built in the ability to evaluate how effectively it is executing on the corporate strategy?

Business value creation and management

92. What does the organisation deem as business value?

93. Has the expected shareholder value been shared with the rest of the organisation?

94. How is the reporting on corporate performance linked to financial and non-financial performance?

Comments

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95. The link between corporate performance and business financial and non-financial performance is

Well defined ☐ Adequately defined ☐ Inadequately defined ☐ Not clearly defined ☐

Comments

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96. How does the company measure financial and non-financial performance?

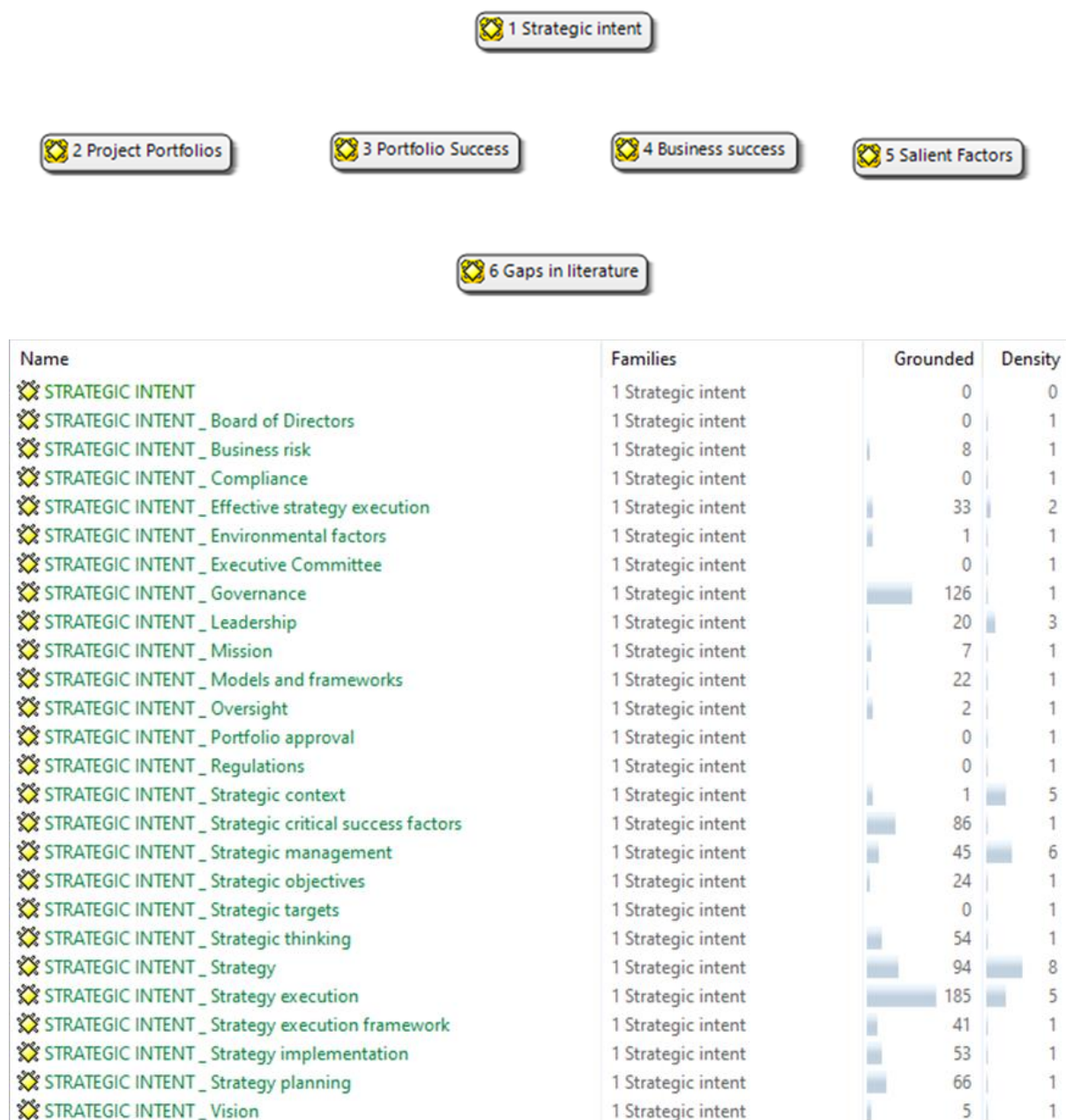
97. How has the reporting on financial and non-financial performance received by the different stakeholders?

98. Which aspects that were considered during strategy planning do you find key to the realisation of financial and non-financial performance?

Thank you very much for your support and assistance!

Appendices

Appendix 5 – Code family structure and codes grounding



Appendices

Name	Families	Grounded	Density
PROJECT PORTFOLIOS	2 Project Portfolios	0	0
PROJECT PORTFOLIOS _ Defined portfolio approach	2 Project Portfolios	188	1
PROJECT PORTFOLIOS _ Defined portfolio management	2 Project Portfolios	86	6
PROJECT PORTFOLIOS _ External environmental factors	2 Project Portfolios	1	1
PROJECT PORTFOLIOS _ Internal environmental factors	2 Project Portfolios	1	1
PROJECT PORTFOLIOS _ Investment Committee	2 Project Portfolios	0	2
PROJECT PORTFOLIOS _ Managing change	2 Project Portfolios	0	1
PROJECT PORTFOLIOS _ Performance criteria	2 Project Portfolios	31	1
PROJECT PORTFOLIOS _ Portfolio management experience	2 Project Portfolios	22	1
PROJECT PORTFOLIOS _ Portfolio review	2 Project Portfolios	10	3
PROJECT PORTFOLIOS _ Portfolio selection	2 Project Portfolios	61	10
PROJECT PORTFOLIOS _ Portfolio structuring	2 Project Portfolios	81	3
PROJECT PORTFOLIOS _ PPM Organisation	2 Project Portfolios	43	2
PROJECT PORTFOLIOS _ Project portfolio management system	2 Project Portfolios	56	1
PROJECT PORTFOLIOS _ Project portfolio selection framework	2 Project Portfolios	9	1
PROJECT PORTFOLIOS _ Projects Portfolio Committee	2 Project Portfolios	5	1
PROJECT PORTFOLIOS _ Resource allocation	2 Project Portfolios	0	1
PROJECT PORTFOLIOS _ Resource constraints	2 Project Portfolios	0	1
PROJECT PORTFOLIOS _ Role definition	2 Project Portfolios	0	1
PROJECT PORTFOLIOS _ Strategic alignment	2 Project Portfolios	19	1
PROJECT PORTFOLIOS _ Strategic decision making	2 Project Portfolios	1	1

Name	Families	Grounded	Density
PORTFOLIO SUCCESS	3 Portfolio Success	0	0
PORTFOLIO SUCCESS _ Average single project success	3 Portfolio Success	152	3
PORTFOLIO SUCCESS _ Defined project management methodology	3 Portfolio Success	14	4
PORTFOLIO SUCCESS _ Portfolio balance	3 Portfolio Success	6	3
PORTFOLIO SUCCESS _ Project management competency	3 Portfolio Success	3	1
PORTFOLIO SUCCESS _ Project management experience	3 Portfolio Success	1	2
PORTFOLIO SUCCESS _ Project management methodology	3 Portfolio Success	21	1
PORTFOLIO SUCCESS _ Projects Steering Committee	3 Portfolio Success	0	1
PORTFOLIO SUCCESS _ Resource management	3 Portfolio Success	0	1
PORTFOLIO SUCCESS _ Strategic fit	3 Portfolio Success	30	1
PORTFOLIO SUCCESS _ Use of synergies	3 Portfolio Success	8	1

Name	Families	Grounded	Density
BUSINESS SUCCESS	4 Business success	0	0
BUSINESS SUCCESS _ Added value (value add)	4 Business success	5	3
BUSINESS SUCCESS _ Balanced scorecard	4 Business success	57	5
BUSINESS SUCCESS _ Customer measure	4 Business success	0	1
BUSINESS SUCCESS _ Economic benefit	4 Business success	46	2
BUSINESS SUCCESS _ Economic success	4 Business success	32	2
BUSINESS SUCCESS _ Effectiveness benefit	4 Business success	0	1
BUSINESS SUCCESS _ Efficiency benefit	4 Business success	0	1
BUSINESS SUCCESS _ Financial measure	4 Business success	8	1
BUSINESS SUCCESS _ Internal process measure	4 Business success	0	1
BUSINESS SUCCESS _ Learning and growth measure	4 Business success	0	1
BUSINESS SUCCESS _ Long term vision	4 Business success	0	1
BUSINESS SUCCESS _ Performance management	4 Business success	83	2
BUSINESS SUCCESS _ Performance metrics	4 Business success	6	1
BUSINESS SUCCESS _ Strategy evaluation	4 Business success	1	3
BUSINESS SUCCESS _ Value creation	4 Business success	6	3



Appendices

Name	Families	Grounded	Density
✖ Gaps in literature	6 Gaps in literature	33	0
✖ IMPORTANT FACTORS	5 Salient Factors	0	0
✖ IMPORTANT FACTORS _ Salient factors	5 Salient Factors	81	0