

https://dspace.org/

Factors influencing strategy execution in the South African petroleum industry

Mabece, Zwelakhe

2015
http://hdl.handle.net/10539/19954

Downloaded from a DSpace repository. https://dspace.org/

Factors influencing strategy execution in the South African petroleum industry

Zwelakhe Mabece

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Wits Business School

Johannesburg, 2015

ABSTRACT

South Africa (SA) produces, imports, and consumes the largest share of liquid fuels in Africa. A majority of SA's fuels exports are destined to neighbouring economies. The SA petroleum industry has great strategic importance to the economy as a source of scarce jobs for people, businesses opportunities and government income. Its influence extends beyond economic boundaries to society and the physical environment. It is tightly regulated, yet a safe investment market as its regulatory framework guarantees companies reasonable investment returns.

The purpose of this study was to identify the factors influencing strategy execution in the South African petroleum industry. The outcomes could contribute towards effective management of the factors that influence strategy execution of companies in the industry.

A survey was conducted that consisted of 12 factor statements suggested by the literature review and that could influence strategy execution. Respondents from International Oil Companies, National Oil Companies, Wholesalers, Retailers and Service Providers were asked to 'force rank' a total of 100 points across one or all the factors. The survey also contained an open-ended question section to capture factors not covered the literature.

All the factors that were recorded in literature and assessed in surveys were found to influence strategy execution, although at varying degrees across industry players. At an industry level the top 5 ranking factors were Leadership Skills; Regulatory Uncertainty; Strategy Clarity; Competencies and Environmental Concerns. The study also found from the open questions 3 new factors that could influence strategy execution.

Leaders face the challenge of making impactful interventions during strategy execution. This study hopes to focus the attention of the leaders, managers and new entrants of the SA petroleum industry to the presented factors that greatly influence strategy execution in their companies.

DECLARATION

I, Zwelakhe Mabece, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Zwelakhe Mabece

Signed at ……

On the …….. day of …… 20…..

DEDICATION

This research is dedicated to my wife Sisipho Ncebakazi Mabece, my children Thimna, Siyavuya and Vuyo, my sister Sikhokhele and my mother Nobenguni Sokabo.

Thank you for all the support you have given me during the entire MBA project.

ACKNOWLEDGEMENTS

I would like to acknowledge the following people:

Professor Anton Roodt and Dr Thabo Mosala, my supervisors.

Fellow MBA students

All the academic staff of the Wits Business School MBA Part Time (2015) program

The admin staff of the Wits Business School

All the respondents who made the time to complete the surveys

All work colleagues who distributed the survey to their industry networks

Athi Mabece for coordinating the distribution and collection printed of surveys

Avhapfani Tshifularo, Executive Director of the South African Petroleum Industry Association (SAPIA)

The Leadership of BP Southern Africa who supported my development through the MBA.

TABLE OF CONTENTS

ABSTRACT ..... **ii**

DECLARATION ..... **iii**

DEDICATION ..... **iv**

ACKNOWLEDGEMENTS ..... **v**

LIST OF TABLES ..... **ix**

LIST OF FIGURES ..... **x**

CHAPTER 1. INTRODUCTION **11**

1.1 PURPOSE OF THE STUDY 11
1.2 CONTEXT OF THE STUDY 11
1.2.1 STRATEGY EXECUTION 11
1.2.2 SOUTH AFRICAN PETROLEUM INDUSTRY 13
1.3 PROBLEM STATEMENT 16
1.3.1 MAIN PROBLEM 16
1.4 SIGNIFICANCE OF THE STUDY 16
1.5 DELIMITATIONS OF THE STUDY 17
1.6 DEFINITION OF TERMS 18
1.7 ASSUMPTIONS 18

CHAPTER 2. LITERATURE REVIEW **20**

2.1 INTRODUCTION 20
2.2 BACKGROUND DISCUSSION 20
2.3 DEFINITION OF STRATEGY EXECUTION 21
2.3.1 STRATEGY 21
2.3.2 STRATEGY EXECUTION 22
2.4 FACTORS THAT IMPACT STRATEGY EXECUTION 23
2.4.1 ORGANISATIONAL CULTURE 24
2.4.2 COMPETENCIES 25
2.4.3 ORGANISATION STRUCTURE 25
2.4.4 MANAGEMENT COMMUNICATION 26
2.4.5 LEADERSHIP SKILLS 27
2.4.6 STRATEGY AND ROLE CLARITY 27
2.4.7 STRATEGIC PERFORMANCE MONITORING 28
2.4.8 RESOURCES ALLOCATION 28
2.4.9 EMPLOYEE ENGAGEMENT 29
2.4.10 CONCLUSION OF THE FACTORS INFLUENCING STRATEGY EXECUTION 30
2.5 PETROLEUM INDUSTRY FACTORS 30

2.6 Conclusion of Literature Review 33
2.7 Research Proposition 36

CHAPTER 3. RESEARCH METHODOLOGY 37

3.1 Research methodology 37
3.2 Research Design 37
3.3 Population and sample 38
3.3.1 Population 38
3.3.2 Sample and sampling method 38
3.4 The research instrument 39
3.5 Procedure for data collection 39
3.6 Data analysis and interpretation 40
3.7 Limitations of the study 40
3.8 Validity and reliability 40
3.8.1 External validity 40
3.8.2 Internal validity 41
3.8.3 Reliability 41
3.9 Ethical Considerations 41

CHAPTER 4. PRESENTATION OF RESULTS 42

4.1 Introduction 42
4.2 Demographic profile of respondents 42
4.3 Presentation of results for industry and by industry player 44
4.3.1 Industry experience 45
4.3.2 Factors influencing strategy execution – industry 45
4.3.1 Factors influencing strategy execution – International Oil Companies 47
4.3.2 Factors influencing strategy execution – National Oil Companies 48
4.3.3 Factors influencing strategy execution – Wholesalers 49
4.3.4 Factors influencing strategy execution – Retailers 50
4.3.5 Factors influencing strategy execution – Service Providers 51
4.4 Results from the open ended question 52
4.5 Summary of the results 52

CHAPTER 5. DISCUSSION OF THE RESULTS 54

5.1 Introduction 54
5.2 Demographic profile of respondents 54
5.2.1 Work and Industry experience profile of respondents 54
5.3 Discussion of factors influencing strategy execution 55
5.3.1 Discussion of the top 5 factors influencing strategy execution at an industry level 55
5.3.2 Discussion of the factors with the least influence on strategy execution at an industry level 56
5.4 Discussion of open ended questions 57
5.4.1 Middle Management support 57
5.4.2 Oil & Petrol Prices 57

5.4.3 CORPORATE VERSUS BUSINESS UNIT STRATEGY 58
5.5 CONCLUSION 58

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS 60

6.1 INTRODUCTION 60
6.2 CONCLUSIONS OF THE STUDY 60
6.3 RECOMMENDATIONS 62
6.4 SUGGESTIONS FOR FURTHER RESEARCH 63

REFERENCES 64

APPENDIX A – The Letter to Respondents 69

APPENDIX B – Consistency Matrix 73

APPENDIX C – Open ended question responses 74

LIST OF TABLES

Table 1: Research Assumptions 19

Table 2: Work and Industry Experience years 43

Table 3: Actual versus Target profile of respondents 44

Table 4: Industry experience years by company type 45

Table 5: Work and Industry Experience years 54

Table 6: Consistency Matrix 73

Table 7: Responses to open ended question 74

LIST OF FIGURES

Figure 1: Top Strategic focus for the Africa Oil & Gas Industry 2013-2018 (Akpata et al., 2013) 31

Figure 2: Responses by industry player 42

Figure 3: Responses by gender Figure 4: Age group years 43

Figure 5: Work experience years Figure 6: Industry experience years 43

Figure 7: Factors influencing strategy execution -industry 46

Figure 8: Factors influencing strategy execution –International Oil Companies ... 47

Figure 9: Factors influencing strategy execution –National Oil Companies 48

Figure 10: Factors influencing strategy execution –Wholesalers 49

Figure 11: Factors influencing strategy execution –Retailers 50

Figure 12: Factors influencing strategy execution –Service Providers 51

CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to identify factors that influence strategy execution in the South African (SA) Petroleum industry. The outcome can contribute towards systematic management of the factors that influence strategy execution in the SA petroleum industry.

1.2 Context of the study

The context of this study is discussed under the following aspects:

1.2.1 Strategy execution

Strategy is about creating a sustainable competitive advantage through uniquely chosen and fitting activity systems (Porter, 1996) that determine where a company will play and how to play (Favaro, 2013). The strategy defines a company's direction, positions it to move in that direction (Bossidy & Charan, 2002) and guides managers to identify core customers, target markets, and fit for purpose business models (Favaro, 2013). A company's strategy can thus be viewed as the primary task of management and reflects management's plans for running the business operations (Kim & Mauborgne, 2009; Thompson, Strickland, Gamble, & Gao, 2008).

Management's tasks with regards to strategy involve formulation and implementation (Dess, Lumpkin, & Eisner, 2006). Literature abounds with studies on these two aspects of strategy and findings reveal similar themes, henceforward discussed.

Numerous studies on strategy formulation can be identified as opposed to strategy execution (Joshi, Kathuria, & Porth, 2003; Noble, 1999a). Most of these do not differentiate between strategy implementation and strategy execution. In some cases, for instance, authors treat strategy execution synonymously with strategy implementation (Yang, Sun, & Eppler, 2009). This report uses the terms interchangeably.

Well formulated strategies are the link between aspirations and results, but do not create value for companies unless they are well executed (Bossidy & Charan, 2002; Noble, 1999b). Strategy execution and the management of its related processes is a key challenge in organisations as evidenced by implementation failures across industries that outnumber implementation successes (Allio, 2005; Srivastava, 2013; Yang et al., 2009). The difficulties attendant to executing strategy can be attributed to its complex operational nature that involves organisation wide management of people and cross functional business processes (Thompson et al., 2008). The success thereof lies in the alignment of value propositions for the customers, profit propositions for the shareholders and people propositions for the employees who are to execute the strategy (Kim & Mauborgne, 2009) .

The root cause of strategy execution failures can be traced from a myriad of issues such as a lack of role clarity in implementing strategy; lack of strategy clarity; lack of communication; employee non-commitment to the strategy; unaligned organisational competencies, structure and culture; as well as non-monitoring of implementation (Allio, 2005; Khadem, 2008; Cokins, 2009; Aaltonen & Ikavalko, 2002 cited in Smith, 2011; Stack, 2013)

Although strategy execution is a challenging task, it can be overcome through a combination of solutions that include addressing policy, structural, process, capability and behavioural dynamics together with developing execution models and monitoring dashboards (Bossidy & Charan, 2002, Dess et al, 2002; Allio, 2005; Hrebiank, 2005; Khadem, 2008; Cokins, 2009; Smith, 2011; Favaro et al, 2012, Srivastava, 2013, Stack, 2013). However, these solutions do not in themselves guarantee value creation and often fail because of a misfit in design (Micheli & Manzoni, 2010) and their post action-control nature is limited due to the late arrival of feedback for corrective action (Schreyögg & Steinmann, 1987).

Value is created through management taking coordinated interventions, facilitated through consistent and recurring strategic dialogues (De Haas & Kleingeld, 1999) that are guided by the models and their respective dials, to direct, control, review and revise execution of strategic objectives (Cokins, 2009; Srivastava, 2013).

It can be concluded that companies that are successful at executing their strategies produce good results that display value creation for their customers and shareholders as well as create a positive environment for employees. This could be a reflection of an effective leadership team that is able to deliver on its primary tasks of choosing strategic positions and driving processes that deliver on the strategic promises.

1.2.2 South African Petroleum Industry

The South African Petroleum Industry is discussed under the following sub-headings:

a) Industry structure

Driven mainly by domestic economic growth as well as demand from other African markets, South Africa produces, imports and consumes the largest share of liquid fuels in Africa (Wood-Mackenzie, 2013). The industry's core activities can be grouped into Importation & Refining of Crude Oil, Storage & Transportation of petroleum products and Sales & Marketing of fuels to end consumers. These activities are undertaken by various players including International Oil Companies; National Oil Companies with partial or full government ownership and control; Distributors or so called Wholesalers; Retailers; and Service Providers who provide services that range from transportation of petroleum products, engineering services to consulting firms (DOE, 2014; SAPIA, 2014).

The government regulates the industry's margins and the price of fuel paid by consumers and compensates petroleum companies for benchmark production costs, actual storage and distribution costs and for investments in marketing activities (DOE, 2014).

b) Strategic importance

Energy is used in the production of goods and services as well as in the transportation of goods and people (Nkomo, 2009); it thus underpins the functioning of the economy. The petroleum industry has a vital role in the economic development of the country due to its inclusion of a large number of Small and Medium sized Enterprises (SMEs) (Mondliwa & Roberts, 2014). It forms the largest broad-manufacturing grouping in terms of value-added and is the third largest employer in manufacturing, contributing about 100 000 direct and indirect jobs in 2012 (SAPIA, 2014; Wood-Mackenzie, 2013).

Fuel retailing, a much more labour intensive sector, contributes an estimated 700 000 jobs (Sibiya, 2013).

Since much of SA's liquid fuels exports are destined to countries in Southern Africa, the country leads the co-ordination of energy policies and influences the setting of fuel quality standards in the region (Mondliwa & Roberts, 2014; Wood-Mackenzie, 2013).

Given the critical role of the fuel to a working economy, any interruptions to required fuel supplies may affect production costs, consumer spending power, national investments, as well as social order in SA and neighbouring countries. This highlights the strategic importance of the industry as well as its value as a source of scarce jobs for people, business opportunities and government revenues.

c) Industry challenges

According to Barradas (2011), SA has minute conventional oil and gas deposits and this forces dependence on imported sources. Crude oil, on which the country relies heavily, accounts for about 17% of the country's primary energy needs (Nkomo, 2009). These factors expose the petroleum industry to economic vulnerabilities that include the supply and demand for fuels in international markets, the Rand/US Dollar exchange rate, international crude oil prices, supply chain costs, regulated fuel prices and geopolitical risks (Nkomo, 2009; SAPIA, 2014; Wood-Mackenzie, 2013).

The country's developing road and rail infrastructure is changing commuting patterns and the movement of goods within the country thus negatively impacting the on-road fuel demand. This is however counterbalanced by an increasing demand for diesel by the mining and construction sectors (Wood-Mackenzie, 2013).

As a result of fatal operational failures recorded in the industry's history world over, and that have transfixed the environment and livelihoods, petroleum companies have to uphold high environmental and people safety standards. Safety and operational risk management is thus a critical success factor for companies in the industry (Barradas, 2011). Additionally, petroleum companies face a range of other impacts latent to operating in industry.

These include legal impacts that emanate from licensing requirements for the importation and transportation of petroleum products as well as retail site operatorship licensing. Political impacts include ownership and participation of previously disadvantaged South Africans in the industry and the influence of the political landscape on the regulatory framework. Social impacts consider the role of the industry in job creation and in sustaining livelihoods. Technological factors are seen in the legislation of cleaner fuels which put pressure on local Refineries to upgrade production technology to meet modern specifications (DOE, 2014; Mondliwa & Roberts, 2014; Nkomo, 2009; SAPIA, 2014; Sibiya, 2013).

Consequent to the above factors, the industry is subjected to draconian regulations that aim to maintain the industry's strategic importance to the country. Notwithstanding that, the industry can be considered safe to invest in as the government has a stable regulatory framework that guarantees players reasonable investment returns (DOE, 2014; Mondliwa & Roberts, 2014; Nkomo, 2009; Wood-Mackenzie, 2013). Furthermore, it is considered a growth industry by SAPIA (2014) , as 85% of fuel demand for the growing Southern Africa Region comes from SA.

It can be concluded that a company playing in the tightly regulated and strategic SA petroleum industry, where consumers pay the same price, has to differentiate itself well, keep a tight rein on its costs and get the safest and most profitable utilization of its people and assets. These are the industry dynamics that managers of companies in the SA petroleum industry have to consider and navigate through when crafting and executing their strategies.

1.3 Problem statement

1.3.1 Main problem

The research problem central to this study is the identification of factors that influence strategy execution in the South African petroleum industry.

1.4 Significance of the study

Managers face the question of how to make impactful interventions during strategy implementation (Noble, 1999b), thus frameworks are needed to highlight the influence of those factors that impede or enhance successful strategy execution (Schreyogg & Steinmann, 1987). Despite advances in strategic planning and performance tracking, there is still widespread dissatisfaction with operating results. The problem in part lies in the great disconnect between strategic objectives and execution value (Angel, 2008). Additionally, according to Srivastava (2013), there is a scarcity of studies that discuss the causal relationships and among various factors at play during strategy execution and the extent of their influence on execution.

This study may contribute to the development of systematic approaches to managing factors that influence strategy execution in the SA petroleum sector. This is based on the fact that effective implementation rests on adopting interventions that encourage the required attitudes for meeting or exceeding strategic targets (Allio, 2005).

The deployment of resources during the strategy execution process should be sensitive toward the different positions and managerial levels in an organisation (Smith, 2011). In this regard, the study may further provide guidance to strategy execution at various levels in the petroleum companies, including:

(i) Executive and management level

A company's strategy is the primary task of management and reflects management's plans for running the business operations (Kim & Mauborgne, 2009; Thompson et al., 2008). The study can help management with the development and tracking of key

strategic factor indicators (Smith, 2011), since strategies are effective when they are constructed and owned by their executors (Bossidy & Charan, 2002).

Strategy execution failures have been linked to high executive job turnover (Cokins, 2009). Successful strategy execution that could be enabled by the study may help lengthen executive tenure.

(ii) Employee and Operations level

Smith (2011, p. 20) notes that "employees from different positions and managerial levels and medium and large-sized organisations have divergent perceptions on the use of leadership as a tool for strategy execution". Employees are effective at implementing a strategy only when there is clarity on the strategy and on their contribution to its achievement (Cokins, 2009). Since this study includes not only managers, it may contribute to integrated employee-management effectiveness in strategy implementation.

"A key feature of the SA liquid-fuels sector is that most transport fuel is produced in the coastal areas, about 68% of which is consumed in the inland region of Gauteng. This requires continued investments in storage and distribution facilities for the supply of petroleum products at the point of need" (Van Niekerk, 2012, p. 201). This study may also be of use to new entrants who may wish to explore investment opportunities along the industry's value chain.

1.5 Delimitations of the study

The study is done within the following boundaries:

- The study focuses on the execution / implementation phase of strategy
- This study focuses on influences at the industry level and not at the company level.
- The study includes petroleum companies operating in the South African petroleum industry as well as companies providing services to the industry such as Petroleum Logistics / Trucking Companies, Petroleum Storage Companies and Petroleum Engineering Consulting companies.

- Industry bodies such as the South African Petroleum Industry Association (SAPIA), Fuel Retailers Association (FRA) and National Oil Recycling Association of South Africa (NORA-SA) have been considers as Service Providers to the industry
- Employees include permanent management and ordinary staff

The following elements are excluded from the study:

- Government departments servicing the petroleum industry

1.6 Definition of terms

Strategy is the plan of action that prescribes resource allocation and other activities for dealing with the environment and achieving a competitive advantage (Daft 2008: 242) cited in (Smith, 2011).

Strategy formulation is the development of long range plans for effective management of opportunities and threats, taking into consideration corporate strengths and weaknesses (Smith, 2011).

Strategy execution/implementation is producing results in the context of strategic choices (Favaro et al, 2012)

An industry is an assemblage of individual businesses which are considered relevant in the study of the behaviour of any one business (Wilson & Andrews, 1951) cited in (Nightingale, 1978)

1.7 Assumptions

The assumptions listed in Table 1 may have influenced the outcomes of this research.

Table 1: Research Assumptions

Assumption	Reasonableness	Sensitivity
Individuals at the selected organisations willing completed the survey.	High	Highly Sensitive
Respondents were knowledgeable about their companies and the industry and were therefore able to answer the questionnaire honestly	High	Highly Sensitive
Respondents were experienced, knowledgeable and have been involved in or were impacted by strategy execution in their respective companies	High	Highly Sensitive

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This chapter contains a literature review on key aspects of strategy execution. The first section contains a brief background to the topic. The second section contains definitions of strategy execution. The third section discusses factors that influence strategy execution, followed by a discussion on how some of the factors influence strategy execution in the petroleum sector. The last section contains a conclusion to the literature review and the research proposition.

2.2 Background discussion

Strategy execution, juxtaposed to strategy formulation, remains a perplexity for executive teams and execution failures, admittedly, continue to be their chief frustration (Bigler & Williams, 2013; Cokins, 2009; Hrebiniak, 2008; Neilson, Martin, & Powers, 2008; Noble, 1999b; Sundheim, 2013). There is no wholesale model for the execution process and isolating the root of execution breakdowns is arduous consequent to latent operational execution complexities that involve organisation wide management of people and coordination of cross functional business processes (Allio, 2005; Cokins, 2009; Heide, Grønhaug, & Johannessen, 2002; Noble, 1999a; Reed & Buckley, 1988; Thompson et al., 2008). Thus, successful execution reflects on the capabilities of the executives of the company; sets apart high-performing from average firms; and guarantees firms lasting survival in a highly competitive environment (Bigler, 2001; Crittenden & Crittenden, 2008).

Various tools have been proposed for successful strategy implementation and these include methodologies to drive strategic behaviour (Allio, 2005); create a culture as well as an environment suited to strategy execution (Dobni, 2003; Katzenbach & Harshak, 2012); and

improve communication, alignment and follow up (Hrebiniak, 2008; Khadem, 2008; Reed & Buckley, 1988) of key systems, processes, and decisions within the firm (Joshi et al., 2003).

Some scholars contribute by directing attention to measurement and management of Strategic Performance Factors (SPFs) as a useful way to improve success in strategy execution (Srivastava, 2013). Others contribute by arguing that since a line "cannot easily be drawn in the organization above which strategy happens and below which execution does" (Martin, 2010, p. 5), strategy and execution is a misleading contrast (Sundheim, 2013) possibly occasioned by executives using strategies drawn on decade old frameworks and practices (McGrath, 2013).

It is evident that strategy execution is a continuing challenge evidenced by failures across industries outstripping successes (Allio, 2005; Srivastava, 2013; Yang et al., 2009) and contributing to high executive turnover (Cokins, 2009). Research and knowledge is therefore still needed to enhance the execution effectiveness of organisations. The next section discusses definitions of strategy execution followed by factors that influence strategy execution.

2.3 Definition of strategy execution

2.3.1 Strategy

Strategy has been defined by many scholars as:

"A statement of the vital missions of an organization, the goals which must be attained, and the principal ways in which the resources available are to be used" (Chandler, 1962) cited in (Hall & Saias, 1980, p. 151).

About creating a sustainable competitive advantage through uniquely chosen and fitting activity systems (Porter, 1996).

Defining a company's direction and positioning it to move in that direction (Bossidy & Charan, 2002).

A plan of action that prescribes resource allocation and other activities for dealing with the environment and achieving a competitive advantage (Smith, 2011).

“A guide for managers to identify core customers, target markets, and fit for purpose business models” (Favaro, Ragan, & Hirsh, 2013b).

Discovering and targeting attractive markets and then crafting positions that deliver sustained competitive advantage in those markets (Zenger, 2013).

The primary task of management and a reflection of management’s plans for running the business operations (Hough, 2007; Kim & Mauborgne, 2009; Thompson et al., 2008).

2.3.2 Strategy execution

The terms strategy implementation and strategy execution, as stated previously, are used interchangeably in this report. This is consistent with Yang et al. (2009) who observed “no differentiation of strategy implementation from strategy execution in the 60 articles that [they] reviewed, while some authors take strategy execution as an exact synonym of strategy implementation”.

Strategy execution is defined as:

“the communication, interpretation, adoption and enactment of strategic plans” (Noble, 1999b, p. 2).

Putting the formulated strategies to work (Heide et al., 2002).

“a dynamic, iterative and complex process which is comprised of a series of decisions and activities by managers and employees – affected by a number of interrelated internal and external factors – to turn strategic plans into reality in order to achieve strategic objectives” Yang et al. (2009, p. 6).

“a systematic way of exposing [a company’s] reality and acting on it. It is a discipline integral to strategy, the major job of the business leader and a core element of the organisation’s culture (Bossidy & Charan, 2002, p. 21)”.

Producing results in the context of strategic choices (Favaro, Ragan, & Hirsh, 2013a).

A critical foundation to building a capable organization and that has to be a part of a company's strategy and its goals (Crittenden & Crittenden, 2008).

When considering the definitions hitherto discussed, strategy execution can be seen as a systematic process comprising actions chosen by management and directed to deliver on the formulated strategy promises. This is the definition that is henceforth used in the study.

2.4 Factors that impact strategy execution

From time immemorial, studies that investigate aspects of strategy execution have been done and from which factors that enhance or impede success in execution have been revealed. The following factors repeatedly show up in the discussions and were reviewed as listed below:

- Organisational Culture
- Competencies
- Organisational Structure
- Management Communication
- Leadership Skills
- Strategy and Role clarity
- Strategic Performance Monitoring
- Resources Allocation
- Employee Engagement

2.4.1 Organisational Culture

The concept culture is defined varyingly according to the field of study (Heide et al., 2002). Cummings and Worley (2009, p. 234) define culture as:

> "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems".

This broad definition of culture is fitting in the context of strategy execution in corporations as a process that involves coordinated actions of many people. It underscores the concept of a shared approach to problem solving that is learned and taught to incumbents. This role of culture is highlighted in the strategy execution literature. For example, Bossidy and Charan (2002) and Chatman and Cha (2003) state that culture concerns execution and is interconnected to business strategy. They view culture as shared values systems that define what is important and norms that define apt attitudes and behaviours.

A corresponding view is seen in Dobni (2003) who expounds corporate culture as the employees' combined thoughts and actions that exhibit the strategic positioning of the company. He further views culture as an internal controllable variable and thus a key the driver of strategy since changes to strategy are best effected through changes in culture. Simons (2010) agrees, stating that employees will assume shared responsibility for the organisation's success if they have pride in its mission, have a sense of belonging to a special group, have trust in their colleagues and perceive fairness as well as equity. Katzenbach and Harshak (2012) concur and advise leaders not to blame their company's culture when strategy execution fails, but rather view it as an asset as well as an access-point for energizing people. Thus culture has to be strategically relevant to be used as leadership tool (Chatman & Cha, 2003). Organisational culture is therefore a key ingredient that enables cooperation during strategy execution.

2.4.2 Competencies

Prahalad and Hamel (1990) define competencies as the collective learning and skills and technology coordination capability in the organization. Their core advice is that identification of core competencies is critical to strategy as these are the linchpin of competitive advantage that enable broad market entry, shape perceived customer benefits and make it difficult for competition to imitate.

Dobni (2003) also supports the concept of employee capabilities as a core competency in strategy implementation and proposes managers assess their awareness of unique employee capabilities as well as evaluate whether the company is leveraging these. Khadem (2008) proposes, among other factors, alignment of competencies as an effective tool in assuring strategy execution. He alleges that, without competency, delegation is unrewarding and yields inefficient utilisation of people.

To have a clear idea of where to focus competency building efforts, managers must identify the skills needed to carry out strategic initiatives together with the level of competency in the identified skills. Moreover, to channel investments appropriately, organizations need a view of whether to develop individual or organizational competencies (Koufteros, Verghese, & Lucianetti, 2014).

2.4.3 Organisation Structure

According to Reed and Buckley (1988) there has been general consensus, since the early 1960s, that company performance hinges on an optimal strategy-structure fit. Olson, Slater, and Hult (2005) confirm by defining organizational structure as a connection of duties, individuals, and formal and informal channels, and argue that firms that match structure and behaviour to strategy outperform those that do not. By implication, one can argue that the choice of structure is vital to the implementation of corporate strategy (Hrebiniak, 2008) and indirectly affects execution through its influence on information, control and decision processes (Heide et al., 2002).

Hrebiniak (2008) identifies the role of structure-strategy fit as the minimisation duplicate resources. It is therefore critical for business leaders to enhance synergies and scale activities as well as strike a balance between centralised and decentralised structures. Neilson et al. (2008) also reaffirm this position, purporting that companies that continue to resolve their execution problems only with structural or motivational initiatives will achieve unsustainable results. From the above discussion it can be concluded that to solve execution failures, structural interventions must be preceded with clarifying decision rights, designing information flows and aligning motivators.

2.4.4 Management Communication

Inadequate management communication on what is to be done in an organisation commonly yields ineffective performance (Reed & Buckley, 1988). Allio (2005) suggests that the challenge managers face when breaking strategy into actions is communicating and monitoring implementation in terms that are understandable to all. This is because strategy implementation requires a large number of people than strategy formulation; consequently challenges with seamless organisation wide communication arise (Hrebiniak, 2008). Communication ensures that processes throughout the organization support execution efforts as well as improves the connectivity of strategic objectives with the daily objectives throughout the organisation (Hrebiniak, 2008). Furthermore, communication can help people clarify customers' expectations and how to satisfy them and also help people know the steps to follow to achieve success (Michlitsch, 2000).

For the purpose of fit between organizational behaviour and organizational goals, a strategic dialogue is necessary to ensure alignment between the discussions on strategic issues at multiple organizational levels (De Haas & Kleingeld, 1999). The fact that strategy execution involves a larger number of people increases the gradient of its challenge. Thus, the difficulties attendant to implementation can be rooted in ineffectual communication, which negatively impacts trust and consequently undermines execution efforts.

2.4.5 Leadership Skills

According to Yang et al. (2009), leadership and management collectively refers to senior-level leaders including company owners, chief officers, and directors. Noble (1999a) and (1999b) considers this group a critical determent of success or failure of strategic execution as it can significantly influence implementation elements such as the delegation of authority and decision-making. Furthermore leading a cross-functional effort requires a broad array of skills. Bigler and Williams (2013) propose that since leadership is essential to world-class strategy execution, the latter can play reciprocal role as a test bed for internal, on the job, leadership development.

Crittenden and Crittenden (2008) concur that strategies are implemented through a company's structure with managerial skills as key indicators of the successful or unsuccessful accomplishment of the implementation effort. Thus, those firms which successfully gain the skill of world-class strategy execution through leadership development attain a valuable firm specific resource that would be difficult for competition to imitate in the short to mid- term (Bigler & Williams, 2013).

2.4.6 Strategy and Role Clarity

A well-formulated, clear and quality strategy yields quality execution (Favaro et al., 2013a; Hrebiniak, 2006); is underpinned by building blocks: the underlying concepts that define even its most complex parts (Bossidy & Charan, 2002); contains factors critical to its success (Schneier, Shaw, & Beatty, 1991); and is a foundation for decision making and resource allocation (Favaro, 2013). Beer and Eisenstat (2000) warn that a vague strategy manifests competing strategies to the detriment of the company. Customer facing employees invent their own strategies when unclear about the company's strategy. Thus clear lines of responsibility derive from a clear strategy and facilitate follow-up on execution tasks (Heide et al., 2002). Additionally, understanding strategic direction helps reconcile different perspectives, fosters common purpose and further empowers managers with judicious independence (Beer & Eisenstat, 2000).

In their study of about 1000 companies, Neilson et al. (2008, p. 2) found that 71% of individuals in companies strong on execution agreed with the statement “Everyone has a good idea of the decisions and actions for which he or she is responsible”. This attests to Allio (2005, p. 2) earlier notion that execution “only works when there’s a clear and shared understanding of who does what, when, at what cost”. This is further supported by Cokins (2009) who states that employees are effective at implementing strategy only when there is clarity on the strategy and on their contribution to its achievement. The discussion above confirms that a clear strategy facilitates clarity of responsibilities and also strengthens successful execution of the major elements of the strategy.

2.4.7 Strategic Performance Monitoring

Metrics and performance measurement are viewed as tools through which an organization’s mission, or strategy, can be translated into reality and through which alignment and coordination can be maintained (Melnyk, Stewart, & Swink, 2004; Micheli & Manzoni, 2010; Srivastava, 2013). Management teams can use the Strategic Performance Management (SPM) to gain insight into customer service levels, engineer strategic options for testing the effectiveness of work processes and required improvements, as well as solicit employee support and commitment (Aracıoğlu, Zalluhoğlu, & Candemir, 2013; Cokins, 2009; Joshi et al., 2003; Koufteros et al., 2014).

From another angle, Micheli and Manzoni (2010, p. 6) warn management teams to avoid SPMs “encouraging perverse behaviours, stifling innovation and learning, and having little effect on decision-making processes”. In the same argument, Srivastava (2013) advises that a right balance is required between financial and non-financial measures as well as measures for the short and long term.

2.4.8 Resources Allocation

Adequate resources allocation is central to strategy implementation (Heide et al., 2002; McGrath, 2013) and encompasses the utilisation of a company’s resources: money, people, and capabilities (Crittenden & Crittenden, 2008).

Montgomery (1992) cited in Crittenden and Crittenden (2008, p. 6) has a comprehensive definition of resources that include:

> "financial; physical capital (plant, equipment, geographic location, and access to raw materials); human capital (training, experience, judgment, intelligence, relationships, and the insight of managers and workers); and organizational capital (formal reporting systems, informal relationships within the firm, and relationships between the firm and its external environment)".

The perspective of Beer and Eisenstat (2000) reflects that resource misallocations impede implementation efforts. For example, allocation of financial resources impacts the allocation human resources that may in turn impact other elements of the strategic plan (Olson et al., 2005). It is for this reason that McGrath (2013) advises business leaders to get a tight rein control over the resource allocation process as a crucial tool for an organisation coping with changes in the strategy execution environment.

2.4.9 Employee Engagement

"While a company's leaders may devise the strategy, it is employees, all of them, who will implement the strategy" (Michlitsch, 2000, p. 2). Accordingly, when workers are engaged and empowered, they take value adding action and the entire company triumphs (Dobni, 2003; Heide et al., 2002; Martin, 2010). However, the right people have to be in the right jobs, correctly used and engaged, if sustainable performance and competitive advantage is to be achieved (Bossidy & Charan, 2002; Prahalad & Hamel, 1990). This, according to Khadem (2008) can be attributed to the fact that creative minds, professionals and experts find difficulty buying into strategies they were not engaged in.

The role of employee engagement in strategy execution and the process by which engagement is best achieved is illustrated best by Michlitsch (2000, p. 7) who advise managers to:

- “Develop a clear, compelling mission and strategy.
- Select and train the right people.
- Explain the mission and strategy to staff and,
- Provide the information needed to clarify performance requirements.
- Give feedback and information so staff can do a good job.
- Embed company goals in a strong company culture.
- Reward people for doing what you want them to do and for successfully achieving the company's mission and strategy.”

2.4.10 Conclusion of the factors influencing strategy execution

The review of literature led to identification of the factors discussed and that have a positive or negative influence on the process of executing strategy. These factors impact organisations in varied ways, for that reason, identification and resolution of the factors are paramount, although it will differ across organisation types and industries.

2.5 Petroleum Industry Factors

Akpata, Bredenhann, and White (2013) conduct and publish a review of developments in the African oil and gas industry based on insights from industry players in Africa including international oil companies, national oil companies, independent oil companies, service companies and industry commentators. They state that uncertainties in the environment make strategic and long-range planning extremely important for oil and gas companies. Furthermore, to be successful, the companies need to continuously control costs, balance new projects risks and benefits, develop new products and make effective capital allocation decisions, all in the backdrop of blizzard regulatory, safety, environmental and political stability considerations.

In relation to the above stated context, Dudley (2014) states that the industry’s responsibilities start with ensuring the safety of operations for people and the environment, followed by providing financial returns to shareholders, thereafter providing energy for customers and revenues for governments.

Thus, strategy execution requires a mind-set focussed on meeting the industry's responsibilities as well as achieving capital discipline, greater operational efficiencies and lower costs.

Akpata et al. (2013) identified and ranked 11 strategic focus areas for the oil and gas industry for the period 2013 to 2018 as depicted in Figure 1. These areas can be matched to one or more of the general factors that influence strategy execution in companies, as discussed in the preceding sections. For example, Asset management and optimisation; Capital expenditures; General and administrative (G&A) cost management can be grouped to involve Resources Allocation, whereas Skills and People training and development can, as discussed above, fall under orgnanisation Competencies. Geographic diversification could be seen to involve factors that influence the cultural and structural orientation of a company. Financial performance / Reporting is also a common factor influencing strategy execution as has been found in literature.



Figure 1: Top Strategic focus for the Africa Oil & Gas Industry 2013-2018 (Akpata et al., 2013)

A discussion of how some of the factors unique to the petroleum industry influence strategy execution follows:

According to Akpata et al. (2013) petroleum companies' resources are expended on both new and old assets, with the aim to control costs with prudent capital expenditure, as well as maximising the life of the assets already owned. This strategy could be consequent to harsh economic conditions and the need for tighter rein on costs.

Capital expenditure is also allocated to meet environmental concerns emanating from a combination of internal company policies and industry standards as well as the increasing environmental legislation in many African countries. In South Africa, cleaner fuel standards have been announced causing a need for major investment by companies who own Refineries to get their plants ready to produce fuels that are compliant with the new quality specifications. Most firms welcome and support these developments, however, they warn that in the absence of cost-recovery mechanisms, the upgrades may be unviable economically (Barradas, 2011; Wood-Mackenzie, 2013). These issues impact capital allocation decisions and may place limitations on resources available for other elements of strategy.

Major oil companies in the petroleum sector own the majority of retail assets across the country, however, they are by law not permitted to operate these assets (Wood-Mackenzie, 2013). This has a potential to impact the leadership teams' ability to directly influence strategy execution at the retail level since the retail businesses are independently operated under franchise-type agreements. Furthermore, retail businesses have non-fuel value add services such as quick service restaurants, convenience shops or partnerships with Fast Moving Consumer Goods (FMCG) retailers. The non-fuel margins contribute significantly total retail margins, however they bring complexity to the organisational structures that are required to manage the various relationships entered to in the different channels of trade (Sibiya, 2013).

In their report, Akpata et al. (2013) state that companies unanimously identified the general skills gap and shortage of local skills as problems across their businesses. Thus, training or recruitment of local talent at the levels required is a significant area of concern that petroleum companies are wrestling, more especially, filling senior management positions. It takes many years for incumbents to gain the required knowledge and experience to perform at senior levels. Filho (2014) attributes the skills challenge in part to the information technology era that has blessed the industry with the needed advanced tools. Complex technology, he argues, calls for commensurate advances in professional skills and expertise. Additionally, the industry's rapid development worldwide makes it challenging to hire the appropriate people to fulfil a wide range of new skilled positions as well as to cover the shortages that result from demographic changes.

The entire South African oil supply chain is regulated, from licensing, export and import control, infrastructure tariff setting, price administration and fuel quality standards (Mondliwa & Roberts, 2014; Nkomo, 2009; SAPIA, 2014; Wood-Mackenzie, 2013). The regulatory controls provide fair levels of margin protection to refiners and retailers, but cannot guarantee a price limit on fuel to consumers. This leaves consumers fully exposed to international oil markets and exchange rate volatility due the lack of price competition in the market (Sibiya, 2013; Wood-Mackenzie, 2013). The regulatory elements are important in strategic investment decision making by companies as well as in the ultimate price that petroleum the consumer pay.

The main driver behind regulation is the transformation of the industry to open to new entrants as well as to improve inclusion of many historically disadvantaged South Africans (Wood-Mackenzie, 2013). For example, import control of finished petroleum products was motivated on the basis of the need to support local refining, while excess demand requiring imports creates opportunities for involvement of broad based black economic empowerment (BBBEE) companies (Mondliwa & Roberts, 2014).

According to Akpata et al. (2013) petroleum companies have identified regulatory uncertainty as one of the key constraints to strategic growth. Uncertainty arises from political interference and non-transparent procedures for awarding licences and production agreements.

Sibiya (2013) warns that regulatory compliance management will become an increasingly challenging task as new players enter the market. Non-compliance by some players brews frustration in the industry and may promote non-compliant behaviour and practices by those whose business is lost to non-complying competitors.

2.6 Conclusion of Literature Review

Strategy execution is a perpetual task and different authors have proposed a number of approaches to enhance processes inherent in execution. The impact of the factors reviewed is summarised using the chosen definition of strategy as a systematic process comprising actions chosen by an organisation’s leaders and directed to deliver on the formulated strategy promises.

A company's leaders are anchors of strategy execution and their skills in formulating and clearly articulating their chosen strategy; engaging and energising employees; calibrating a suitable company culture and structure; systematically directing company-wide processes; and making decisions on strategic choices including resources allocation are critical determinants of success (Bigler & Williams, 2013; Noble, 1999a, 1999b; Yang et al., 2009).

For effective execution, a strategically relevant culture is needed that fosters positive behaviours, cooperation and shared responsibility during execution (Bossidy & Charan, 2002; Chatman & Cha, 2003; Dobni, 2003; Katzenbach & Harshak, 2012; Simons, 2010). Culture is a gateway to engaging employees and getting their buy in to and trust of the chosen strategy and in empowering them to engage in value adding activities (Bossidy & Charan, 2002; Dobni, 2003; Hamel & Prahalad, 1994; Heide et al., 2002; Khadem, 2008; Michlitsch, 2000).

Employee engagement is effective through consistent and understandable communication at all levels of the organisation and that ensures continuous connectivity of strategic objectives with the daily objectives of all company members. This facilitates an ongoing strategic dialogue about the outcomes of employees' actions in meeting customer expectations (De Haas & Kleingeld, 1999; Hrebiniak, 2008; Michlitsch, 2000; Reed & Buckley, 1988).

Communication should clarify the building blocks and critical success factors of the chosen strategy as well as clarify the lines of accountability and responsibility. This avoids the creation of conflicting strategies and speeds up decision making (Allio, 2005; Beer & Eisenstat, 2000; Favaro, 2013; Favaro et al., 2013a; Heide et al., 2002; Hrebiniak, 2006; Neilson et al., 2008; Schneier et al., 1991).

Communication flows seamlessly across the organisation through channels imprinted in the organisational structure management has put in place. Structure influences the flow of information and decisions; can minimise duplication of effort and resources; and can be utilitarian in achieving synergies as well as scale economies.

Thus the choice of structure and the structural orientation of a company needs to be balanced towards enhanced execution of the chosen strategy (Heide et al., 2002; Hrebiniak, 2008; Neilson et al., 2008; Olson et al., 2005; Reed & Buckley, 1988).

For a constant strategic dialogue to occur, financial and non-financial measures need to be in place to bring to reality the pillars of the strategy. Moreover, measures help convey insight, for the short and long term, into internal work processes and targeted customer satisfactions levels. Through measures, demonstrable alignment on the strategic goals is achieved with the fruitful consequence of improved coordination (Aracıoğlu et al., 2013; Cokins, 2009; Joshi et al., 2003; Koufteros et al., 2014; Melnyk et al., 2004; Micheli & Manzoni, 2010; Srivastava, 2013).

With strategic performance measures in place, behaviours are corrected or rewarded as required. Most importantly, core competencies, both at individual and organisational level, can be identified, developed and aligned through measure based strategic dialogues (Dobni, 2003; Khadem, 2008; Prahalad & Hamel, 1990). It is also in these dialogues that people, financial and capital resource constraints and resource misallocations can be highlighted and prioritised to accelerate execution (Beer & Eisenstat, 2000; Crittenden & Crittenden, 2008; Heide et al., 2002; McGrath, 2013; Olson et al., 2005).

The literature on the SA petroleum industry is very limited. However, from the sources reviewed, it can be determined that the petroleum industry has a vital and strategic role in the economic development of South Africa. It provides energy that is used in the production of goods and services as well as in the transportation of goods and people. It is exposed to a number of economic, reputational and political vulnerabilities that make strategic and long-range planning critical to success.

To succeed, managers of companies in the SA petroleum industry have to execute strategy in way that balances the needs of their customers with those of shareholders, through efficient and environmentally compliant supply of high quality fuels within a tightly regulated environment. (Akpata et al., 2013; Barradas, 2011; Dudley, 2014; Filho, 2014; Mondliwa & Roberts, 2014; Nkomo, 2009; SAPIA, 2014; Sibiya, 2013; Wood-Mackenzie, 2013)

2.7 Research Proposition

The factors that influence strategy execution in the South African Petroleum industry include:

- Organisational Culture
- Competencies
- Organisational Structure
- Management Communication
- Leadership Skills
- Strategy and Role clarity
- Strategic Performance Monitoring
- Resources Allocation
- Employee Engagement
- Regulatory Uncertainty
- Regulatory Compliance
- Environmental Concerns

CHAPTER 3. RESEARCH METHODOLOGY

This section contains a description of the methodology that was followed to address the research proposition presented. Quantitative research is discussed first as well as its value to the study, followed by the research design, population and sample, research instrument, procedure for data collection and the method that was used for data analysis. Potential weaknesses to the research process are discussed under limitations of the study followed by pertinent validity and reliability considerations.

3.1 Research methodology

The study followed a quantitative research method and made use of a survey (Leedy & Ormrod, 2010). “Quantitative research entails gathering numerical data, as exhibiting a view of the relationship between theory and research as deductive and a predilection for a natural science approach and as having an objectivist conception of social reality” (Bryman, 2012, p. 160). Additionally, qualitative research entails testing out a theory deductively, using techniques of measurement that produce numerical or statistical data (Bhattacherjee, 2012).

A quantitative approach was apt as the type of research that was to be accomplished is exploratory. Factors impacting strategy execution are well documented; however, there has been little investigation in the SA petroleum industry.

3.2 Research Design

The research design assumed the form of a quantitative-oriented survey (Kalof, Dan, & Dietz, 2008) as can be seen in Appendix A. This type of survey, according to Kalof et al. (2008) is useful in measuring the relationships among variables so that hypotheses derived from conceptual ideas can be tested. The survey questionnaire was constructed with input from the literature reviewed.

3.3 Population and sample

3.3.1 Population

The population for this study includes professionals working in the petroleum industry in South Africa including International Oil Companies, National Oil Companies, Petroleum Wholesalers/ Distributors, Retailers, and Service Providers. This population was appropriate for the context of the study as it contains the organisations and people with the characteristics intended to be studied and from which a sample can be drawn (Bhattacherjee, 2012; Bryman, 2012; Eisenhardt, 1989).

3.3.2 Sample and sampling method

The sample frame consisted of members of the South African Petroleum Industry Association (SAPIA) namely: Afric Oil (Pty) Ltd, Bahlaloga Technology's, Brent Oil (Pty) Ltd, BP Southern Africa (Pty) Limited, Camel Fuels (Pty) Ltd, Chevron South Africa (Pty) Limited, Easigas (Pty) Limited, Elegant Fuels, Energy Oil (Pty) Ltd, Engen Petroleum Limited, Gulfstream (Pty) Ltd, Imbizo Petroleum Traders (Pty) Ltd, Khulaco (Pty) Ltd, KZN Oils (Pty) Ltd, Mabele Fuels (Pty) Ltd, Makwande Energy Trading (Pty) Limited, MBT Petroleum (Pty) Ltd, Oryx Oil South Africa (Pty) Ltd, PetroSA (Pty) Limited, Royale Energy Limited, Sasol Limited, Shell SA (Pty) Limited, Siyanda Petroleum, Total South Africa (Pty) Limited, TOTALGAZ Southern Africa (Pty) Ltd and Tunica Trading 59 (Pty) Limited trading as AEMCOR (SAPIA, 2014). Furthermore, professionals working for various retailers and services provider companies were included.

Simple random sampling was used to select participants from each of the industry companies. Random sampling was effective for this study and provided each unit in the population with equal probability of inclusion in the sample (Bryman, 2012), thus making the sample unbiased and the resultant inferences more generalizable (Bhattacherjee, 2012; Kalof et al., 2008).

The sample comprises of about 156 management and full time staff of the selected companies across all the nine provinces of South Africa.

3.4 The research instrument

The research instrument was a 4 section self-completion questionnaire (Bryman, 2012). The web based and printable questionnaire was sent by email to target participants, with a covering letter describing the title, purpose of the research report, and the different sections as can be seen in Appendix A. Some questionnaires were printed and handed over to professionals at their companies' premises.

The covering letter motivated why respondents should participate and explained the contribution the research aims to make to knowledge and to the South African Petroleum Industry.

Section 1 of the survey requested respondents to complete their demographic data. Section 2 listed statements that participants were to assign a rank weighting, based on their personal experience or observation, to factors that influence strategy execution in the SA petroleum industry. A forced choice ranking response scale was used to obtain information from participants allocating a total of 100 points across the factors identified in literature. Section 3 asked for general comments about aspects of strategy execution not covered by the questionnaire. The last section, Consent, requested the respondents to consent to participating in the study.

3.5 Procedure for data collection

A self-designed survey questionnaire, included in Appendix A, was employed in data collection. The questionnaire was first piloted and thereafter submitted to the Wits Business School Research Panel for approval.

The data for the research originates from questionnaire responses from the target sample. The same instrument was used for all target respondents.

3.6 Data analysis and interpretation

Participants from all companies were asked to force rank a total of 100 points across 12 factors that influence strategy execution. Force-ranking enables respondents to assign a unique weight for each answer and thus helps eliminate uniform biases such as acquiescence responding as well as increase the operational validity of the research instrument (Bryman, 2012; Everitt & Hothorn, 2011). The data, once collected, was summated across all companies and by company type. Further socio-demographic summation was done to ascertain if such factors contribute to different ranking scores. Lastly, the additional factors captured from the general comments section were analysed.

The data analysis method is listed in the consistency matrix in Table 4.3

3.7 Limitations of the study

- This study relied solely on self-completed questionnaires
- It is unlikely that the results of the study can be generalised to other petroleum industries outside of South Africa due to different industry and regulatory structures.

3.8 Validity and reliability

3.8.1 External validity

Thornhill, Saunders, and Lewis (2008) and Bryman (2012) describe external validity as the extent to which the research instrument measures what the researcher intends to measure. It also considers generalizability of a study across a wider population and time period. External validity is affected by the research being set in the real world or being laboratory based and also by sample choice (Bhattacherjee, 2012; Kalof et al., 2008).

This research has been carried out in a real world setting, companies in the SA petroleum industry, to ensure external validity. The target sample size was 150, comprised of a target minimum 30 of for each of International Oil companies, National Oil Companies, Wholesalers, Retailers and Service Providers.

3.8.2 Internal validity

Internal validity is also referred to as face or content validity and concerns the extent to which the research instrument provides acceptable coverage of the topics in the study (Bryman, 2012; Neuman & Neuman, 2006)

The questionnaire was built using an extensive literature review. The questionnaire was piloted with a few employees from the sample frame and altered to improve validity as required.

3.8.3 Reliability

Reliability concerns repeatability of a study's results (Bryman, 2012) and refers to the procedures measuring accuracy and precision (Bernard & Bernard, 2013). The reliability of the study was enhanced by the use of a standardised questionnaire for all respondents and by piloting the survey questionnaire before deployment.

3.9 Ethical Considerations

The research instrument used was approved by the Wits Business School Research Panel before it was commissioned for the study. An interview consent form accompanied the questionnaire and to help with trust and honesty, the respondents were assured that confidentiality of their responses was to be upheld. The analysis and discussion of results further upholds confidentiality commitments.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the results obtained from 156 respondents who completed the survey, concurrent with a description of the structure of the results. The first section presents the results for the entire SA Petroleum Industry and the sections that follow presents the results for each group of industry players namely: International Oil Companies (IOCs), National Oil Companies (NOCs), Wholesalers, Retailers and Service Providers.

4.2 Demographic profile of respondents

The research instrument requested respondents to complete demographic details including gender, age group, race, work and industry experience years and industry company type. Results from these categories' are summarised in Figure 2 to Figure 6 below and in Table 2. The following signs used in the tables are explained as follows:

- > means *greater than*
- < means *less than*

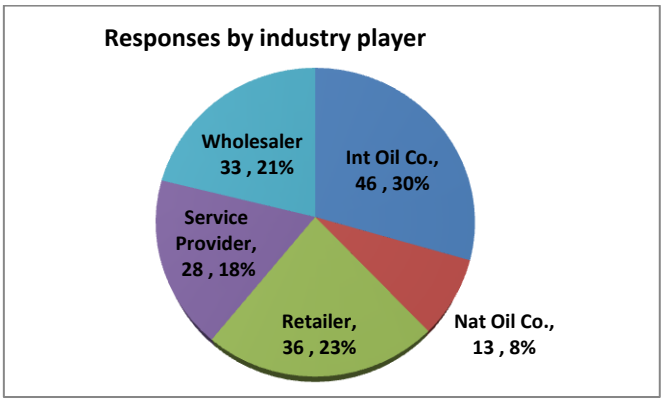
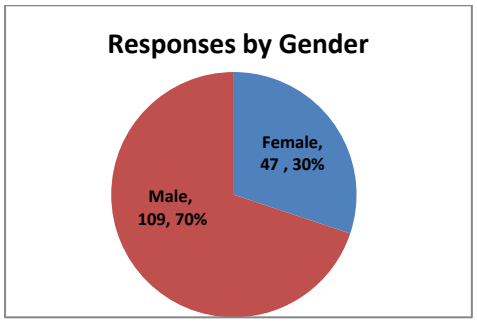


Figure 2: Responses by industry player



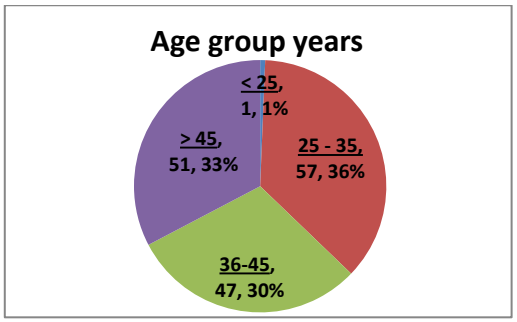
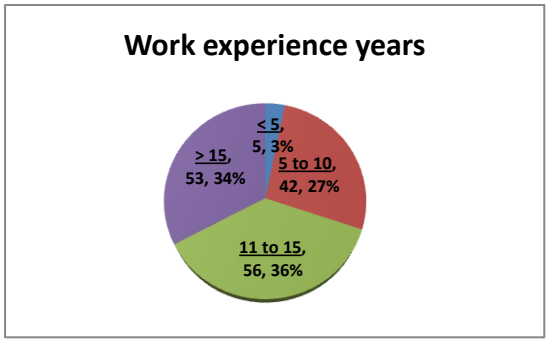


Figure 3: Responses by gender

Figure 4: Age group years



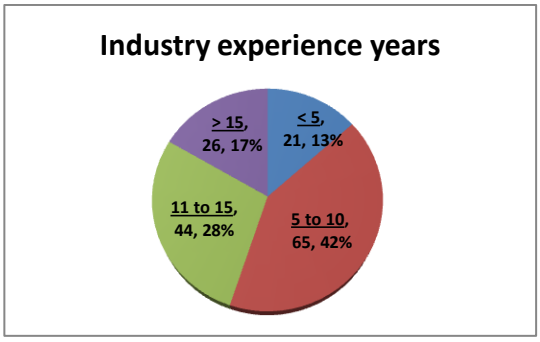


Figure 5: Work experience years

Figure 6: Industry experience years

Responses from International Oil companies were the largest at 46, contributing 30% of the industry data. Retailers were second largest at 36 (23%) responses. Wholesalers and Service Providers responded 21% and 18% respectively, while National Oil Companies contributed 8%.

The majority (70%) of the respondents were male and the age group 25-35 years was the largest with 36% responses, followed by 33% and 30% for the age groups >45 and 36-45 respectively.

Table 2: Work and Industry Experience years

	Work Experience				
Industry Experience	**< 5**	**5 to 10**	**11 to 15**	**> 15**	**Total**
< 5	5	9	5	2	21
5 to 10	0	33	27	5	65
11 to 15	0	0	26	18	44
> 15	0	0	0	26	26
Total	**5**	**42**	**58**	**51**	**156**

Work experience years were mainly greater than 5, with fairly equal spread in the categories 5-10 (27%), 11-15 (36%) and >15 (34%). Industry experience years were also mainly higher than 5 with the 5-10 category accounting for the majority (42%) followed by 28% for the 11-15 and 17% for >15. Only 13% of respondents had less than 5 years' industry experience.

A comparison between the obtained and targeted demographic profile of respondents in the sample is shown in Table 3.

Table 3: Actual versus Target profile of respondents

Industry Player	Actual	Target
International Oil Co.	46	30
National Oil Co.	13	30
Wholesaler	33	30
Retailer	36	30
Service Provider	28	30
Grand Total	**156**	**150**

Company Type	Female		Male		Total	
	Actual	Target	Actual	Target	Actual	Target
Black African	28	15	58	15	**86**	**30**
Coloured	0	15	19	15	**19**	**30**
Indian	5	15	13	15	**18**	**30**
White	12	15	19	15	**31**	**30**
Asian	2	15		15	**2**	**30**
Grand Total	**47**	**75**	**109**	**75**	**156**	**150**

It is demonstrable in Table 3 that, while random sampling was employed, a majority of the demographic components that were targeted were achieved.

4.3 Presentation of results for industry and by industry player

4.3.1 Industry experience

Table 4: Industry experience years by company type

Company Type	< 5	5 to 10	11 to 15	> 15	Total
International Oil Co.	22%	33%	26%	20%	100%
National Oil Co.	8%	46%	15%	31%	100%
Wholesaler	9%	36%	42%	12%	100%
Retailer	17%	47%	22%	14%	100%
Service Provider	4%	54%	29%	14%	100%
Grand Total	**13%**	**42%**	**28%**	**17%**	**100%**

Table 4 shows that industry experience years varied across company types. The 5-10 years category accounted for the highest across all company types except for Wholesalers where it was second highest to the 11 to 15 category.

4.3.2 Factors influencing strategy execution – industry

Section 2 of the survey instrument requested respondents to allocate, for each factor statement, points out of 100. The survey had a control that ensured the total score added up to 100 and no more or less. Respondents could, if they wished, allocate all 100 points across, for example 4 factors, and leave the rest of the factors with a 0 score or allocate 100 points across one factor that they felt very strongly about, or across all 12. This implies that a factor with a high score has more influence on strategy execution than one with a low score.

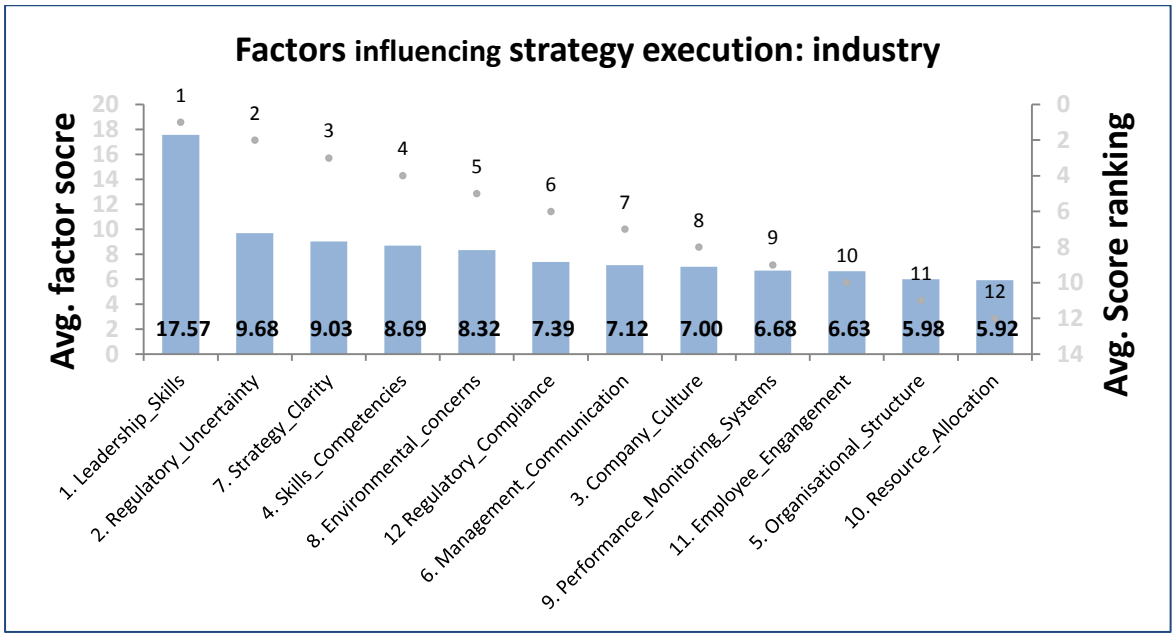


Figure 7: Factors influencing strategy execution - industry

Figure 7 depicts the average scores and ranking for all the factors in the industry. The following are the top three factors seen to have the greatest influence on strategy execution:

- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy.* Average score 17.57;
- Factor 2 - Regulatory Uncertainty *(The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning).* Average score 9.68; and
- Factor 7 - Strategy Clarity *(The clarity of the strategy, as I experienced, made clear the role I had to play in its execution).* Average score 9.03.

The following factors rank in the bottom quartile, indicating their least influence on strategy execution:

- Factor 11 - Employee Engagement *(My support for strategy execution initiatives is related to the level of engagement and trust placed on me to make decisions).* Average score 6.63;

- Factor 5 - Organizational Structure *(My Company's organizational structure facilitated quick decision making when executing strategy).* Average score 5.98; and
- Factor 10 - Resources Allocation *(Allocation of people, money and capital resources are adapted to changes in the strategy execution environment).* Average score 5.92.

4.3.1 Factors influencing strategy execution – International Oil Companies

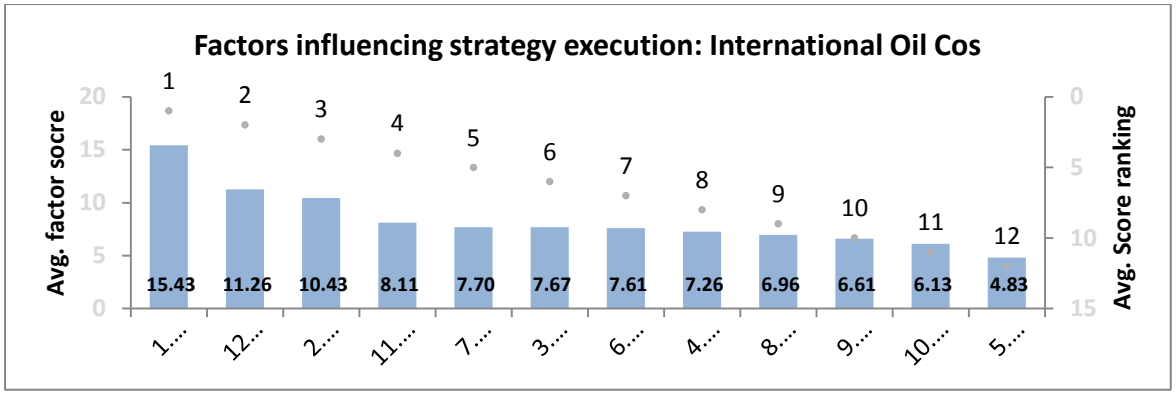


Figure 8: Factors influencing strategy execution –International Oil Companies

Figure 8 represents the average scores and ranking for all the factors in the IOCs where the following are the top three factors that have the greatest influence on strategy execution:

- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy).* Average score 15.43;
- Factor 12 - Regulatory Compliance *(Regulatory compliance is an essential element my company's strategy).* Average score 11.26; and
- Factor 2 - Regulatory Uncertainty *(The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning).* Average score 10.43.

The following factors rank the lowest for IOCs, indicating their least influence on strategy execution:

- Factor 9 - Performance monitoring tools and systems *(The Company's performance monitoring tools and systems positively contribute to successful strategy execution).* Average score 6.61;
- Factor 10 - Resources Allocation *(Allocation of people, money and capital resources are adapted to changes in the strategy execution environment)* Average score 6.13; and
- Factor 5 - Organizational Structure *(My Company's organizational structure facilitated quick decision making when executing strategy).* Average score 4.83.

4.3.2 Factors influencing strategy execution – National Oil Companies

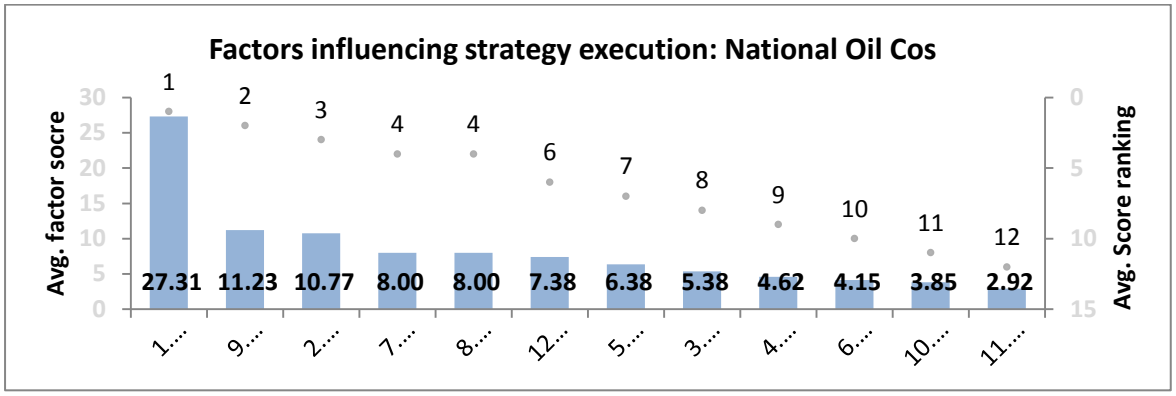


Figure 9: Factors influencing strategy execution –National Oil Companies

Figure 9 shows the scores for NOCs and the following are the top three factors that greatly influence strategy execution:

- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy).* Average score 27.31;
- Factor 9 - Performance monitoring tools and systems *(The Company's performance monitoring tools and systems positively contribute to successful strategy execution).* Average score 11.23; and
- Factor 2 - Regulatory Uncertainty *(The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning).* Average score 10.77.

For NOCs, the following factors have the least influence on strategy execution:

- Factor 6 - Management Communication *(The information communicated by management, across different departments, helped me understand the bottom-line impact of my actions).* Average score 4.15;
- Factor 10 - Resources Allocation *(Allocation of people, money and capital resources are adapted to changes in the strategy execution environment).* Average score 3.85; and
- Factor 11 - Employee Engagement (*My support for strategy execution initiatives is related to the level of engagement and trust placed on me to make decisions*). Average score 2.92.

4.3.3 Factors influencing strategy execution – Wholesalers

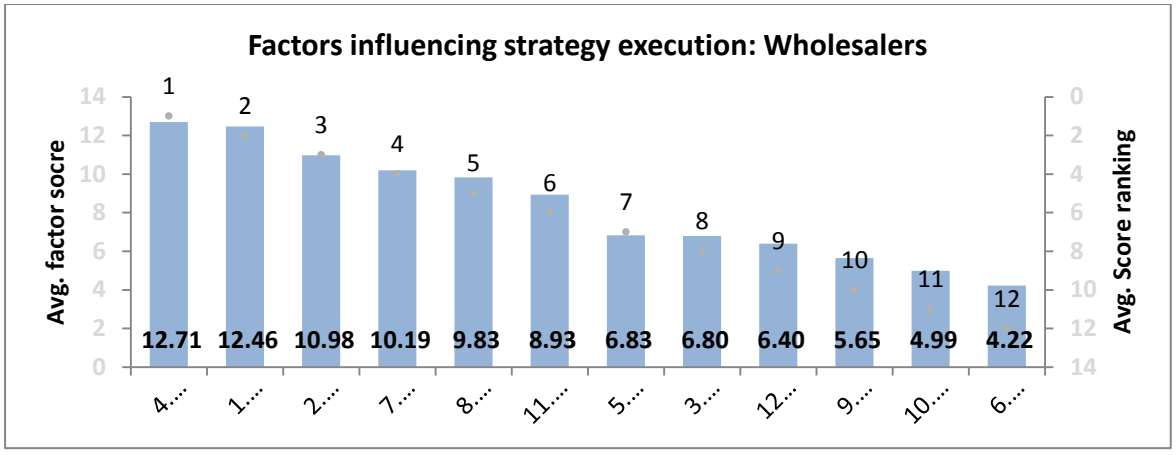


Figure 10: Factors influencing strategy execution –Wholesalers

In Figure 10, the scores for Wholesalers are depicted and the following are the top three factors influencing strategy execution:

- Factor 4 – Skills and Competencies *(There is a company-wide understanding of the skills and levels of competency required to execute strategy).* Average score 12.71
- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy.* Average score 12.46; and

- Factor 2 - Regulatory Uncertainty *(The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning).* Average score 10.98.

For Wholesalers, the following factors ranked the lowest:

- Factor 9 - Performance monitoring tools and systems *(The Company's performance monitoring tools and systems positively contribute to successful strategy execution).* Average score 5.65;
- Factor 10 - Resources Allocation *(Allocation of people, money and capital resources are adapted to changes in the strategy execution environment).* Average score 4.99; and
- Factor 6 - Management Communication *(The information communicated by management, across different departments, helped me understand the bottom-line impact of my actions).* Average score 4.22.

4.3.4 *Factors influencing strategy execution – Retailers*

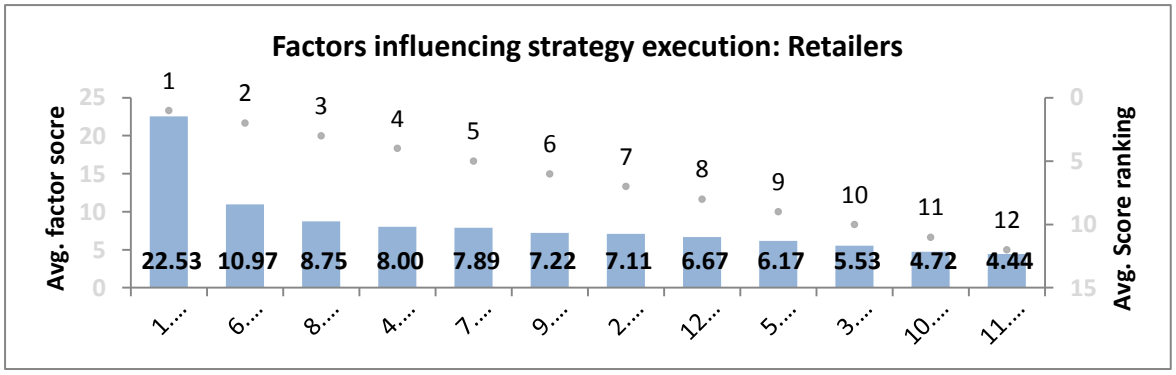


Figure 11: Factors influencing strategy execution –Retailers

The scores for Retailers are shown in Figure 11. The following are the top three factors influencing strategy execution:

- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy).* Average score 22.53;

- Factor 6 - Management Communication *(The information communicated by management, across different departments, helped me understand the bottom-line impact of my actions).* Average score 10.97; and
- Factor 8 – Environmental Concerns *(My company's strategy execution plans include elements to meet environmental concerns).* Average score 8.75.

For Retailers, the following factors rank the lowest:

- Factor 3 – Company Culture *(The company culture had a positive influence on me when executing strategy).* Average score 5.53;
- Factor 10 - Resources Allocation *(Allocation of people, money and capital resources are adapted to changes in the strategy execution environment).* Average score 4.72; and
- Factor 11 - Employee Engagement (*My support for strategy execution initiatives is related to the level of engagement and trust placed on me to make decisions*). Average score 4.44.

4.3.5 *Factors influencing strategy execution – Service Providers*

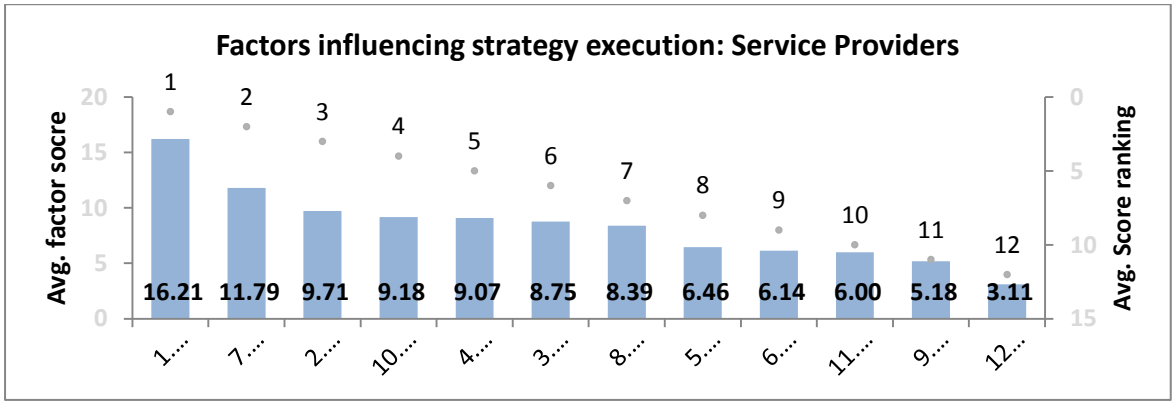


Figure 12: Factors influencing strategy execution –Service Providers

The results for Service Providers show the following factors highly ranked as depicted in Figure 12.

- Factor 1 - Leadership Skills *(The skills of the leaders in my company played an essential role in assisting me execute the strategy).* Average score 16.21;

- Factor 7 - Strategy Clarity (*The clarity of the strategy, as I experienced, made clear the role I had to play in its execution*). Average score 11.79; and
- Factor 2 - Regulatory Uncertainty (*The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning*). Average score 9.71.

The lowest ranking factors for Service providers are the following:

- Factor 11 - Employee Engagement (*My support for strategy execution initiatives is related to the level of engagement and trust placed on me to make decisions*). Average score 6.00;
- Factor 9 - Performance monitoring tools and systems *(The Company's performance monitoring tools and systems positively contribute to successful strategy execution).* Average score 5.18 and;
- Factor 12 - Regulatory Compliance *(Regulatory compliance is an essential element my company's strategy).* Average score 3.11.

4.4 Results from the open ended question

Respondents were provided with an option to comment on any aspect of strategy execution not covered in the survey. There were about 25% of respondents who commented and their direct responses are listed in Table 5 in Appendix C. These factors are discussed in the following chapter.

4.5 Summary of the results

Overall, 156 responses were collected of which 70% were male and 30% female. The majority of the responses were from IOCs, followed by Retailers and Wholesalers. About 99% of the respondents were older than 25 years and the largest age grouping was the 25-35 years at 36% followed by the >45 years at 33% and in terms of work experience, about 97% of the respondents had more than 6 years work experience. The 11 to 15 years work experience grouping was the largest, accounting for 36% of the responses followed by the >15 years grouping at 34%.

There were only 13% responses with industry experience less than 5 years. The remaining 135 responses had industry experience ranging from 6 years to greater than 15 years, with 17% accounting for industry experience greater than 15 years.

The respondents had to rank 12 factors and the top ranking factor turned out to be Factor 1: The skills of the leaders in my company played an essential role in assisting me execute the strategy. This factor was ranked the highest in all company groupings with the exception of Wholesalers, where it was ranked the second highest.

The other factors ranking in the top 5 were:

- Factor 2 - The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning;
- Factor 7 - The clarity of the strategy, as I experienced, made clear the role I had to play in its execution
- Factor 4 – There is a company-wide understanding of the skills and levels of competency required to execute strategy; and
- Factor 8 – My Company's strategy execution plans include elements to meet environmental concerns.

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

This chapter is devoted to a discussion, explanation and interpretation of the findings in Chapter 4 in relation to the literature reviewed in Chapter 2 and consistent with the purpose of this research which is to identify factors that influence strategy execution in the SA Petroleum industry.

5.2 Demographic profile of respondents

5.2.1 Work and Industry experience profile of respondents

At a high level, work and industry experience of respondents is 97% and 87% greater than 5 years respectively. Additionally, as can be summed from Table 2, about 70% of the total respondents have greater than 10 years working experience and 45% of total respondents have greater than 10 years industry experience. This endorses the view that respondents are greatly experienced in both work and with respect to the SA petroleum industry.

Table 5: Work and Industry Experience years

	Work Experience				
Industry Experience	**< 5**	**5 to 10**	**11 to 15**	**> 15**	**Total**
< 5	5	9	5	2	21
5 to 10	0	33	27	5	65
11 to 15	0	0	**26**	18	44
> 15	0	0	0	**26**	26
Total	**5**	**42**	**58**	**51**	**156**

Table 5 reveals further that 45% (26) of respondents in the 11 to 15 years group are from the 11 to 15 years industry experience years' group. Furthermore, 51% (26) of those whose work experience is >15 years have matching industry experience years indicating the possibility that respondents in this grouping have spent their entire working career in the petroleum industry.

This observation can be seen to be consistent with the findings from (Akpata et al., 2013) that skills gap and shortages of local talent, especially at senior management, were strategic focus areas for petroleum companies. While it can be argued that extensive work and industry experience should yield sufficient talent pools, the industry may be mitigating the challenges with talent retention instead of talent generative mechanisms, as evidenced by 17% (26 of 156) of total respondents spending their entire careers in the industry.

5.3 Discussion of factors influencing strategy execution

5.3.1 Discussion of the top 5 factors influencing strategy execution at an Industry level

The top five factors that influence strategy execution in the SA petroleum industry are Leadership Skills*;* Regulatory Uncertainty; Strategy Clarity; Competencies and Environmental Concerns.

Respondents across the industry felt that the skills of their leaders played an essential role in assisting them to execute the strategy. This coheres with the literature that strategy execution is anchored on effective leadership skills (Bigler & Williams, 2013; Noble, 1999a, 1999b; Yang et al., 2009).

In the SA petroleum industry, the level of certainty or uncertainty in the regulatory framework influences long-range strategic planning as also found in literature by Akpata et al. (2013) who identified regulatory uncertainty as one of the key constraints to strategic growth.

At the industry level, respondents indicated that the clarity of the strategy made clear the role they had to play in its execution. This follows the two factors discussed above and confirms the findings in literature that the building blocks and the critical success factors of the strategy should be clarified together with the lines of accountability and responsibility for achieving such success (Allio, 2005; Beer & Eisenstat, 2000; Favaro, 2013; Favaro et al., 2013a; Heide et al., 2002; Hrebiniak, 2006; Neilson et al., 2008; Schneier et al., 1991). The respondents could, from experience or observation, be attesting to the benefits of

strategy and role clarity that include expedient decision making and a progressive influence on successful strategy execution. For each respondent, this could be confirming Cokins (2009) notion that employees effectively implement strategy only when there is clarity on the strategy and on their contribution to its achievement.

Managers must identify and develop the skills needed to carry out strategic initiatives together with the level of competency in the identified skills. Identification of competencies should be at individual or organizational level (Dobni, 2003; Khadem, 2008; Prahalad & Hamel, 1990). This can be seen to be applicable in the SA petroleum industry as majority respondents ranked fourth highest the statement that there is a company-wide understanding of the skills and levels of competency required to execute strategy in their organisations.

According to Akpata et al. (2013), companies allocate capital resources to meet environmental concerns emanating from self-imposed policies, industry standards, as well as the increasing environmental legislation. The announcement of cleaner fuels standards in SA has brought a need for investments to comply with the new fuel specifications. Respondents accordingly indicated that their companies' strategy execution plans include elements to meet environmental concerns. This is also in alignment of the statement by Barradas (2011) and Wood-Mackenzie (2013) that most firms are supportive of improving fuels standards although weary of the economic viability of the investments in the absence of cost recovery mechanisms.

5.3.2 Discussion of the factors with the least influence on strategy execution at an industry level

The three factors that have little influence on strategy execution at an industry level are Employee Engagement; Organizational Structure and Resources Allocation.

This could be showing that employees in the companies surveyed are engaged in aspects of strategy and feel empowered to add value to their organisations (De Haas & Kleingeld, 1999; Hrebiniak, 2008; Michlitsch, 2000; Reed & Buckley, 1988). Conclusively, employees in the industry have no concerns with engagement. This could be attributed to the majority respondents' extensive work experience and long tenure in the industry.

Since organisational structure influences the flow of information and decisions (Heide et al., 2002; Hrebiniak, 2008; Neilson et al., 2008; Olson et al., 2005; Reed & Buckley, 1988), a low score on the factor statement: “my company’s organizational structure facilitated quick decision making when executing strategy” could mean that, overall, the structural orientation of respondents’ companies is aligned to the chosen strategies.

The resources allocations factor is the least influential on strategy indicating that respondents actively engage in strategic dialogues that resolve people, financial and capital resource constraints as well as resource misallocations (Beer & Eisenstat, 2000; Crittenden & Crittenden, 2008; Heide et al., 2002; McGrath, 2013; Olson et al., 2005). This is view could also be attributed to the experience of respondents.

5.4 Discussion of open ended questions

Respondents were asked for general comments about aspects of strategy execution not covered by the questionnaire. The following is a summation of the key themes from the general comments in Table 6 in Appendix C. Three themes that were not covered in literature and the survey instrument emerged; namely Middle Management support, Oil & Petrol prices and Corporate versus Business Unit Strategy. The insights from these are discussed below.

5.4.1 Middle Management support

Respondents felt that the inclusion of middle management into the strategic decision making done by the senior leadership members may be good for companies. Other respondents saw the need for middle management to take ownership of aligning the frontline to effectively delivery the strategy.

5.4.2 Oil & Petrol Prices

End consumers demand influences strategy as it is impacted by changes in Oil and Petrol prices. This resonates with Sibiya (2013) view that, while the regulation provides fair margin protection to refiners and retailers, it does not shield consumers from price

fluctuations; this leaves them exposed to international oil markets and exchange rate volatilities.

5.4.3 Corporate versus Business Unit Strategy

Group / Corporate Strategy impacts on Business Unit level strategy. Since the nature of the petroleum sector has global linkages, worldwide environmental impacts could have an impact on how the local BU-level strategic response can and should be in support of the global Corporate / Group-level strategic agenda.

This is confirmed by the statements of Nkomo (2009) and (Wood-Mackenzie, 2013) that the SA petroleum industry is susceptible to economic vulnerabilities that include the supply and demand for fuels in international markets, the Rand/US Dollar exchange rate, international crude oil prices, importation supply chain costs, and geopolitical risks. These are impacts that require careful calibration of business unit strategies to corporate strategies.

The rest of the respondents' comments clarified their score allocations and largely resounded findings in the literature review along the following themes: Leadership Skills and buy-in; Regulatory uncertainty / Deregulation; Strategy Clarity; Employee engagement and trust; Capital Requirements/Resources Allocation.

5.5 Conclusion

The survey results obtained were deliberated and explained in relation to the literature reviewed as well as to industry factors.

From the demographic profile analysis and discussion, it can be concluded that people working for the SA petroleum industry have good work experienced that is gained primarily within the industry. This occurs as a result of a strategic focus on the skills shortages within the industry and that are mitigated by talent retention mechanisms.

The majority of the respondents at an industry level agree that all the factors that were found in literature and that were assessed in surveys do in fact influence strategy

execution. There is a shared understanding that effective Leadership Skills are fundamental to strategy execution.

Secondly, the regulated SA Petroleum Industry causes uncertainties that greatly influence long-range strategic planning of companies and that can be growth restrictive.

Thirdly, there is evidence showing that respondents recognise strategy clarity has a great influence on its execution and that clarity yields the benefits of expedient decision making and ultimately successful implementation.

Fourthly, industry respondents feel that company-wide understanding of the skills and levels of competency required to execute strategy in their organisations is paramount.

Fifthly, most respondents' companies' have strategic plans that direct resources to meet environmental concerns. This is an acknowledgement that the industry's responsibilities start with ensuring the safety of operations for people and the environment.

Employee engagement has less influence on strategy execution at the point of this research. Respondents are engaged in aspects of strategy and feel empowered to add value to their organisations success. That they have no concerns with engagement could be consequent to their extensive work experience and long tenure in the industry.

In the industry, organisational structure has little influence execution possibly meaning that the structural orientation of respondents' companies' is aligned to the chosen strategies. The Resources allocation factor has the least influence strategy execution, a fact that could also be attributed to the experience of respondents.

From the open ended question, respondents highlighted 3 new factors that could influence execution, namely: middle Management support of the strategy, Oil & Petrol Prices, and Corporate versus Business Unit level strategy.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary of the research findings, the conclusions and provides recommendations pertaining to the factors influencing strategy execution in the SA petroleum industry. Suggestions for future research are presented in last section.

6.2 Conclusions of the study

The purpose of this research is to identify factors that influence strategy execution in the South African (SA) Petroleum industry. The results of the study showed that all the factors that were found in literature have an influence on strategy execution. An analysis of the results showed that 5 of the twelve factors have the greatest influence than the rest. The top 5 ranking factors are Leadership Skills*;* Regulatory Uncertainty; Strategy Clarity; Competencies; and Environmental Concerns.

These findings are consistent with the context of the study in terms strategy execution and the SA Petroleum industry. Strategy execution is a perpetual and systematic process comprising actions chosen by management and directed to deliver on the formulated strategy promises. Companies successful at executing their strategies are a reflection of effective leadership teams that are able to deliver their strategies. This is the core reasoning on which Leadership skills are found to be primary influence of strategy execution in the industry.

The SA petroleum industry is tightly regulated and holds great strategic importance to the South African economy and neighbouring economies. Additionally, since the SA economy is integrated into the global economy through industry's value chain extending beyond the country's borders, the industry is vulnerable to global economic as well as geopolitical risks. Within SA's borders, the industry has impacts that reach beyond economic boundaries to societal and physical environment impacts.

Therefore, it follows that Regulatory Uncertainty is the second highest ranking factor found in the study owing to its limiting influence on long range strategic planning. This places significant impetus for clear strategies and clear roles for each person involved in execution.

This study has found that Competencies are the fourth ranking influence on strategy. This is consistent with the study of Akpata et al. (2013) that identified and ranked 11 strategic focus areas for the Africa oil and gas industry for the period 2013 to 2018, where Skills and people training and develpoment were also ranked fourth highest. Employee capabilities are a core ingredient in strategy execution and the calibration of individual and organisation competencies is an effective lever to strengthen execution efforts.

Although environmental compliance was ranked as one of the lowest focus areas in of Akpata et al. (2013) study, this study found this factor has a high influence on strategy exection in the SA prestroleum industry. This indicates that strategic plans reflect a commitment to the safety of operations for people and the environment, together with financial returns.

This study has also found, from the open-ended question, 3 new factors that could influence execution, namely: middle Management support of the strategy, Oil & Petrol Prices, and Corporate versus Business Unit level strategy.

Leaders face the challenge of making impactful interventions during strategy execution. This study focuses the attention of the leaders, managers and new entrants of the SA petroleum industry to the presented factors that greatly influence strategy execution in their companies.

6.3 Recommendations

This research has presented insight into the factors that influence strategy execution in the SA petroleum industry. The following recommendations are made on how to strengthen strategy execution efforts by industry players.

- Effective leadership skills anchor strategy execution. Leaders in all companies across the industry should work to continually develop their skills in crafting clear and articulate strategies and that they can use as the basis for engaging and energising employees as well as for calibrating an expedient company culture and structure.
- Managers must constantly scan the regulatory landscape to reduce uncertainties occasion by unclear regulations. This can be achieved through developing strong teams focussed on interpreting regulations and on providing training internally. Companies must also ensure they actively participate in industry forums in which regulators are presented.
- Executives must develop means with which to test the decision making expedition in their companies. Expeditious decision making is an indication of clear strategies as well as clear lines of accountability for execution.
- Managers must identify and develop the skills needed to carry out strategic initiatives together with the level of competency in the identified skills. Competencies should be identified at individual and company level.
- Through scanning the regulatory landscape, companies must ascertain impacts of changing industry and environmental standards in order to swiftly adapt internal policies and strategies. That way, environmental concerns can be perpetually on the agenda for resources to be prioritised to meet compliance standards in a commercially viable way.
- One of the objectives behind regulation is the transformation of the industry to open to new entrants as well as to improve inclusion of many historically disadvantaged South Africans. Industry players should therefore ensure that their strategy review processes include robust competitive landscape scanning in order to identify and counterweight forces such as new entrants and substitute products.

- For as long as the SA Petroleum industry is regulated, regulatory compliance management should receive fair attention and be done cost effectively to ensure that businesses continue to have their licences to operate. Furthermore, leaders of companies should use industry forums to influence simplified and cost effective compliance.
- Leaders have to maintain consistent and clear communication at all levels of the organisation in order to enable on-going strategic dialogues that connect management and front line staff to the strategic objectives as well to the daily objectives.
- Managers must develop effective resource allocation processes without slowing down decision making and their companies' ability to adapt to changes in the strategy execution environment.
- Leaders should leverage on their collective skills to engaged employees in aspects of strategy formulation and execution. Various parts of the industry's value chain are labour intensive and employ low-skilled labour. It is very easy to exclude these employees in various aspects of strategy. That can cause lack of buy-in and trust in the company's strategy and ultimately impede execution efforts.
- Companies must support and also avail themselves to research of this nature in order to promote continuous learning and development on aspects of the industry. This will help provide a stream of knowledge about the industry.

6.4 Suggestions for further research

- Further research can be done to understand the impact of regulation or de-regulation on the growth and development of the industry.
- A comparative study on another regulated petroleum industry to draw learnings that can be applied to the SA petroleum industry.
- An assessment of new entrants' strategies in the SA petroleum industry.
- An investigation of the causal relationships among the top raking factors influencing strategy execution.

REFERENCES

Akpata, U., Bredenhann, C., & White, D. (2013). Africa oil & gas review. South Africa: PricewaterhouseCoopers.

Allio, M. K. (2005). A short, practical guide to implementing strategy. *Journal of Business Strategy, 26*(4), 12-21.

Angel, R. (2008). Linking execution with strategy in support functions. *Ivey Business*.

Aracıoğlu, B., Zalluhoğlu, A. E., & Candemir, C. (2013). Measuring and Evaluating Performance within the Strategic Management Perspective: A Study on Performance Measurement of a Seafood Company. *Procedia-Social and Behavioral Sciences, 99*, 1026-1034.

Barradas, S. (2011). Liquid Fuels 2011. Johannesburg: Creamer Media.

Beer, I. R. A., & Eisenstat, M. (2000). The silent killers of strategy implementation and learning. *Sloan Management Review, 41*(4), 29-41.

Bernard, H. R., & Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches*: Sage.

Bhattacherjee, A. (2012). *Social science research: principles, methods, and practices* (Second Edition ed.). Florida: Anol Bhattacherjee.

Bigler, W. R. (2001). The new science of strategy execution: how incumbents become fast, sleek wealth creators. *Strategy & Leadership, 29*(3), 29-34.

Bigler, W. R., & Williams, F. A. (2013). WORLD-CLASS STRATEGY EXECUTION THROUGH'ON THE JOB'LEADERSHIP DEVELOPMENT. *Business Studies Journal, 5*(1).

Bossidy, L., & Charan, R. (2002). *Execution: The discipline of getting things done*: Random House.

Bryman, A. (2012). *Social research methods*: Oxford university press.

Chandler, A. D. (1962). *Strategy and structure*. Cambridge: MIT Press.

Chatman, J. A., & Cha, S. E. (2003). Leading by leveraging culture. *California Management Review, 45*(4), 20.

Cokins, G. (2009). *Performance management: Integrating strategy execution, methodologies, risk, and analytics* (Vol. 21): John Wiley & Sons.

Crittenden, V. L., & Crittenden, W. F. (2008). Building a capable organization: The eight levers of strategy implementation. *Business Horizons, 51*(4), 301-309.

Cummings, T. G., & Worley, C. G. (2009). *Organization Development and Change*: Cengage Learning.

De Haas, M., & Kleingeld, A. (1999). Multilevel design of performance measurement systems: enhancing strategic dialogue throughout the organization. *Management Accounting Research, 10*(3), 233-261.

Dess, G. G., Lumpkin, G. T., & Eisner, A. B. (2006). *Strategic management: text and cases*: Richard d Irwin.

Dobni, B. (2003). Creating a strategy implementation environment. *Business Horizons, 46*(2), 43-46.

DOE. (2014). Petroleum Sources Overview. Retrieved 3 July 2014, 2014, from http://www.energy.gov.za/files/petroleum_frame.html

Dudley, B. (2014). *Developing new technologies to meet expanding demand.* Paper presented at the 21st World Petroleum Congress, Moscow, Russia.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review, 14*(4), 532-550.

Everitt, B., & Hothorn, T. (2011). *An introduction to applied multivariate analysis*. New York: Springer.

Favaro, K. (2013). How Leaders Mistake Execution for Strategy (and Why That Damages Both). In P. Michelman (Ed.), *The executive guide to strategy*: Booz & Company.

Favaro, K., Ragan, K., & Hirsh, E. (2013a). Strategy or Execution: Which is more important. In P. Michelman (Ed.), *The executive guide to strategy*: Booz & Company.

Favaro, K., Ragan, K., & Hirsh, E. (2013b). Strategy: An Executive's Definition. In P. Michelman (Ed.), *The executive guide to strategy*: Booz & Company.

Filho, M. C. (2014). *The human challenge in the oil and gas industry.* Paper presented at the 21st World Petroleum Congress, Moscow, Russia.

Hall, D. J., & Saias, M. A. (1980). Strategy follows structure! *Strategic Management Journal, 1*(2), 149-163.

Hamel, G., & Prahalad, C. (1994). Competing for the Future, 1994. *Harvard Business School Press, Boston*.

Heide, M., Grønhaug, K., & Johannessen, S. (2002). Exploring barriers to the successful implementation of a formulated strategy. *Scandinavian Journal of Management, 18*(2), 217-231.

Higgins, J. M. (2005). The eight 'S's of successful strategy execution. *Journal of Change Management, 5*(1), 3-13.

Hough, J. (2007). Strategy: making clear cut choices about how to compete. *Management Today, 23*(8), 18-22.

Hrebiniak, L. G. (2006). Obstacles to effective strategy implementation. *Organizational dynamics, 35*(1), 12-31.

Hrebiniak, L. G. (2008). Making strategy work: Overcoming the obstacles to effective execution. *Ivey Business Journal, 72*(2), 1-6.

Hrebiniak, L. G., & Joyce, W. F. (1984). *Implementing Strategy*. New York: Macmillan.

Joshi, M. P., Kathuria, R., & Porth, S. J. (2003). Alignment of strategic priorities and performance: an integration of operations and strategic management perspectives. *Journal of Operations Management, 21*(3), 353-369.

Kalof, L., Dan, A., & Dietz, T. (2008). *Essentials of social research*: McGraw-Hill International.

Katzenbach, J., & Harshak, A. (2012). Stop Blaming Your Culture. In A. Kleiner (Ed.), *Don't Blame Your Culture*: Booz & Company.

Khadem, R. (2008). Alignment and follow-up: steps to strategy execution. *Journal of Business Strategy, 29*(6), 29-35.

Kim, W. C., & Mauborgne, R. (2009). How strategy shapes structure. *Harvard Business Review, 87*(9), 72-80.

Koufteros, X., Verghese, A. J., & Lucianetti, L. (2014). The effect of performance measurement systems on firm performance: A cross-sectional and a longitudinal study. *Journal of Operations Management, 32*(6), 313-336.

Leedy, P. D., & Ormrod, J. E. (2010). *Practical Research: Planning and Design* (9 ed.). New Jersey: Merrill.

Martin, R. L. (2010). The execution trap. *Harvard Business Review, 88*(7/8), 64.

McGrath, R. G. (2013). *The end of competitive advantage: How to keep your strategy moving as fast as your business*: Harvard Business Review Press.

Melnyk, S. A., Stewart, D. M., & Swink, M. (2004). Metrics and performance measurement in operations management: dealing with the metrics maze. *Journal of Operations Management, 22*(3), 209-218.

Micheli, P., & Manzoni, J.-F. (2010). Strategic performance measurement: Benefits, limitations and paradoxes. *Long Range Planning, 43*(4), 465-476.

Michlitsch, J. F. (2000). High-performing, loyal employees: the real way to implement strategy. *Strategy & Leadership, 28*(6), 28-33.

Mondliwa, P., & Roberts, S. (2014). Review of economic regulation of liquid fuels and related products. Johannesburg: Centre for Competition, Regualtion and Economic Development.

Montgomery, C. A. (1992). Resources: The essence of corporate advantage. *Harvard Business School Cases, 9*, 792-064.

Neilson, G. L., Martin, K. L., & Powers, E. (2008). The secrets to successful strategy execution. *Harvard Business Review, 86*(6), 60.

Neuman, W. L., & Neuman, W. L. (2006). Social research methods: Qualitative and quantitative approaches.

Nightingale, J. (1978). On the Definition ofIndustry'andMarket'. *The Journal of Industrial Economics*, 31-40.

Nkomo, J. C. (2009). Energy security and liquid fuels in South Africa. *Journal of Energy in Southern Africa, 20*(1), 20-24.

Noble, C. H. (1999a). Building the strategy implementation network. *Business Horizons, 42*(6), 19-28.

Noble, C. H. (1999b). The eclectic roots of strategy implementation research. *Journal of business research, 45*(2), 119-134.

Olson, E. M., Slater, S. F., & Hult, G. T. M. (2005). The importance of structure and process to strategy implementation. *Business Horizons, 48*(1), 47-54.

Porter, M. E. (1996). What is strategy? *Harvard Business Review, 87*(9), 2-21.

Prahalad, C., & Hamel, G. (1990). The core competence of the corporation. *Boston (MA)*, 235-256.

Reed, R., & Buckley, M. R. (1988). Strategy in action—Techniques for implementing strategy. *Long Range Planning, 21*(3), 67-74.

Rugg, G., & Petre, M. (2006). A gentle guide to research methods.

SAPIA. (2014). Industry Overview - South African Fuel Industry Retrieved 3 July 2014, 2014, from http://www.sapia.co.za/industry-overview/fuel-industry.html

Schneier, C. E., Shaw, D. G., & Beatty, R. W. (1991). Performance measurement and management: a tool for strategy execution. *Human Resource Management, 30*(3), 279-301.

Schreyögg, G., & Steinmann, H. (1987). Strategic control: a new perspective. *Academy of management review, 12*(1), 91-103.

Sibiya, R. (2013). The Journey: South African Liquid Fuels Retailing Sector. *Forecourt Times*.

Simons, R. (2010). Stress-test your strategy: The 7 questions to ask. *Harvard Business Review, 88*(11), 93-100.

Smith, E. (2011). Perceptions regarding the use of strategy execution tools and processes in the contemporary workplace. *Journal of Contemporary Management, 8*, 473-497.

Srivastava, A. K. (2013). Modeling strategic performance factors for effective strategy execution. *International Journal of Productivity and Performance Management, 62*(6), 554-582.

Sundheim, D. (2013). Closing the Chasm Between Strategy and Execution (Vol. 91, pp. 24-24): HARVARD BUSINESS SCHOOL PUBLISHING CORPORATION 300 NORTH BEACON STREET, WATERTOWN, MA 02472 USA.

Thompson, A. A., Strickland, A. J., Gamble, J. E., & Gao, Z. a. (2008). *Crafting and executing strategy: The quest for competitive advantage: Concepts and cases* (Vol. 19): McGraw-Hill/Irwin.

Thornhill, A., Saunders, M., & Lewis, P. (2008). Research methods for business students.

Van Niekerk, L. (2012). *South Africa Yearbook 2012/13*. (1919855149). Pretoria: Government Communication and Information System (GCIS).

Wilson, T., & Andrews, P. W. S. (1951). *Oxford studies in the price mechanism*: Clarendon.

Wood-Mackenzie. (2013). Due for an oil change: South Africa's downstream oils sector: Wood Mackenzie.

Yang, L., Sun, G., & Eppler, M. (2009). Making strategy work: A literature review on the factors influencing strategy implementation. *Handbook of research on Strategy Process*, 165-181.

Zenger, T. (2013). What is the Theory of your Firm? *Harvard Business Review, 91*(6), 72-78.

APPENDIX A – The Letter to Respondents

15 October 2014

Dear Sir / Madam,

Thank you for agreeing to take part in this survey. The survey may take about 30 minutes of your time. The completed questionnaires will be highly **appreciated by 20 November 2014.**

This survey is part of my MBA thesis at Wits Business School, which is on "**factors that influence strategy execution in the South African Petroleum Industry**. Your participation and the research outcome can contribute towards the development of a framework that can facilitate systematic enhancement of those factors that positively affect strategy execution in South African petroleum companies. The study is about strategy execution and does not require you to discuss specific aspects of your company's strategy.

The questionnaire is comprised of 4 sections:

Section 1: Cover and Consent. The section provides brief info on the survey and is also for you to provide consent to the survey.

Section 2: Factors that influence strategy execution are listed. Kindly read each statement and allocate a total of 100 points across all twelve (12) factors. There is also a question in this section that is provided for you to capture any other factors and aspects of strategy execution not covered by the survey.

Section 3: Demographic information. This will be helpful in ensuring that the results are representative of South African demographic groupings.

All respondents' information will be kept confidential at all times. You are under no obligation to participate in the survey, and you may terminate your participation at any time. All responses remain anonymous and only aggregated data will be analysed. Kindly use my contact details provided for any clarity you require about any aspect of the survey.

Best Regards,

Zwelakhe Mabece

The Research Instrument

Survey Questionnaire for: "Factors influencing strategy execution in the South African petroleum industry"

By: Mr Zwelakhe Mabece – Wits Business School MBA Student

Tel: 082 8500 688; Email: zwelakhe.mabece@gmail.com

SECTION 1: DEMOGRAPHICS

Please CLICK / TICK on each statement BOX applicable to you

Question Number	Statement					
1	Please indicate your gender		Male		Female	
2	Please indicate your age		Less than 25	25-35	36-45	More than 45
3	Please indicate your race group		Black African	Coloured	Asian / Indian	White
4	Please indicate your employment status		Permanent		Contractor	
5	Please indicate your total number of years of work experience		Less than 5	5-10	11-15	More than 15
6	Please indicate your total number of years of work experience in the petroleum industry		Less than 5	5-10	11-15	More than 15
7	Please indicate the descriptor that best identifies your company	International Oil Company	National Oil Company	Wholesaler / Distributor	Retailer	Service Provider

SECTION 2 FACTORS THAT INFLUENCE STRATEGY EXECUTION

Please complete this section based on your most recent personal experience or observation in the South African Petroleum Industry. For each statement, allocate points out of 100. Please ensure that the total score adds up to 100 (and no more or less) If you wish, you may allocate all 100 points across, for example 4 factors, and leave the rest of the factors with a 0 score. You may also wish to score 100 points across one factor that you feel very strongly about, or across all 12.The survey allows you to make changes.

No.	Factor Statement	Rank Score
1	The skills of the leaders in my company played an essential role in assisting me execute the strategy	
2	The level of certainty or uncertainty in the regulatory framework has an influence on my company's long-range strategic planning	
3	The company culture had a positive influence on me when executing strategy	
4	There is a company-wide understanding of the skills and levels of competency required to execute strategy	
5	My company's organizational structure facilitated quick decision making when executing strategy	
6	The information communicated by management, across different departments , helped me understand the bottom-line impact of my actions	
7	The clarity of the strategy, as I experienced, made clear the role I had to play in its execution	
8	My company's strategy execution plans include elements to meet environmental concerns	
9	The company's performance monitoring tools and systems positively contribute to successful strategy execution	
10	Allocation of people, money and capital resources are adapted to changes in the strategy execution environment	
11	My support for strategy execution initiatives is related to the level of engagement and trust placed on me to make decisions	
12	Regulatory compliance is an essential element in my company's strategy	

SECTION 3 COMMENTS

Please comment on any aspect of strategy execution not covered before in the survey

SECTION 4 SURVEY CONSENT

I, the undersigned, have read and understood the purpose of the study

I have been given an option and an opportunity to seek clarity about the study

I have been informed that I have no obligation to take part in the survey and may terminate my participation at any time

Signature _____

APPENDIX B – Consistency Matrix

Table 6: Consistency Matrix

Research problem: The research problem central to this study is the identification of factors that influence strategy execution in the South African petroleum industry					
Sub-problem	**Literature Review**	**Research Propositions**	**Source of data**	**Type of data**	**Analysis**
Identify factors influencing strategy execution in the SA petroleum Industry	(Allio, 2005; Angel, 2008; Beer & Eisenstat, 2000; Bigler & Williams, 2013; Bossidy & Charan, 2002; Chatman & Cha, 2003; Cokins, 2009; Crittenden & Crittenden, 2008; Dobni, 2003; Favaro et al., 2013a, 2013b; Hamel & Prahalad, 1994; Heide et al., 2002; Higgins, 2005; Hrebiniak, 2006, 2008; Hrebiniak & Joyce, 1984; Joshi et al., 2003; Katzenbach & Harshak, 2012; Khadem, 2008; Kim & Mauborgne, 2009; Koufteros et al., 2014; McGrath, 2013; Micheli & Manzoni, 2010; Noble, 1999a, 1999b; Olson et al., 2005; Schreyögg & Steinmann, 1987; Smith, 2011; Srivastava, 2013; Yang et al., 2009) (Bernard & Bernard, 2013; Everitt & Hothorn, 2011; Leedy & Ormrod, 2010; Rugg & Petre, 2006; Thornhill et al., 2008) (Akpata et al., 2013; Barradas, 2011; Dudley, 2014; Filho, 2014; Mondliwa & Roberts, 2014; Nkomo, 2009; Sibiya, 2013; Wood-Mackenzie, 2013)	The factors that influence strategy execution in the South African Petroleum industry include: • Organisational Culture • Competencies • Organisational Structure • Management Communication • Leadership Skills • Strategy and Role clarity • Strategic Performance Monitoring • Resources Allocation • Employee Engagement • Regulatory Uncertainty • Regulatory Compliance • Environmental Concerns	Survey questions	Ordinal	Forced-Choice Ranking

APPENDIX C – Open ended question responses

Table 7: Responses to open ended question

I think regulation plays a key role in strategy execution
Performance metrics not well aligned to strategy
It is hard to allocate scores to items that I feel are not necessarily connected. However, in general I do feel that my company and perhaps the industry at large is not very agile at execution and thus the strategy has to be formulated in a manner that shows strong foresight. Particular weaknesses in my company are performance tools and the organizational structure which does not facilitate agile decision making.
Sentiment
It will be good for Senior Leadership members to include middle management in strategic decision taken.
Challenges faced by strategy execution are a result of the uncertainty of decision makers in the petroleum sector and the influence of politics as the role played by stakeholders like government and international oil companies.
1. The skills of the people executing the strategy is also an important factor in the successful execution of the strategy. / 2. The relevance (ability to address key business issues) and robustness of the strategy (ability to remain relevant even in changing circumstances) - also plays a factor in how readily the people responsible for strategy execution commit to the strategy.
The inability for an organisation to change direction due to environmental issues has an impact on it's ability to deliver strategy
Ambiguity of the government regulations often affects the effectiveness of strategy execution in the petroleum industry.
The consumer or demand view, and dynamics of that demand, play a critical role in strategy formulation and execution.
Somebody must take responsibility of the company strategy and control it
Clarity of the company strategy was a major factor in helping strategy execution and I my instance I found that this was under played.
Management support for innovation plays an important role in influencing the strategy. Rewards and reinforcement is key. Risk taking and tolerance for risk motivates employees to go an extra mile and feel they are in control. Autonomy must be promoted as this helps motivates high performers to take a leading role.
Leadership is instrumental in developing and communicating the strategy. Middle management must take ownership of aligning the frontline so that they can deliver the strategy.
Buy-in of leadership is critical for strategy execution
Government policy uncertainty creates a negative effect on investment, direction and investment choices.
Strategy execution rests on good formulation
Deregulation
There's something about Group / Corporate Strategy and how it impacts on Business Unit level strategy. Secondly, given the global nature of our business, the "environment" extends far beyond local nuances - e.g. What happens in the US could have an impact on how the BU-level strategic response should be in support of the Corporate / Group-level strategic agenda.

People come and do surveys, implementation takes long
Oil prices
Petrol and oil prices impact our strategies and customers as well
Petrol price
Allocation of capital to assets renewal strategy so that the assets are always in a good condition
Execution management is lacking; Too many unnecessary bottle necks with structure; performance monitoring and systems: we are forever missing our targets
The changes in the price of fuel. The changes in the laws of the coutry that affect the running of the business
Capital Requirements to implement strategy
The organisational structure plays a pivotal role in the turnaround time for decision making, which has a positive correlation to the ability to enjoy first mover advantage when executing strategy, particularly when it comes to innovation and locking in customers.
The strategy must not be vague, it must be well cascaded, and at each level, be thoroughly explained through workshops
all generally covered
Adaptability of organisations is key to changing tactics to execute the strategy (while maintaining a long term strategy).
A clear vision and ability to relay this to all are essential and leadership therefore plays a vital role in my opinion facilitating strategy execution.
All covered by and large
I think all of the factors listed are relevant and affect the effective execution of strategy. However, the wording is asking for positive realities associated with each. In my experience, the company has not done a "good job" of those factors and thus and I did not weight them.
Leadership that is open to change is important to strategy.
Team cohesion and collaboration across multi-disciplinary teams is essential.
Given limited resources in any organisation, each resource application needs to be directed towards actions that will yield high impact on strategy output and ultimately the bottom line. Therefore, strategy execution requires the correct (i) leadership to allocate the resources appropriately; (ii) technology and (iii) processes to effect the strategy.
Prices
Fuel is a grudge purchase for motorists
fuel prices impact strategy
the politics of the country impact strategy