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# Scenario planning as a strategic tool for multinational pharmaceutical companies in South Africa.

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# Scenario Planning as a Strategic Tool for Multinational Pharmaceutical Companies in South Africa

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**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**

**Johannesburg, 2013**

# ABSTRACT

The pharmaceutical industry in South Africa has been undergoing significant changes in the last few decades. The entrance of local and generic companies has affected the profitability and revenue generation of the multinational pharmaceutical companies who had, in the past, dominated this industry.

The multinational companies have had to try to maintain their revenue and strive to regain the market leadership they once had. Their ability to do this successfully has been questioned, and so have the corporate strategies that these companies are implementing in the South African environment.

Scenario planning has been identified as a tool that can be used by organisations to assist them in planning for events that have a likelihood of happening in the future. The purpose of this research was to ascertain the use of scenario planning by multinational pharmaceutical companies in South Africa and how this tool can assist them.

A qualitative research methodology was adopted with 12 in depth interviews of a convenience sample of senior managers in multinational, local and generic companies. The data was analysed using the deductive method.

The key findings of this research indicated that firstly, the corporate strategies being implemented, especially by the multinational pharmaceutical companies, do not address the challenges that these companies have been experiencing and secondly, these companies do not incorporate scenario planning into their strategic plans, even though the interviewees employed by these companies agreed that scenario planning would benefit them.

Recommendations regarding how the multinational pharmaceutical companies can improve their corporate strategies and include scenario planning into their strategic planning have been included in this report.

# DECLARATION

I, Sandra Dionisio, 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.

Sandra Maria Franco Salgado Dionisio

Signed at ……

On the …….. day of …… 2008

# DEDICATION

This research report is dedicated to my darling daughter Savannah:

From the day you were born you have been my reason for everything.

Thank you, Munchkin, for understanding the many nights that mommy would sit and work. Thank you for getting up early on Saturday mornings to go to vóvó so I could attend lectures. There are no words to describe how grateful I am to you for the sacrifices that you made for me to be able to do this. I am very proud to be your mom and my only wish in life is that I have taught you to always follow you dreams, never give up and that anything is possible!

I love you my darling!

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I would like to acknowledge and thank Professor Geoff Bick. Thank you Geoff! You really are a great teacher and an excellent supervisor. Your faith in my ability is much appreciated.

Thank you Mommy, Daddy and Nadia for all the Saturday's that you stayed with Savannah so I could attend lectures and be able to do my MBA. You are, and always will be, my rocks of support – I love you!

I would also like to acknowledge all the respondents who invested their time in completing the interviews. It really was an honour to meet and interview each and every one of you.

Finally I would like to thank the company for whom I have worked for the last 14 years. Thank you for aiding me financially and for providing all the resources necessary for completing this research project. I am very proud to work in our organisation. This report is for us!

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# CHAPTER 1 INTRODUCTION

## 1.1 Purpose of the Study

This study analysed the benefits of scenario planning as a strategic tool to assist the multinational pharmaceutical companies in South Africa to remain competitive in the light of generic company dominance.

## 1.2 Context of the Study

Three types of Pharmaceutical companies currently operate in South Africa: 1) the multinational pharmaceutical companies that are the producers of innovative medicines 2) the international generic manufacturers and 3) the locally owned pharmaceutical companies. There are various differences between them, but the main differences are the manner in which they operate, and their level of investment into the research and development of innovative medicines. The multinationals (MNEs) operate from a rigid global platform and invest millions of dollars annually into research and development (R&D), whilst the international generic companies and the local companies operate with local flexibility and invest their earnings into the launching of generic formulations for molecules launched by the MNEs once the patents for these molecules have expired.

Henry and Lexchin (2002) stated that international companies now face increasingly demanding customers, constrained expenditure on drugs, an expanding generics business, and imminent expiry of patents for several very profitable products. The combination of these factors creates uncertainty about the continued growth of the industry. Henry and Lexchin (2002) go on to explain that mergers of pharmaceutical companies have been common, and the number of major international manufacturers was predicted to fall from over 30 to around 12 in 2012. The main point of mergers seem to be to replenish depleted product pipelines, cut costs (including research and promotion), and maintain growth and profitability, rather than to reduce prices to customers.

The World Trade Organisation (WTO) has implemented certain laws to assist the multinationals specifically, namely the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement, which entered into force in January 1995 (Hoen, 2002). This agreement requires the member nations of the WTO—which includes nearly all major trading nations—to live up to defined standards of intellectual property protection. The proponents of TRIPS were responding to pressure from their pharmaceutical, copyright content, and trademark-based industries. These industries viewed themselves as victims of "piracy" in many markets throughout the world and sought to gain increased protection for their products. Developing countries accepted the agreement—which they recognized would greatly increase their royalty and license costs—in return for developed-world concessions that would expand these countries' exports of agricultural and textile products (Thomas, 2002).

Whilst TRIPS was accepted by most developing countries, an amendment made by the South African government to the Medicines and Related Substances Control Act was considered a contravention to the TRIPS agreement and made international headlines in 1998 (Barnard, 2002).

In February 1998, the South African Pharmaceutical Manufacturers Association and 40 (later 39, as a result of a merger) mostly multinational pharmaceutical manufacturers brought a suit against the government of South Africa, alleging that the Medicines and Related Substances Control Amendment Act No. 90 of 1997 ("Amendment Act") violated TRIPS and the South African constitution (Barnard, 2002). The Amendment Act introduced a legal framework to increase the availability of affordable medicines in South Africa. Provisions included in the Amendment Act are generic substitution of off-patent medicines, transparent pricing for all medicines, and the parallel importation of patented medicines (Hoen, 2002).

Subsequently, the suit was dropped due to activism efforts supporting the government's decision. The argument made by the South African government was on the basis that South Africa has a population of 44 million people, the majority of whom live in dire poverty. Consequently, medicines in this market are heavily patented and highly priced. Unfortunately, many of the medicines

that are highly priced to maximize profit in the private sector are needed equally in the public sector, where ill health creates a large market based on need, but poverty restricts the market because of affordability. The high price of patented medicines has thus been a relative barrier to health care in the private sector, but an absolute barrier to health care in the public sector (Loff and Heywood, 2002).

In 2010, the South African Pharmaceutical industry generated R 22, 8 billion in sales with a growth rate of 8% vs. 2009 sales of R21 billion (IMS, 2010). The companies in South Africa currently achieving the highest growth year on year are the generic and local companies. The MNEs are struggling to maintain positive growth, and have adopted various different business models to try and remain competitive. A model that could assist MNEs as a strategic tool is scenario planning.

This research has I investigated the use of scenario planning as a strategy currently being implemented by MNEs in other industries and has also examined the possible benefits of scenario planning to aid the MNEs in the Pharmaceutical industry.

## 1.3 Problem Statement

### *1.3.1 Main problem*

The primary objective of the study was to analyse the strategic planning tools currently employed by the multinational Pharmaceutical companies within South Africa and assess the benefit scenario planning would offer to these companies.

### *1.3.2 Sub-problems*

The first sub-problem examined the current strategic planning tools being employed by the Pharmaceutical MNEs in South Africa.

The second sub-problem assessed the extent to which scenario planning is used and how best scenario planning could be incorporated into the strategic planning framework used by Pharmaceutical MNEs in South Africa.

## 1.4 Significance of the Study

This study has attempted to fill a gap by providing guidance to leaders of multinational Pharmaceutical companies operating in South Africa. The study assists them to plan future scenarios that can both maximise the profits of their organisations and ensure their long term sustainability in a market currently dominated by local or generics companies.

The beneficiaries of this study are the leaders of the MNEs in South Africa. The study has enabled these beneficiaries to have a clear understanding of scenario planning as well as of the benefits of using scenario planning in their current environment. The beneficiaries are able to use this research as a basis for discussions regarding strategic decisions made globally for their local market, and why or why not these decisions should be implemented into the South African environment.

## 1.5 Delimitations of the Study

- This research was limited to the Pharmaceutical industry in South Africa.
- Recommendations from other industries were based on literature reviews.

## 1.6 Definition of Terms

Multinational Enterprise (MNE): Any business that has productive activities in two or more countries (Hill, 2007).

Generic Drugs: The term "generic" has several meanings regarding drugs: 1) the chemical name of a drug. 2) A term referring to the chemical makeup of a drug rather than to the advertised brand name under which the drug is sold.

3) A term referring to any drug marketed under its chemical name without advertising. Generic drugs marketed without brand names are generally less expensive than brand-name drugs, even though they are chemically identical to brand-name drugs and meet the same standards of the Medicines Control Council for safety, purity and effectiveness. Generic drugs can be legally produced in South Africa if a patent has expired, or when drugs have never been patented. The expiration of a patent removes the monopoly of the patent holder on drug sales licensing (Banahan III and Kolassa, 1997).

TRIPS: The Trade-Related Aspects of Intellectual Property Rights agreement.

MCC: The Medicines Control Council (MCC) is a statutory body that regulates the performance of clinical trials and registration of medicines and medical devices for use in specific diseases. The MCC is responsible for ensuring that all clinical trials of both non-registered medicines and new indications of registered medicines comply with the necessary requirements for safety, quality and efficacy (Department of Health, 2013).

WTO: The World Trade Organisation is an international agency that encourages trade between member nations, administers global trade agreements and resolves disputes when they arise (Correa, 2000).

## 1.7 Assumptions

For purposes of this study, it was assumed that there was sufficient information available regarding the Pharmaceutical industry in South Africa.

It was also assumed that those interviewed from the industry had sufficient knowledge regarding the current market dynamics and the current position of the MNEs operating in the market. Leaders and strategists employed by the companies in this industry should be aware of the dynamics within the industry and the limitations placed on the MNEs.

# CHAPTER 2 LITERATURE REVIEW

## 2.1 Introduction

The review of the available literature revealed a scarcity of information in the area of scenario planning within the Pharmaceutical industry worldwide. Literature regarding the Pharmaceutical industry globally and examples of different business strategies were available, but a gap was also found regarding the strategies incorporated by the Pharmaceutical industry in South Africa. Whilst there was a lack of published information, there were examples available of the different strategies that have been implemented. This chapter discusses scenario planning and the benefits thereof as well as assesses the strategic options that could be considered by the South African multinational pharmaceutical companies.

## 2.2 Definition of Scenario Planning

Scenario planning is a systemic way of thinking about how the future might unfold that builds on what is known about current trends and signals. Scenario planning is not a forecasting technique, but a process for thinking and communicating about the future (Grant, 2009). Scenario planning therefore is of greater benefit to an organisation than forecasting. Forecasting has worked well in the past for many organisations that experienced internal and external stability. Today however, the external environment in the majority of industries has become unstable (Wack, 2002). Forecasting errors have become more frequent and occasionally of dramatic and unprecedented magnitude. Most managers understand the inaccuracy of forecasting.

A well-known method for coping with future changes in organisations has been strategic planning. While this approach has yielded some insight regarding how organisations can anticipate and cope with change, it has not proven its ability to inform organisational leaders about massive political, environmental, economic and/or societal changes. Rather than claiming an ability to predict the

future, scenario planners advocate expressing multiple stories that cover a variety of plausible future occurrences. With the focus on both long and short term stories about the future, scenario planning forces organisational planners to consider paradigms that challenge their current thinking (Chermack et al., 2001).

In theory, all organisations can use scenario planning, but it is clearly important for large intensive firms (such as the oil companies) to retrieve the most correct version of the future context as possible. Equally, pharmaceutical firms have extraordinary R&D levels and manufacturing costs. Planning for the incorrect probable future could be a disastrous problem in such industries (McGee et al., 2010).

Scenario planning can be thought of as a process of being proactive rather than reactive. In the Pharmaceutical industry this is crucial. Most MNEs in this industry react to situations after they have happened, as opposed to being proactive and devising plans to adapt to changes immediately. Organisations that need to use scenarios are especially those that are unable to react quickly and effectively to changing events as they occur. Scenarios are particularly useful in situations where there is a desire to put challenges on the agenda proactively (McGee et al., 2010).

De Geus(1988) stated that it would likely take 12 to 18 months from the moment a signal is received until it is acted on. This timeline is far too long and therefore companies need to learn to be proactive rather than reactive. By being proactive, they can respond rapidly when situations that can negatively impact on their business occur. Scenario planning is a method that is considered to be proactive.

In general it is difficult to say when a company should use scenario planning. However, the following type of conditions would favour its use:

1) Uncertainty is high (relative to one's ability to predict or adjust).

2) Too many costly surprises have occurred in the past.

3) Insufficient new opportunities are perceived and generated.

4) The quality of strategic thinking is low (e.g. because strategic planning has become too reutilised).

5) The industry has experienced significant change or is about to.

6) A common language and framework is desired, without stifling diversity.

7) Strong differences of opinion exist, each of which has its merits.

8) Your competitors are using scenario planning (Schoemaker, 2006).

Five out of eight of these conditions are currently evident within the Pharmaceutical industry in South Africa, strongly suggesting that scenario planning would greatly benefit the companies in this industry. There are no right or wrong scenarios. Scenarios do not fall neatly in “good” and “bad” worlds, desirable and undesirable futures. Like the real life from which they are built, the scenarios are mixed bags, at once wonderfully dreadful and dreadfully wonderful (Wilkinson, 2004).

## 2.3 Strategy and the Pharmaceutical Industry in South Africa

The Pharmaceutical industry in South Africa has changed considerably within the last 10 years. The introduction of generic medicines, the establishment of local pharmaceutical companies and the changes in legislation regarding the registration of medicines have all resulted in a radical shift in this industry's dynamics.

Due to these changes in dynamics of the Pharmaceutical market in South Africa, the MNEs have had to make some strategic decisions which in the past would not have been considered, but have become in some cases the only options available to explore in order for these companies to remain competitive and profitable.

Strategic decisions such as purchasing a percentage of a generic company, like GlaxoSmithKline purchasing 16% of Aspen pharmaceuticals (GSK, 2009), or

entering into co-marketing agreements, like Merck Sharpe and Dohme & Adcock Ingram (Bloomberg, 2010). Whether these strategic decisions have been the best long term decisions still remains unknown, but the fact of the matter is that these once very powerful and dominant companies (within the context of the South African Pharmaceutical industry) are no longer generating the profits that they once did, and are now finding different ways to how best recover their past financial standing within the industry.

### *2.3.1 The impact of external and internal forces on the market dynamics of the Pharmaceutical Industry in South Africa*

Strategically relevant influences approaching from the outer ring of the macro environment can sometimes have a strong impact on a company's business situation and play a very significant part in the company's direction and strategy (Hough et al., 2008). This is true in the case of the Pharmaceutical MNEs in South Africa. The market dynamics within the local environment impact the strategic decisions that are made by these companies.

The PESTLE model (Johnson et al., 2006) (see Figure 1) and Porter's five forces model (Porter, 2008) are effectively used to assess the external factors affecting the pharmaceutical industry in South Africa, and the internal factors within the industry that impact all the companies within this industry.

Starting with the PESTLE model (Johnson et al., 2006) (see Figure 1); it is evident that the external environment currently impacts greatly on the strategies being implemented by the Pharmaceutical MNEs.




**Figure 1: The PESTLE Model (Johnson et al., 2006)**

Political: The political situation has an enormous effect on the pharmaceutical industry in South Africa. Healthcare is a central point of contention for any political party in power, and pressure from society on government to provide free and good healthcare to the masses is a never-ending debate. For this reason, post -apartheid governments have taken an aggressive stance towards the innovative multinational Pharmaceutical companies. Pressure from government to reduce the costs of medicines has become a norm. Legislation now states that if a generic equivalent to any medicine is available, then the generic should be offered instead of the originator brand (Department of Health(b), 2009), irrelevant of whether they are priced the same. Along with the Medicines and Substances control amended act of 2009 which legislates that all medicines should have a controlled single exit price (Department of Health(a), 2009), this has greatly impacted on the profit margin for the multinational innovative Pharmaceutical companies in South Africa. Lastly, the Medicines Control Council, which is the government body responsible for the registration of new medicines in South Africa currently, has a waiting list of three years for new chemical entities. Whilst generic formulations are registered in large numbers monthly, new innovative medicines submitted for registration by a

multinational, can wait up to three years for registration (Mangalmurti, 2006). This has a negative impact on the pipeline for multinationals in South Africa, and also impacts on proper forecasting for financial earnings annually.

Economic: Approximately 15 per cent of the 49 million population in South Africa are covered through varying tiers with privately funded medical insurance, whereas the remainder of the population seeks care in state healthcare facilities (IMS, 2011). Even so, the privately supplied Pharmaceuticals market in SA was worth around ZAR 19.5bn in 2011, whereas the state funded market was worth an estimated ZAR 4.7bn. Currently generic penetration in the private market is approximately 58 per cent (IMS, 2011). The economic situation in South Africa is improving, and there is growth year on year. In 2009, the total audited Pharmaceutical market for South Africa rose 14.7 per cent (IMS, 2011).

Sociocultural: In South Africa HIV / AIDS is classified as a pandemic. The MNEs that are the originators of antiretroviral medicines (ARV's) have been under extreme pressure in the last decade from activist groups to lower the price of these medicines. A decision was made to sell ARV's in the South African market at cost, and the originator MNEs were to grant compulsory licences to generic companies to manufacture these medicines prior to patent expiry (Pérez-Casas et al., 2001). The impact of this decision has been that the originators or MNEs no longer generate any profit from these medicines.

Technological: Great leaps and bounds have been made in the invention of new and improved ways to treat disease. The Pharmaceutical MNEs have always and are still currently investing millions of dollars annually in this type of research (Bruni and Verona, 2009).

Environmental: The South African environment does not negatively influence the Pharmaceutical industry in South Africa.

Legal: The Pharmaceutical industry in South Africa is highly regulated. All medicines marketed and sold in the market have to be registered with the Medicines Controls Council (MCC). All marketing prepared is also regulated by

the South African Code of Practise for the Marketing of Medicines (Department of Health(b), 2009).

The South African Code of Practise for the Marketing of Medicines (Department of Health(b), 2009) states that “all marketers of medicines should maintain high ethical standards when conducting promotional activities and must comply with applicable legal, regulatory and professional requirements. Compliance with the Code will ensure that ethical promotional practices are established for all marketers, prescribers, dispensers, advisers and users of medicines”.

The Pharmaceutical MNEs adhere strongly to the Code, and have stricter globally enforced codes. The problem is that not all the pharmaceutical companies adhere to the Code, and many times legal action has to be taken by one MNE or another due to incorrect or bias information that is provided by the competitors to customers incorrectly portraying brands in the market.

### *2.3.2 Porter’s Five Forces*

Understanding the competitive forces, and their underlying causes, reveals the roots of an industry’s current profitability while providing a framework for anticipating and influencing competition (and profitability) over time, see Figure 2 (Porter, 2008) for an illustrated explanation.

Rivalry amongst existing competitors: The Pharmaceutical industry in South Africa compromises of three types of companies. The Multinational Enterprises, The Multinational Generic companies and the Local South African companies. The Local and Multinational Generic companies are manufacturers of generic medicines only. They manufacture medicines whose patents have expired. All the current competitors compete for the same target segments.

Threat of new entrants: In South Africa the Pharmaceutical market is currently stable with no evidence of new entrants. There is an imminent threat, however, that the largest generic Multinational in the world—TEVA—may decide at any moment to enter the market. Should this happen, the impact to all the current competitors will be great.

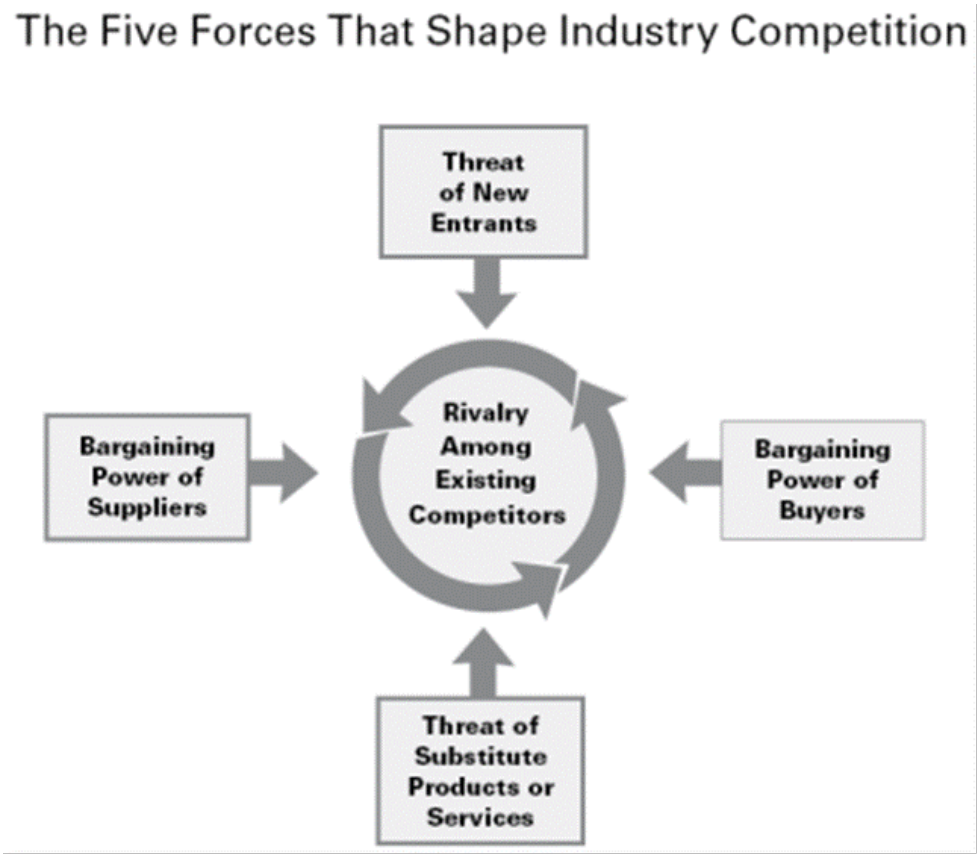


**Figure 2: The five forces that shape strategy (Porter, 2008)**

Bargaining power of buyers: Buyers in the industry comprise of Patients, Physicians, Pharmacies, Wholesalers and Funders. Whilst patients and physicians have very little bargaining power, large pharmacy chains, wholesalers and funders have a huge bargaining power. Pharmacy chains and wholesalers negotiate distribution fees with the companies, and those that offer the highest fees are the ones whose medicines are stocked and sold the most.

Funders have influence over which medicines will be reimbursed by means of a formulary that they set. The medicines listed on the formulary are the ones that they will reimburse 100%. Should a medicine not be on the formulary and the patient refuses to use the alternative on the formulary, then the patient has to co-pay. Most patients refuse to pay the co-pay and opt for the medicine listed on the formulary. Formularies are set according to the saving that funders can make on the cost of medicines. The cheaper the medicine is, the greater the chances that it will be listed on the formulary. This applies to all funders in South Africa (Godfrey, 2008).

Threat of substitute products or services: In South Africa there are laws that protect patented medicines therefore there is no threat of substitutes for these medicines. However, medicines whose patents have expired have a very real threat of being substituted for cheaper generics. The South African Government supports this with legislation that is in place (Department of Health(a), 2009). The entry of generics into therapeutic markets dramatically decreases the value of the market and of the brands within that market.

Bargaining power of suppliers: Local suppliers of chemicals used in the manufacturing of medicines have very little influence on the MNEs, because most of their medicines are manufactured overseas. The reason for this is to ensure adequate quality control and protection of intellectual property. The suppliers in South Africa have a greater influence on the local and some Multinational generic companies because they manufacture their medicines locally.

### *2.3.3 Testing the strategy*

The literature available does not allude to whether the strategies currently being implemented by the Pharmaceutical MNEs in South Africa are right or wrong. What is available is a framework which assists organisations in determining whether they are on the "right track", taking into account the environment in which they operate.

Hambrick and Frederickson (2001) recommend a specific set of questions that should be asked when testing the quality of a strategy:

1) **Does the strategy fit with what's going on in the environment?**

Is there healthy profit potential where you are headed? Does your strategy align with the key success factors of your chosen environment?

2) **Does the strategy exploit your key resources?**

With your particular mix of resources, does this strategy give you a head start on competitors? Can you pursue this strategy more economically than competitors?

3) **Will your envisioned differentiators be sustainable?**

Will competitors have difficulty matching you? If not, does your strategy explicitly include a ceaseless regimen of innovation and opportunity creation?

4) **Are the same elements of your strategy internally consistent?**

Have you made choices of areas, vehicles, differentiators, and staging, and economic logic? Do they all fit and mutually reinforce each other?

5) **Do you have enough resources to pursue this strategy?**

Do you have the money, managerial time and talent, and other capabilities to do all you envision? Are you sure you are not spreading your resources too thinly, only to be left with a collection of feeble positions?

6) **Is your strategy implementable?**

Will your key constituencies allow you to pursue this strategy? Can your organisation make it through the transition? Are you and your management team able and willing to lead the required changes?

Answering these questions is of vital importance when assessing whether or not the strategy currently in place is indeed the best option.

In order to do this effectively, tools such as PESTLE and Porter's five forces, discussed previously, should be used in the analysis of the current strategy.

### *2.3.4 Research question 1*

To what extent are corporate strategic planning tools being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability?

## 2.4 Benefits of scenario planning and how best to incorporate it into the strategic planning framework

In the strategic thinking phase the focus is less on financial variables and trend extrapolation and more on strategic issues of identification and fundamental analyses of the forces that drive the system. Scenario construction is an important tool for such analyses. Its benefits lie in both the resulting output and in the process of systematically examining the interaction of trends and uncertainties within a given business domain and time frame (Schoemaker, 2006).

Scenarios are not projections, predictions, or preferences; rather, they are coherent and credible alternative stories about the future. They are designed to help companies challenge their assumptions, develop their strategies, and test their plans (Davis, 2002).

Cornelius et al. (2005) explained that scenario planning may help businesses overcome limitations and assist managers in deciding when and how to exercise options, capturing upside potential due to greater flexibility. Cornelius et al. (2005) went on to state that specifically, scenarios can contribute to real options at three fundamental levels. First, they can help identify options in the future. Second, they can help time the decision to exercise the real option. Third, they can provide an important input in the process evaluating it.

### *2.4.1 Why scenario plan?*

The events of the 11th September 2001 showed the world what scenario planning can prevent. The United States of America had been informed of the possibility of a terrorist attack, and ignored such a possibility. Had this information been taken seriously, the horrific events that unfolded on 9/11 could have been avoided (Sunter and Ilbury, 2001).

Royal Dutch/Shell Group introduced scenario analysis as a method to help them deal with challenges more than 30 years ago. Since then, global scenarios have been developed every three years (Cornelius et al., 2005).

Pierre Wack of Royal Dutch Shell (Wack, 2002) and Khan of RAND Corporation (Kahn et al., 1967) understood the benefits of scenario planning. By incorporating scenario planning into the strategic planning of their organisations, both Wack and Kahn assisted their organisations in benefiting from the resulting output of scenario planning, and from the process of systematically examining the interaction of trends and uncertainties within their respective business domain and time-frames (Schoemaker, 2006).

Pierre Wack said of scenarios that they serve two main purposes. The primary purpose is proactive in that scenarios anticipate and understand risk; the second is entrepreneurial because scenarios discover strategic options which were previously unaware (Sunter and Ilbury, 2001).

Cornelius et al. (2005) explained that scenarios serve multiple functions. First of all, they present a background for the design and selection of strategies. Second, scenarios help make managers aware of environmental uncertainties by confronting them with fundamentally different future states. Third, scenarios provide a tool to identify what might possibly happen and how an organisation can act upon or react to future developments. As such, scenarios can act as early warning systems. Fourth, scenarios offer the possibility to combine quantitative data with qualitative input, enabling scenario planners to incorporate results from other forecasting techniques and allow for soft or fuzzy variables. Finally, scenarios can help stretch managers' mental models by explicitly confronting them with their own biased viewpoints.

### *2.4.2 The benefit of scenario planning in relation to competitive advantage*

The Pharmaceutical industry is extremely competitive. Fahey (1999) stated that scenarios offer a proven means to generate understanding of competitor's potential strategies, capabilities, and actions. Scenarios contribute in three distinct, but related, ways to identifying and assessing competitors' current and potential strategies:

1) They provide an opportunity to generate knowledge about current and future competitors' strategy choices.

2) They offer another avenue by which an organisation can explore the nature and type of competitive dynamics that might characterise various product-customer segments at some future time.

3) As a consequence, they generate critical input to the development, execution and monitoring of the organisation's own strategies and action plan.

### *2.4.3 Research Question 2*

How would incorporating scenario planning into the strategies used by Pharmaceutical MNEs in South Africa benefit these organisations?

## 2.5 Conclusion of Literature Review

In conclusion, this review of literature revealed a lack of data regarding scenario planning within the Pharmaceutical industry both globally and within South Africa. This suggested an absence of the use of scenario planning within the industry as part of the strategies currently being employed. Examples of successful uses of scenario planning within other industries were reported on. The long term success of scenario planning in companies such as Royal Dutch Shell and the RAND Corporation are such examples.

Furthermore, the review of literature did not reveal sufficient details regarding the current strategic models/tools used by these MNEs. Whilst there is sufficient information regarding the internal and external factors that influence the strategies employed by these MNEs, there was no prior literature identified regarding the individual strategies being employed.

Therefore, further research into the strategies currently being employed by MNEs in the Pharmaceutical industry in South Africa, and the benefit of scenario planning for these organisations can be of benefit to this industry as a whole.

### *2.5.1 Research Question 1:*

To what extent are corporate strategic planning tools being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability?

### *2.5.2 Research Question 2:*

How would incorporating scenario planning into the strategies used by Pharmaceutical MNEs in South Africa benefit these organisations?

# CHAPTER 3 RESEARCH METHODOLOGY

## 3.1 Research methodology /paradigm

The qualitative research method was the method used for purposes of the study. This form of methodology was chosen because it allowed the researcher to describe and explain a phenomenon and permitted the researcher the opportunity to explore diverse forms of expression (Willig, 2008).

## 3.2 Research Design

The research design that was used for the purposes of the study was qualitative research by means of in-depth interviewing and a naturalistic approach was used.

Bogdan and Biklen (1982) described in-depth interviewing as “open ended questions which are used in order to retrieve as many details as possible. Open ended questions allow for the informants to answer from their own frame of reference rather than being confined by the structure of pre-arranged questions; informants express their thoughts more freely”. Bogdan and Biklen (1982) further explained that the naturalistic approach is defined when researchers are in a particular setting with their pad and pencil, or video/audio recording equipment. Researchers feel that actions can be understood when they are observed in the setting in which it occurs.

Therefore, it was assumed that by conducting this research using this methodology, the opportunity to capture not just the thoughts, but also the reactions of the interviewees would be possible, and a better understanding of not just the interviewees’ knowledge regarding scenario planning would be captured, but also their reactions. How comfortable the interviewees were in discussing scenario planning, and also how much insight they actually had into the topic was therefore also better captured.

The advantage of conducting face to face interviews was that there would be an opportunity for the interviewees to take their time to answer the questions. The

interviewees would have the opportunity to share as much information as they chose for each question asked. This kind of research method also offered the researcher an opportunity to obtain clarity with the interviewees regarding the questions that were asked, and therefore eliminated the possibility of the interviewees misunderstanding the questions and therefore answering incorrectly. Face-to-face interviewing also assisted the researcher in understanding the attitudes and behaviours of the respondents in their natural setting.

The disadvantage of conducting face-to-face interviews was that when using this method, there was no anonymity as is the case with quantitative research, and therefore interviewees may have felt less comfortable answering certain questions, or may have chosen to divulge less information than they could have, should they have been answering a questionnaire in a quantitative setting. Qualitative research is neither quantifiable nor verifiable. From the researcher's perspective, it may also have been difficult to maintain or determine objectivity because of the researcher's involvement with the research.

## 3.3 Population and sample

### *3.3.1 Population*

The population sample necessary for purposes of this research report were all senior managers employed in pharmaceutical companies operating in South Africa, whose role was relevant to the company's design of the strategic plan. They were, therefore, in decision making positions.

### *3.3.2 Sample and sampling method*

A convenience sample group of 12 senior/executive level managers employed in Pharmaceutical companies in South Africa was selected. Eight of the respondents were people employed in pharmaceutical MNEs and six of the

respondents were employed in Local/Generic pharmaceutical companies at the time that the interviews were conducted.

Scenario planning is one of the vital tools used when deciding the strategy of an organisation and therefore those interviewed were in positions within their organisations where they shaped or influenced the strategy of their respective organisations. Therefore, they would know to what extent (if any) their organisations used scenario planning.

**Table 1 Profile of respondents**

| Respondent Type | Sample No. |
|---|---|
| Senior/Executive level Managers employed in Pharmaceutical MNEs in South Africa | 8 |
| Senior/Executive level Managers employed in Local/Generic Pharmaceutical companies operating in South Africa | 6 |

## 3.4 The research instrument

An open ended questionnaire was used as the research instrument. The respondents were not informed at the start of questioning about the topic being researched. The questions asked were related to the Pharmaceutical environment in South Africa, its' impact on their organisations and what types of strategies they used. At the end of the questionnaire there were a few questions exploring their thoughts on scenario planning and whether they thought it would be of benefit to their organisations. See appendix A for a copy of the research instrument.

A pilot test interview was successfully completed on one respondent. All the questions were clearly understood by the respondent and all the questions were answered.

## 3.5 Procedure for data collection

1) Face to face interviews were conducted with the relevant respondents.

2) Hand written notes and voice recordings were used with permission from the interviewees during the interviews to capture the answers from the respondents.

3) Once all the interviews were conducted, all the transcripts were then analysed.

## 3.6 Data analysis and interpretation

The deductive method was used to analyse the data. This method is the most appropriate to use when: 1) the existing theory is incomplete and 2) Semi-structured interviewing is done.

A simple deductive coding process was recommended by Hsieh and Shannon that include the following steps(Hsieh and Shannon, 2005):

1. Review the literature and the interview guide
2. Develop a code book, a table or record of concepts or variables
   - Names of codes
   - Definitions of codes
3. Get a sense of the whole; read through all transcripts carefully.
4. Write preliminary codes next to appropriate segments of the text.
5. Develop new codes/sub-categories for uncoded data.
6. Look for ways of reducing the list of codes by grouping codes that relate to each other into categories.
7. Look for relationships between categories.

8. Assemble the material belonging to each category and write up the preliminary analysis.

## 3.7 Limitations of the study

- There was a certain difficulty in obtaining access to the proposed respondents which, in some instances, lead to alternative people being interviewed.
- Long waiting times to interview respondents resulted in a delay in gathering of all the required information.
- Some respondents were not able to answer all the relevant questions.
- Some respondents were not able to give accurate and complete answers to the questions asked.

## 3.8 Validity and reliability

The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability. If the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (Joppe, 2000).

Validity in quantitative research depends on careful instrument construction to ensure that the instrument measures what it is supposed to measure. In qualitative inquiry the researcher is the instrument. The credibility of the qualitative methods therefore hinges to a great extent on the skill, competence and rigor of the person doing the fieldwork (Patton, 2001).

Ratcliff (1995) suggested that it should be considered that low reliability could produce high validity. His point of view was that qualitative researchers emphasize validity rather than reliability. He stated that qualitative researchers believe that documenting what occurs in an accurate manner may reveal inconsistencies. Reality is dynamic; it changes constantly. Ratcliff (1995) also explained that it is important to realize that low reliability could be consistent

with high validity if the social situation is constantly in flux, or people might see things differently because they are seeing different aspects, different levels, different perspectives, of the whole which is far more complex than any single perspective/person might see. Placing two different accounts together might result in a better understanding of the whole than either one separately, even though the consistency between those accounts might be rather low. Together, the two very different accounts, reflecting low reliability, could produce even higher validity.

Based on this information, this study aimed to rather show high validity than reliability, even though both were considered.

### *3.8.1 External validity*

The sample size of respondents used in this study was 12.

Willig (2008) stated that the external validity is determined by whether or not the findings of a study can be generalised to the broader population.

The sample size in this study was therefore not sufficient to determine external validity. However, not proving external validity did not hinder the value of this study. The sample size of 12 respondents addressed the gap that this study was attempting to fill.

### *3.8.2 Internal validity*

In order to improve the internal validity of this study, data triangulation (Johnson, 1997) was used. Data triangulation is the method of using multiple data sources in a single research study. A single method of gathering data was used, in this case the interview method, but multiple respondents were interviewed.

### *3.8.3 Reliability*

Whilst reliability would have been more complex to obtain, an attempt was made to achieve reliability by ensuring the content of the questionnaire and the order in which the questions were asked would be the same for all the respondents being interviewed.

# CHAPTER 4 PRESENTATION OF RESULTS

## 4.1 Introduction

The findings of the research are presented in the form of graphs and tables with written explanations.

## 4.2 Demographic profile of respondents

The intention of the researcher was to interview 20 senior/executive level managers for purposes of the research. Ten of the respondents were to be employed by MNEs and the other ten were to be employed by Local/Generic Pharmaceutical companies.

However, after 12 interviews convergence was reached as the major portion of the participants were all interviewed and no further insights were gained from the final interviews. Of the 12 interviews conducted, 7 were conducted with managers of MNEs and 5 were conducted with managers of Local/Generic Pharmaceutical companies.

## 4.3 Results Pertaining to Research Question 1

The first research question was aimed at investigating to what extent are corporate strategic planning tools being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability?

In an attempt to answer Research Question 1, a series of questions were asked to the respondents focusing on the strategy currently used by their respective organisations. The respondents were asked whether the strategy they currently used addressed their environmental challenges and how their strategies were created.

The responses to the questionnaire were as follows:

### *4.3.1 Common Challenges*

Respondents were asked about the most significant challenges currently facing their respective organisations. Figure 3 below depicts the three most common themes mentioned by the respondents.

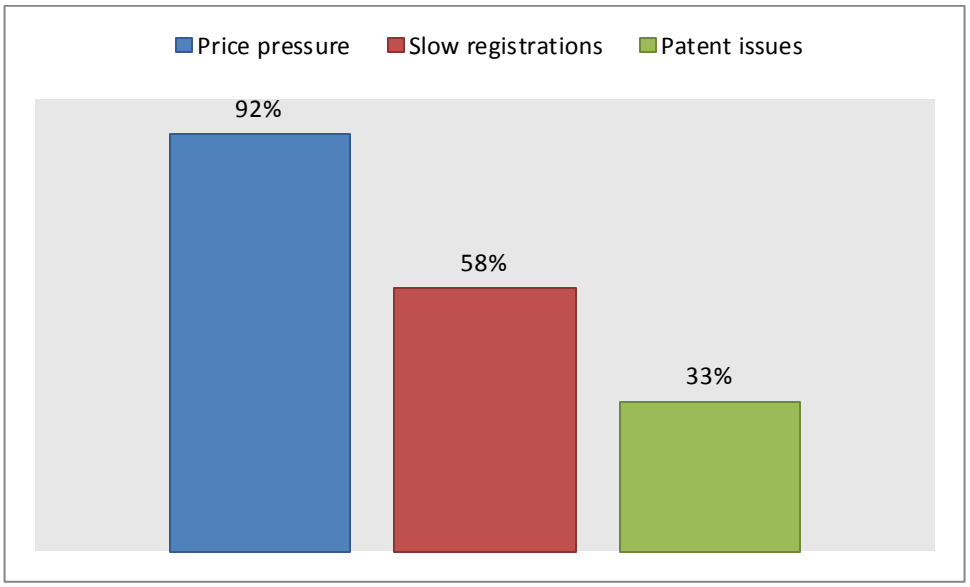


**Figure 3: Common challenges**

Whilst price pressure and slow registrations were identified by both MNEs and Local/Generic companies; patent issues were identified as a common challenge by MNEs only.

A senior marketing respondent from an MNE eluded to the fact that the development of novel therapeutic molecules costs a MNE millions of dollars to research and bring to market. The patent of the molecule helps the MNE to recover the initial costs of research and devlopment of the molecule but on patent expiry the value of the molecule is severly diluted with the entrance of generic molecules at a significantly reduced cost into the market.

### *4.3.2 Effectiveness of Strategy*

Figure 4 below confirms that of all the respondents interviewed, only 58% of them felt that the strategy currently being implemented by their respective organisations addressed the challenges that their organisation faced at the time

the interviews were conducted. The majority of these respondents were, at the time of the interviewing process, employed by Local/Generic companies.

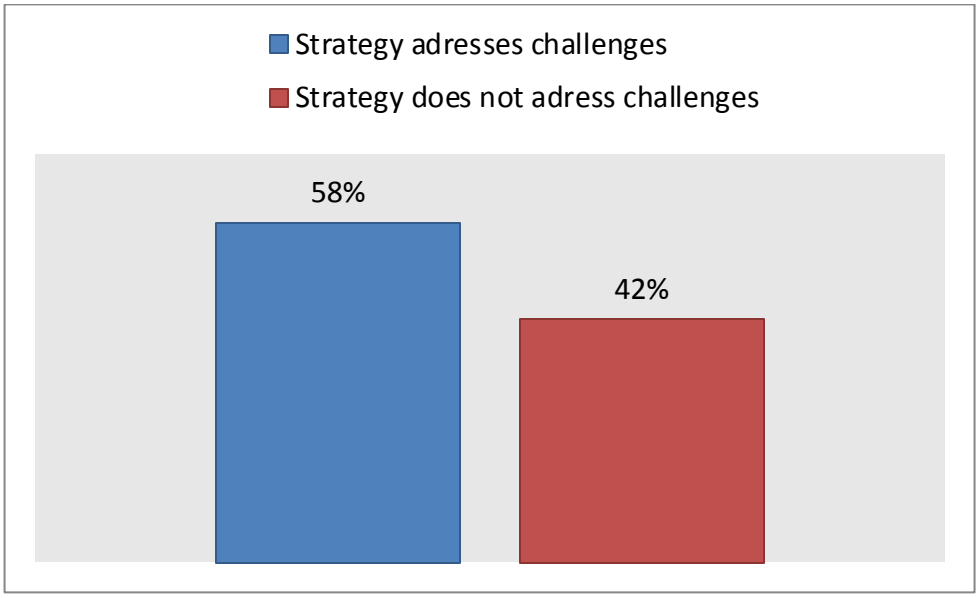


**Figure 4: Strategy effectiveness addressing challenges**

Of the 42% of respondents whose response was that their organisations' strategies did not address the challenges they were facing at the time the interviews were conducted; an overwhelming 80% were employed in MNEs.

### *4.3.3 Strategy Creation*

As evident in Figure 5 below, 83% of the respondents stated that their organisations created their strategies locally. Only 17% of respondents answered that their strategies were created either regionally or globally, and of these respondents 100% were employed by MNEs

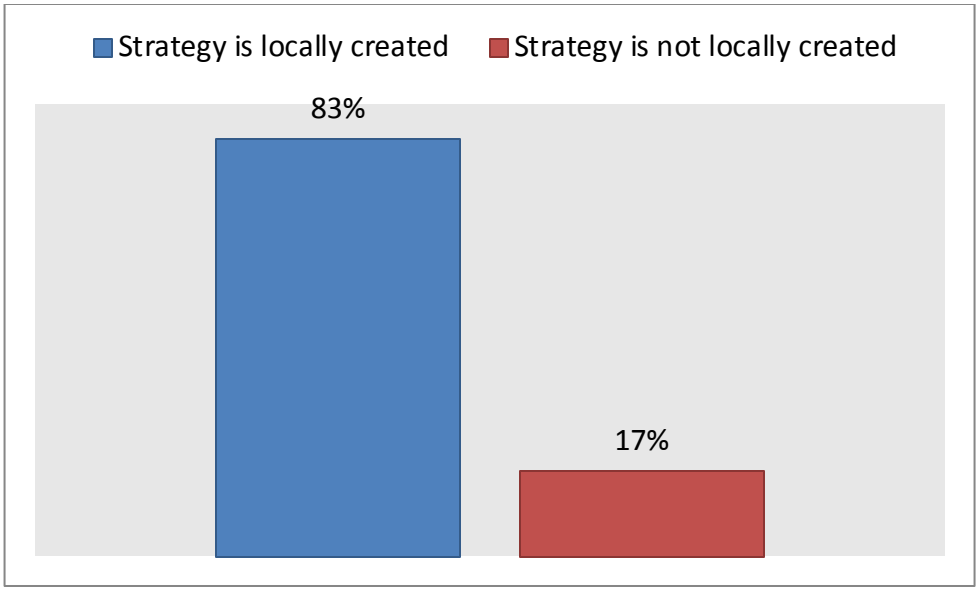


**Figure 5: Strategy creation**

### *4.3.4 Process used to create strategy*

When asked whether a formal or informal process is used by their respective organisations; 50% of respondents answered that neither a formal or informal process was used. It appeared that each of these organisations used their own internally designed approach.

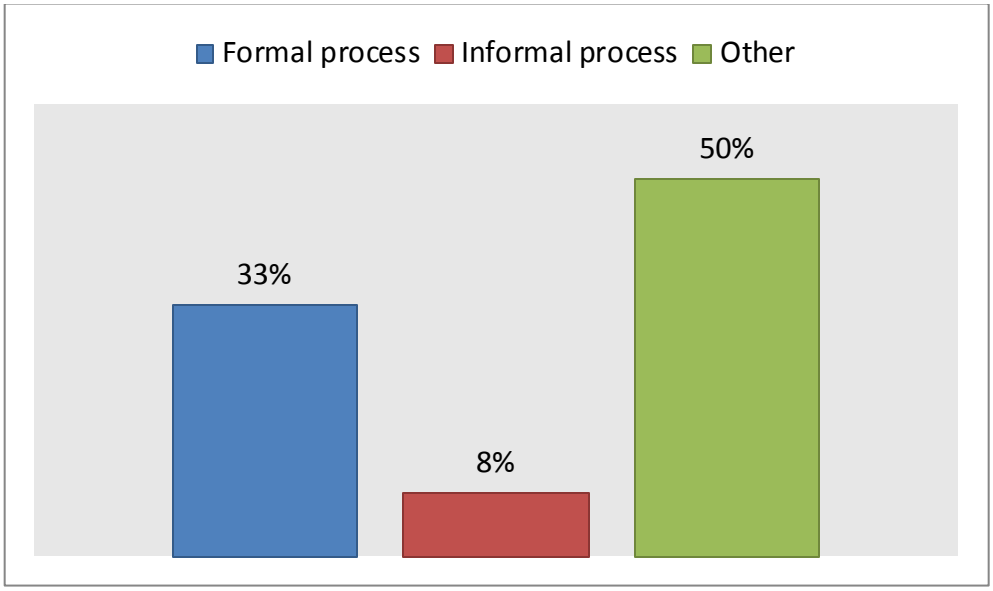


**Figure 6: Process used to create the strategy**

One third of the respondents did however state that their organisations used a formal process to create their strategy and the formal strategy used for all the MNEs appeared to have some similarities. The most common similarity is explained below by a managing director of one of the MNEs.

He explained that in his organisation, during Q3 of every year, the strategy would be formulated for the following year. Those creating the strategy would take into account the potential revenue that the organisation could generate for the next three years. In other words, the Long Range Operating Profit (LROP) and the strategic objectives for the organisation would then be formulated around actions which could assist the organisation to achieve this calculated LROP. The strategy would then be presented to the regional management team responsible for South Africa. Only once the regional team commented on the strategy and agreed that it was aligned with the regional strategy; would approval then be given to the local subsidiary to implement the strategy.

### *4.3.5 Tools for planning*

When asked which tools are used to plan for the future, 50% of the respondents commented that their respective organisations used financial reports to plan for the future. Of these, 83% respondents were from MNEs.

According to one of the respondents, who at the time was a senior financial manager in his organisation, the future growth for the South African based subsidiary of his organisation was calculated by the company's regional team and the future strategy was then created locally in an attempt to achieve the projected growth calculated by the regional team.

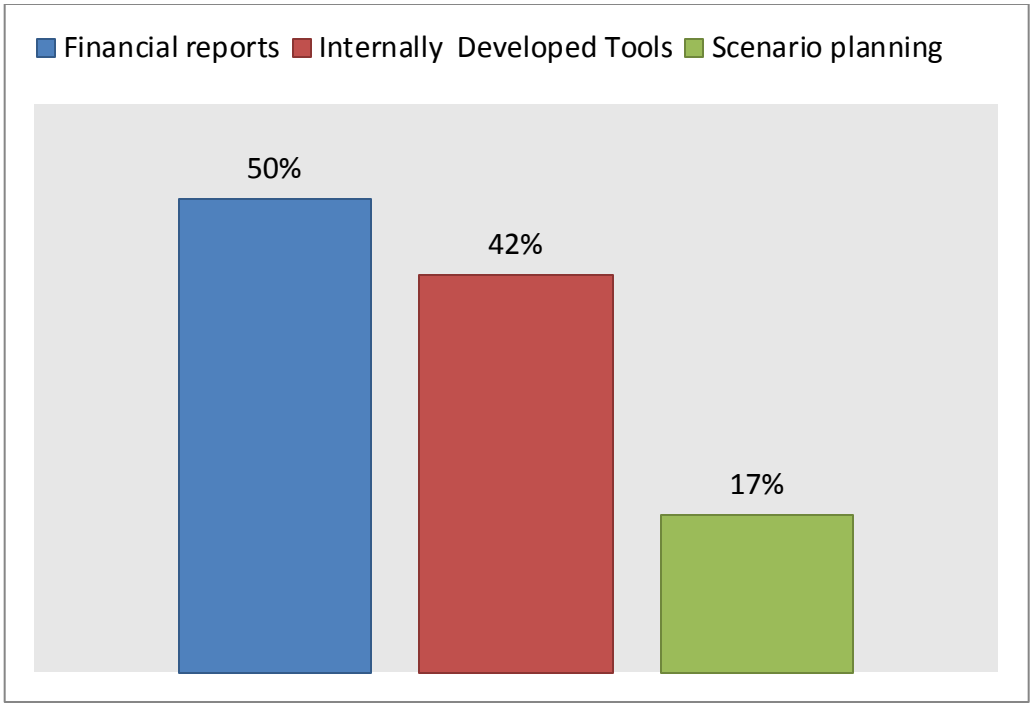


**Figure 7: Tools used to plan for the future**

The remainder of those who responded explained that their respective organisations used internally developed tools. What was of interest to the researcher, however, was that 17% of these respondents mentioned that scenario planning was one of the tools that were used for future planning. The percentage of these respondents was equal for both organisational groups, as seen in Figure 8 below.

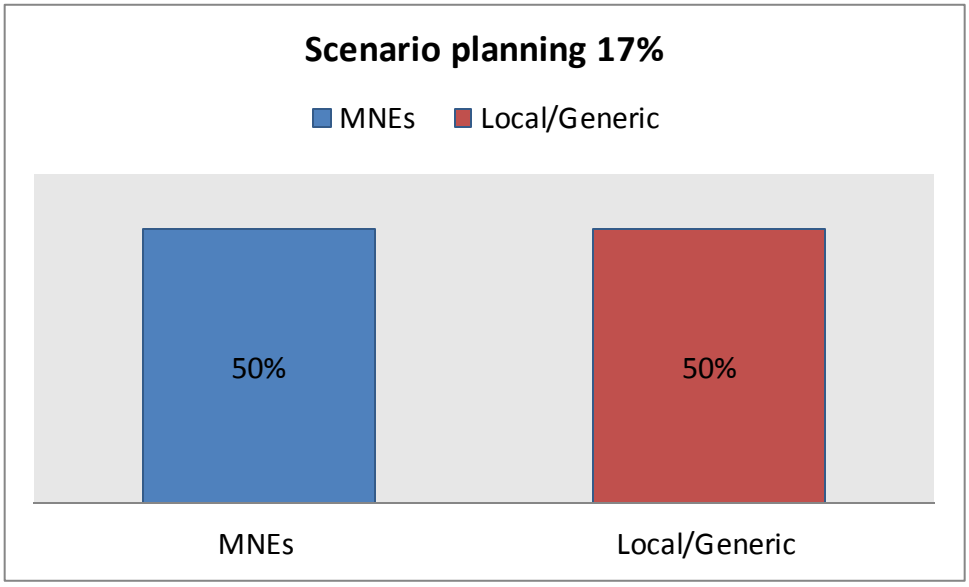


**Figure 8: Scenario planning as an Internally Developed Tool**

## 4.4 Results Pertaining to Research Question 2

The second research question was aimed at investigating whether incorporating scenario planning in the strategies used by pharmaceutical MNEs would benefit these organisations. In an attempt to answer Research Question 2 the researcher asked the respondents a series of questions about their perceptions of scenario planning, whether or not they viewed scenario planning as a useful tool and whether or not they thought scenario planning would be of benefit to their respective organisations.

### *4.4.1 Individual perceptions about scenario planning*

When the respondents were asked what their personal viewpoints were regarding scenario planning, 67% agreed that scenario planning could be useful. The majority of these were employed by MNEs at the time that the interviews were conducted. Only 17% of respondents did not agree that scenario planning was useful and these respondents were equal for both groups.

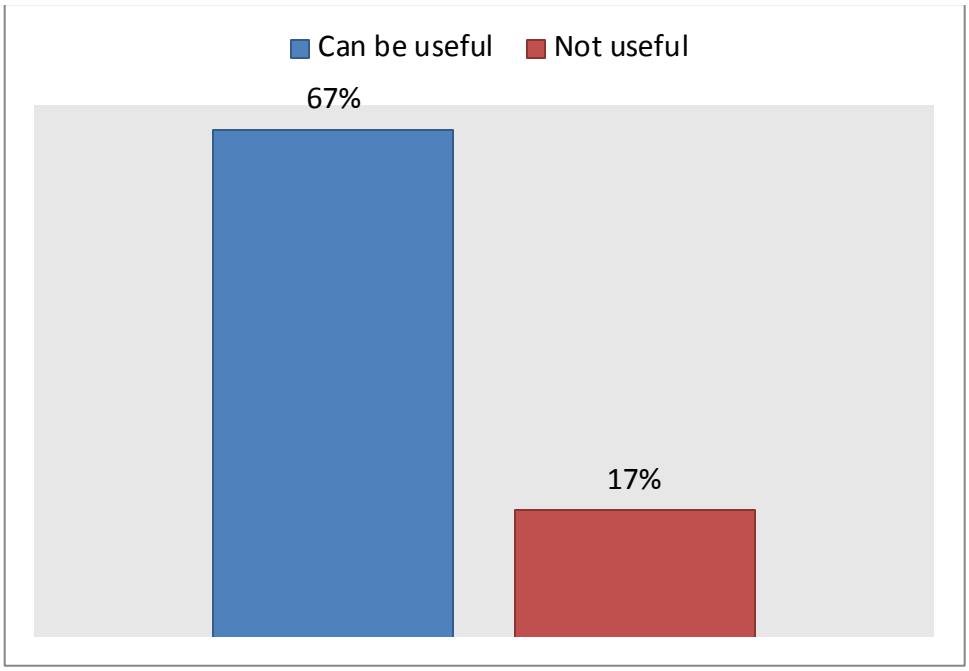


**Figure 9: Individual Perceptions about Scenario Planning**

Furthermore, of those who responded that scenario planning could be useful the most common reason was that it could help to lead to future benefits for the organisation's future.

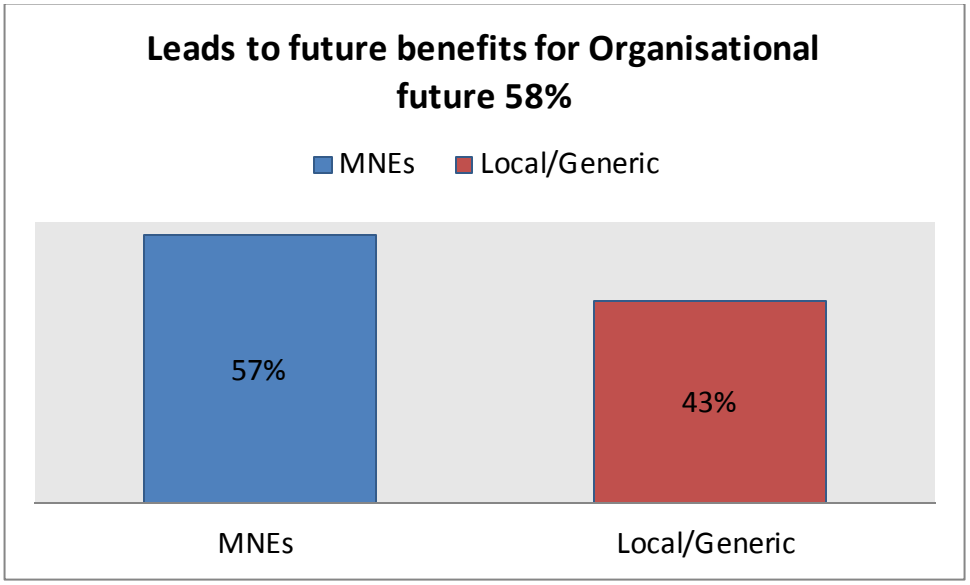


**Figure 10: Main reason why Scenario Planning can be useful**

When asked to elaborate further, 25% of the respondents stated that scenario planning could be utilised to predict future problems and therefore help organisations to have a plan in place should problems arise in the future. All the respondents that had this view were employed by MNEs at the time the interviews took place.

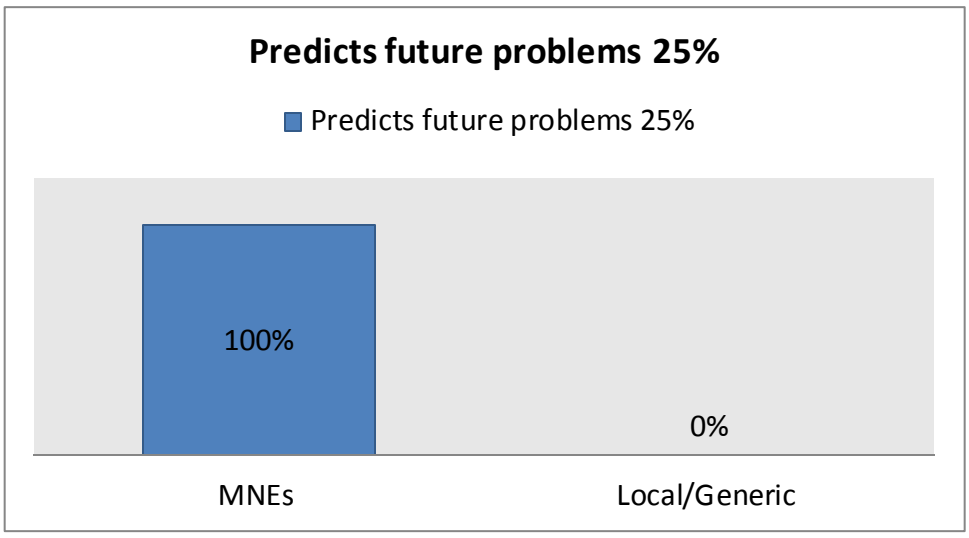


**Figure 11: How Scenario Planning could benefit an organisation**

### *4.4.2 Organisational use of Scenario Planning*

Even though 67% of respondents agreed that scenario planning could be useful as revealed in Figure 9, when asked whether their organisations used scenario planning when designing their strategies, only 42% of respondents stated that their organisations used scenario planning. 60% of these respondents were employed in Local/Generic companies as opposed to only 40% employed in MNEs.

Therefore, even though the majority of those that agreed that scenario planning was useful were employed by MNEs at the time the interviews were conducted, the majority of the organisations that use scenario planning are in fact Local/Generic companies.

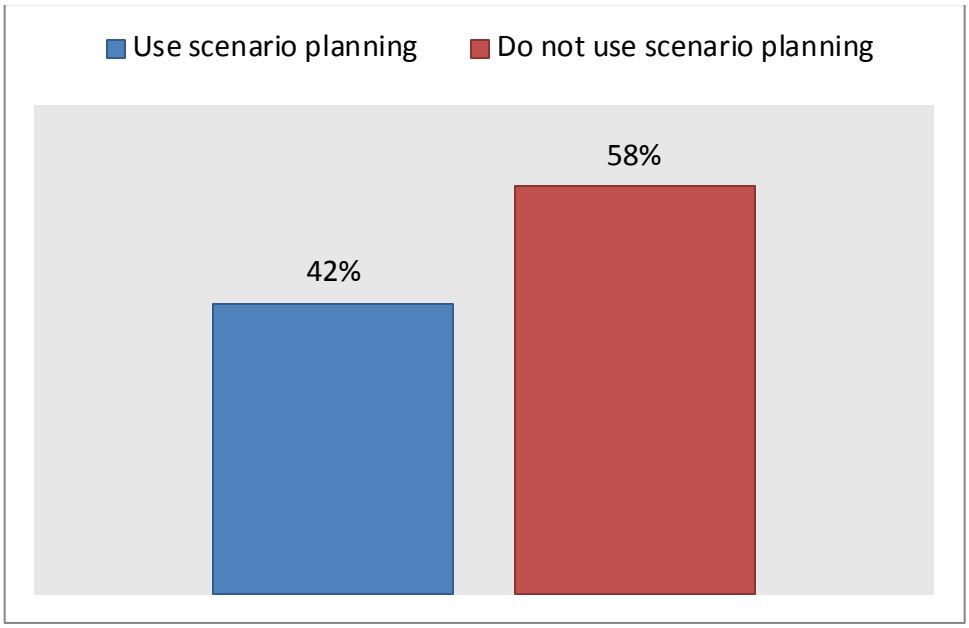


**Figure 12: Organisational use of Scenario Planning**

Of the 58% who responded that their organisations did not scenario plan; a senior finance respondent from an MNE explained that there was not enough time or resources for "blue sky thinking" even though he believed it would be of great benefit to the organisation.

A further question was asked to those whose response was that their organisations did not use scenario planning, in an attempt to find out what

method was used by these respective organisations to plan for the future. The main response was informal methods (75% of respondents gave this response).

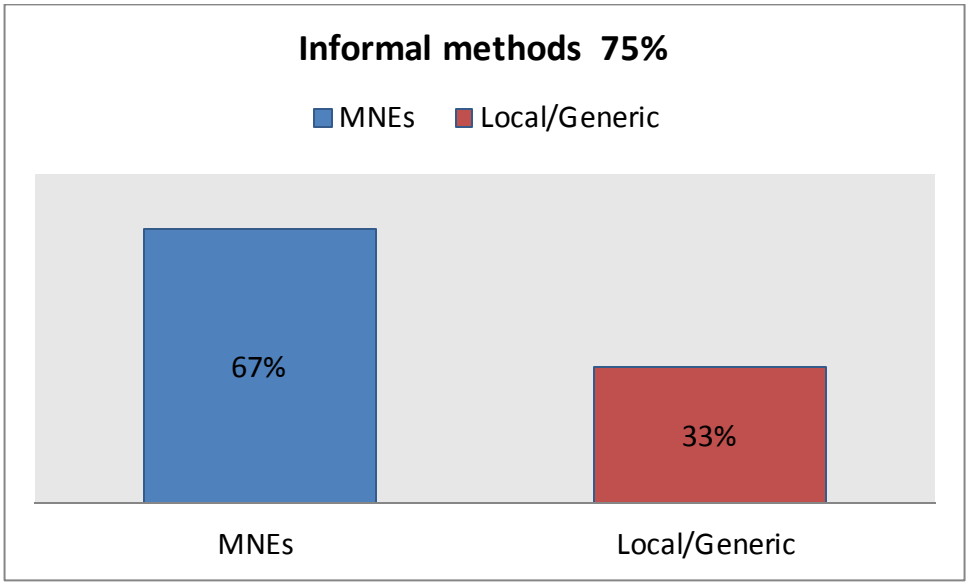


**Figure 13: Most common method used by organisations not using Scenario Planning**

### *4.4.3 Organisational benefit of Scenario Planning*

When asked whether their organisations would benefit from scenario planning a majority of 75% of the respondents stated that their organisations would benefit from scenario planning as seen below in Figure 14. Of these respondents, 56% were employed by MNEs and 44% were employed by Local/Generic companies at the time the interviews were conducted.

Of the 17% of respondents that saw no benefit in scenario planning, all the respondents in this group were employed MNEs.

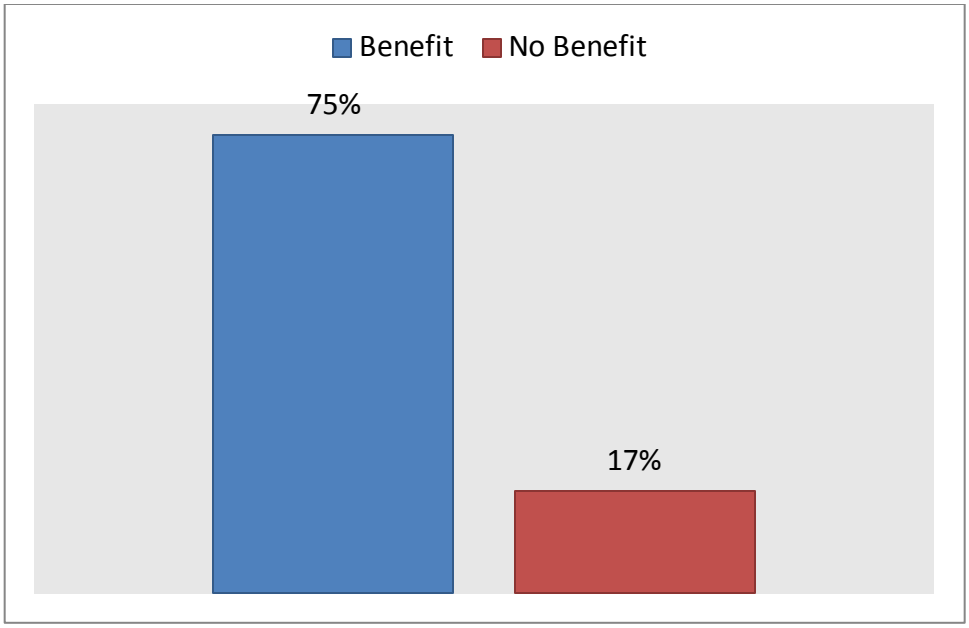


**Figure 14: Perception of Organisational benefit of Scenario Planning**

A further question was posed to the respondents who stated that their organisations could benefit from scenario planning in an attempt to find out the main reason for this response. The result was that 42% of these respondents believed that scenario planning could help with future problems, as seen in Figure 15 below. All of these respondents were employed by MNEs at the time the interviews were conducted.

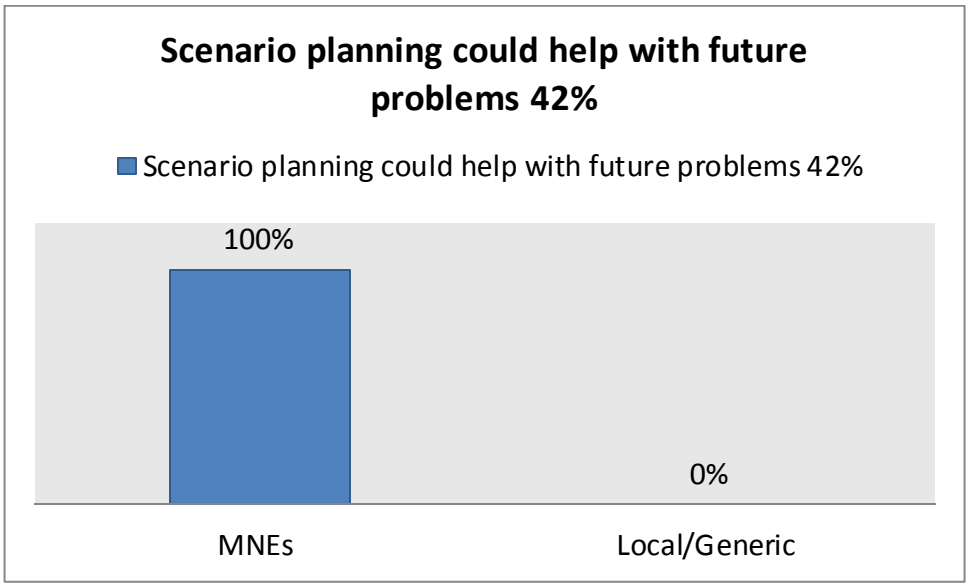


**Figure 15: How Scenario Planning could be beneficial**

A further question was also enquired of the respondents who stated that their organisation would not benefit from scenario planning. Of the responses received, 33% of the respondents believed that scenario planning could side-track their business, as seen below in Figure 16.

A respondent from this group, who was a senior manager in a local company at the time the interview was conducted, believed that scenario planning could result in "analysis paralysis". He went on to say that the danger with scenario planning was that sometimes strategists could get so caught up in all the different possibilities that this could result in failure to execute the strategy already in place.

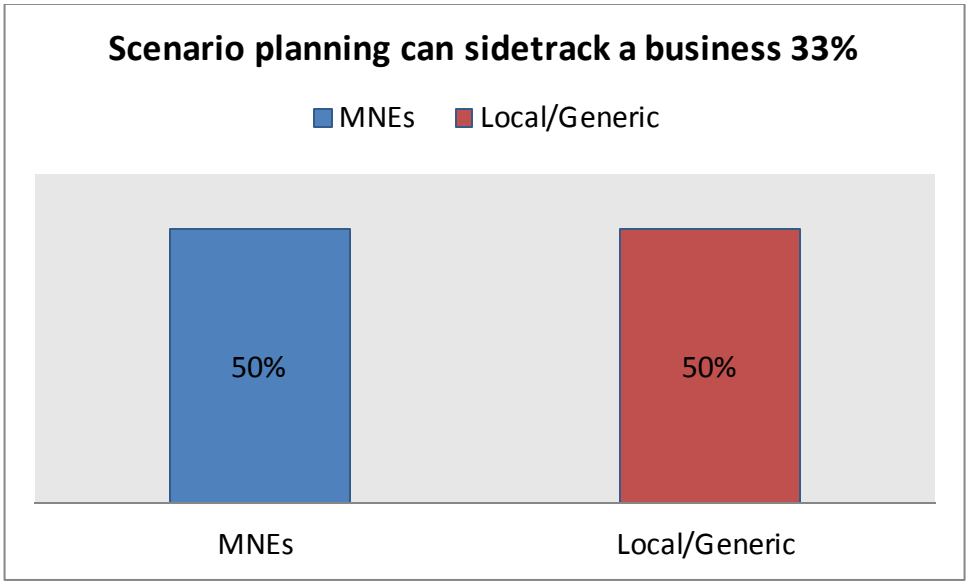


**Figure 16: Why Scenario Planning would not be beneficial**

Those who responded to this question were equal for both groups of organisations.

### *4.4.4 Future of the Organisation*

The last question asked to all the subjects interviewed was aimed at determining whether the respondents agreed that their respective organisations had a clear vision for the future.

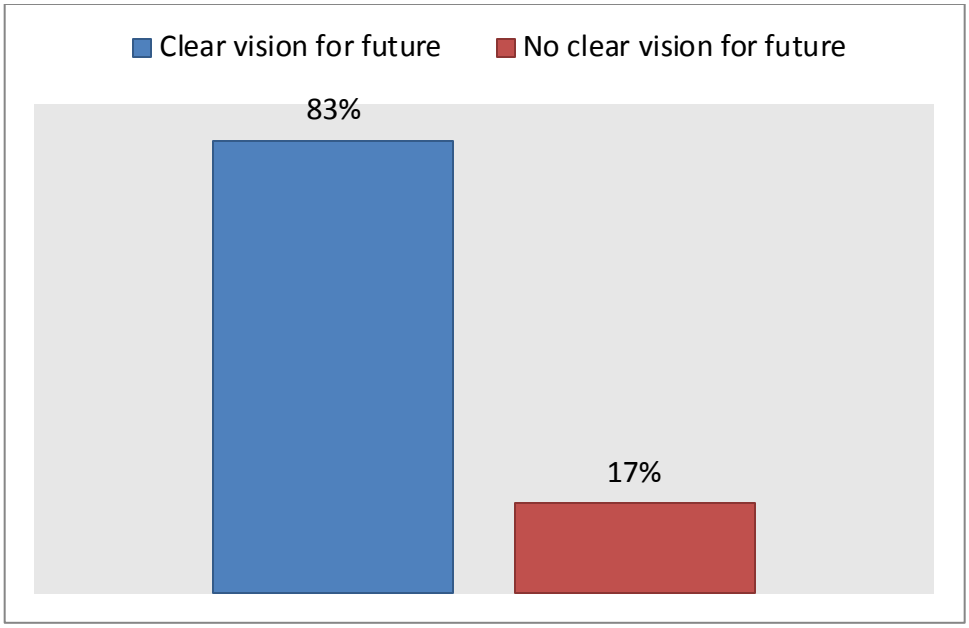


**Figure 17: Clear long term organisational plan**

As much as 83% of the respondents had a clear idea of the long term vision of their organisation. This group of respondents were equally distributed across the two groups. The 17% of respondents that answered that their organisations do not have a clear vision for the future were all employed by Local/Generic organisations.

A further question was asked of the respondents that answered that their organisations had a clear term vision. This question asked was focused on what the main long term strategy involved. 58% of the respondents stated that the long term strategy of their organisations involved expansion into emerging markets, as demonstrated in Figure 18.

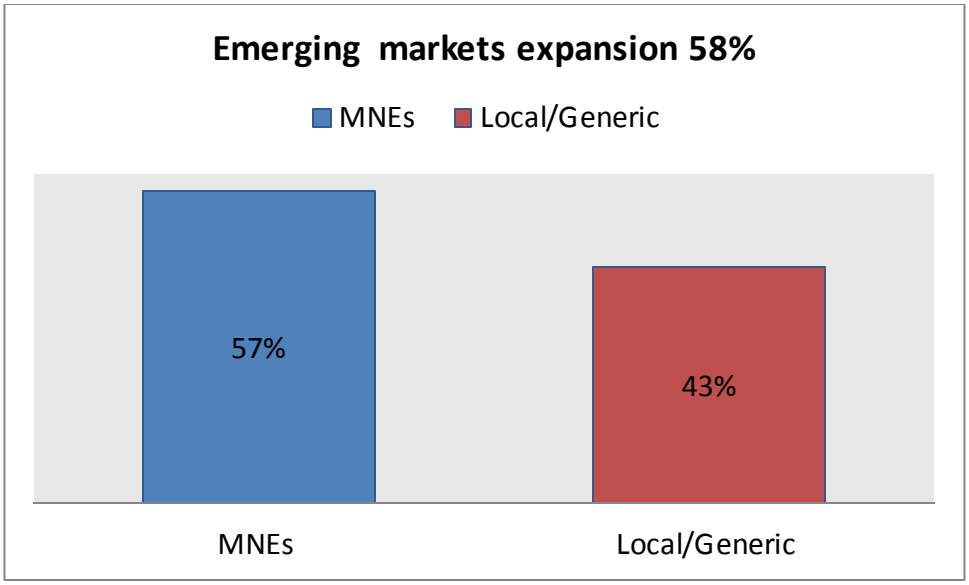


**Figure18: Emerging markets expansion**

The majority of the respondents were employed by MNEs at the time that the interviews were conducted.

The managing director of one of the generic companies highlighted that branching out in Sub Saharan Africa would be the future of his organisation.

## 4.5 Summary of the results

The results of this study revealed that MNEs and Local/Generic companies have common challenges. The majority of these companies' current strategies do not address the current challenges that these companies are facing.

It was also found that whilst the method in which the strategies are formulated differs from company to company, all the companies have a strategy which is not developed using the traditional tools taught in business schools around the world, such as Porter's five forces and the PESTLE model.

The majority of the respondents interviewed believe that scenario planning is a beneficial tool to use though the majority stated that their organisations do not use scenario planning as a tool to plan for the future. This was especially true for MNEs.

The consensus amongst those interviewed was that their organisations should be using scenario planning as a strategic tool. This was also particularly applicable to the MNEs.

Though the majority of the respondents felt that their organisations had a clear vision for the future, there were still a percentage of the respondents who felt that their organisations did not have a clear vision for the future and all of these respondents were employed by Local/Generic companies.

# CHAPTER 5 DISCUSSION OF THE RESULTS

## 5.1 Introduction

The purpose of this chapter is to discuss and explain the association, if any, of the results documented in Chapter 4 and the literature reviewed in Chapter 2.

## 5.2 Demographic profile of respondents

As noted in Chapter 2, the Pharmaceutical industry is divided into three types of companies, namely the MNEs, the locally owned companies and the Generic companies. The Local and Generic companies have very similar operating models and their revenue is generated mainly from commercialising generic medicines. Therefore, for the purposes of this research the Local/Generic companies were combined into one group of respondents and the MNEs were analysed as a separate group.

In order to explore the two research questions properly this researcher found it important to interview respondents from both groups. Of crucial importance to the research was the role of each respondent that was interviewed. All the respondents had to be involved in the creation and/ or implementation of the strategy in their respective companies. All respondents interviewed had to be employed in an organisation that met the description of one of the three types of pharmaceutical companies.

The expectations of this researcher were met regarding the criteria necessary for a respondent.

## 5.3 Discussion - Research Question 1

To what extent are corporate strategic planning tools being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability?

The vital discussion points that were derived from the interviews pertinent to question 1 were as follows:

1. Common challenges
2. Effectiveness of the strategy in addressing current challenges
3. Who creates the strategy
4. What process is used to create the strategy
5. Tools used to plan for the future

### *5.3.1 Common challenges*

The three common themes that were derived in relation to common challenges were: Price pressure, slow registrations and patent issues.

The issue of price pressure was more predominant but not exclusive to the MNEs and the issue of slow registrations was more predominant but not exclusive to Local/Generic companies.

The only issue however that was exclusive to MNEs was patent issues. This finding was in line with research conducted by Henry and Lexchin (Henry and Lexchin, 2002) who stated that international companies now face increasingly demanding customers, constrained expenditure on drugs, an expanding generics business, and imminent expiry of patents for several very profitable drugs. The combination of these factors creates uncertainty about the continued growth of the industry.

### *5.3.2 Effectiveness of the strategy in addressing current challenges*

The majority of the respondents stated that the strategy used by their respective companies addressed the challenges that they were facing at that time. The interesting finding though was that only 58% of them agreed that the strategy that was being used in their respective organisation addressed the challenges they were facing at that time. Considering that in 2012 the Pharmaceutical

industry in South Africa generated R22, 815,904,000 in sales (IMS, 2011) it would have been expected that more than 58% of the respondents would have been confident that the strategy that was being implemented by their respective organisations was effective.

### *5.3.3 Who creates the strategy?*

The results of this question concluded that majority of the companies operating in South Africa create their strategies locally and the numbers of MNEs and Local/Generic companies in this group were equal.

However, there were a small percentage of companies that have their strategies created regionally or globally and these were all MNEs. In the past this would have been true for all MNEs but as is evident in this research, the parent companies of the majority of MNEs operating in South Africa have begun to realise that their subsidiaries operating in the South African environment need to design strategies that can address the local market needs and the local environmental issues.

### *5.3.4 What process is used to create the strategy?*

Of the respondents, 50% stated that the strategy for their respective organisation is created by using other methods instead of either a formal or informal process. The processes used to develop their strategies appear to be internally designed.

Only 33% of the respondents stated that their respective organisations use formal processes. This formal process appeared to have a common similarity for all the MNEs in this group of respondents.

The similarity appears to be, as explained by one of the respondents, that the future potential revenue is forecasted and then the strategy is created around this forecast as a road map for the organisation to achieve the forecasted potential revenue.

However, literature has cautioned organisations to move away from this approach. As suggested by Wack (Wack, 2002), forecasting has worked well in the past for many organisations that experienced internal and external stability. Today however, the external environment in majority of industries has become unstable. The instability that Pierre Wack referred to in his research is relevant to the Pharmaceutical industry in South Africa.

### *5.3.5 Tools used to plan for the future*

When asked which tools are used to plan for the future, half of the respondents commented that their respective organisations use financial tools. This is in line with the previous finding and as citied previously, this method is no longer recommended.

The remainder of respondents explained that their organisations use internally developed tools to plan for the future. Of these respondents, 17% of them responded that scenario planning was one of the tools being used but it was not clear in the responses how scenario planning is incorporated. Even so, these organisations have a higher likelihood of succeeding in the environment that they operate in as opposed to those that do not use scenario planning at all. Schoemaker (Schoemaker, 2006) stated that scenario construction is one new important tool for such analyses. Its benefits lie in both the resulting output and in the process of systematically examining the interaction of trends and uncertainties within a given business domain and time frame

## 5.4 Discussion: Research Question 2

How would incorporating scenario planning in the strategies used by Pharmaceutical MNEs in South Africa benefit these organisations?

The key discussion points that were derived from the interviews pertinent to Research Question 2 were namely:

1. Personal perceptions about scenario planning.

2. Current use of scenario planning in organisations.

3. Perception of organisational benefit of scenario planning.

4. Long term organisational plan.

### *5.4.1 Personal perceptions about scenario planning*

When asked about their personal perceptions regarding scenario planning, two thirds of the respondents answered that they think scenario planning can be useful. The majority of these respondents were employed in MNEs when the interviews were conducted. When asked why they felt it could be useful, the main reason provided by respondents was that scenario planning can lead to future benefits for the organisation, again the majority of the respondents citing this reason were employed by MNEs. The second main reason was that it can predict future problems. All the respondents that cited this reason were employed by MNEs.

The answers above are in line with what literature suggests as some of the reasons why companies should scenario plan. Pierre Wack said of scenarios that they serve two main purposes. The first purpose is proactive as scenarios can anticipate and understand risk; the second is purpose is entrepreneurial in that scenarios can discover strategic options of which we were previously unaware (Sunter and Ilbury, 2001).

### *5.4.2 Current use of scenario planning*

Respondents were asked whether their respective organisations used scenario planning when designing their strategies and only 42% responded that they do. The majority of these respondents were employed by Local/Generic companies.

This finding was not in line with the personal perceptions of the respondents. Many of the respondents had answered that they agree that scenario planning is a beneficial tool and most of these respondents were employed by MNEs. However, when assessing whether scenario planning is being incorporated in the respective organisations, it was found that it was not.

Therefore, the opinions of the respondents did not impact the way in which their respective organisations develop their strategies. This finding is concerning. Scenario planning can be regarded as a tool for improving decision making against a background of possible future environments. It is an internally consistent account of how the business environment and external environment in which the organisations operate might develop over time as suggested by Mietzner and Reger (Mietzner and Reger, 2005).

A further question was asked to those who responded affirmatively about organisations that were not using scenario planning in an attempt to find out which tools they were using to plan for the future, and the majority of them answered that their organisations were using informal methods. Detail regarding the informal methods was not shared. This finding is in line with the literature review since there is no prior research was identified documenting the tools used by Pharmaceutical companies for planning purposes.

### *5.4.3 Perception of organisational benefit of scenario planning*

A majority of 75% of respondents stated that their organisations would benefit from scenario planning. The difference between the two groups interviewed in relation to this response was not large but more representatives from MNEs than Local/Generic companies provided this response. This finding demonstrates that these respondents are aware of scenario planning and that it should be incorporated into their organisational strategic planning. This is a positive finding since Mintzberg (Mintzberg, 1994) suggested that scenario analysis offers a more dynamic and realistic context for strategy development than the traditional methods of strategic planning.

Those respondents who did not see the benefit of scenario planning were only 17% of the population. The most common reason provided by these respondents regarding why they saw no benefit of scenario planning for their organisations was that they felt that scenario planning can side-track a business. One of the respondents from this group stated that the danger with scenario planning was that it could result in “analysis paralysis”. This statement was not in line with literature. In fact, the opposite appears to be true as

explained by Peterson (Peterson et al., 2003) who stated that uncertainty can be demoralizing. Uncertainty can lead to inaction or “paralysis by analysis” rather than decisiveness and action, and that scenario planning is most useful when there is a high level of uncertainty.

### *5.4.4 Long term organisational plan*

The final question asked to all the subjects interviewed was aimed at determining whether their respective organisations had a clear vision for the future. The reasoning behind this question was that scenario planning is a tool used to plan for future possibilities. The researcher was curious about whether or not it was being incorporated in the respective organisations and whether the respondents had a clear idea of their respective organisations’ futures.

Of those that responded, 83% stated that they had a clear idea of their organisations’ visions for the future. Only 17% of respondents did not know the vision for the future of their organisations and all of these respondents were employed by Local/Generic companies at the time that the interviews were conducted.

Only 58% of the respondents had a clear idea of their organisations future vision, and they stated that the focal long term strategy involved expanding in emerging markets in Africa. This finding was in line with the current trends of MNEs. Growing evidence suggests that global strategies should include emerging markets, and even pre-emerging markets, such as those in Africa (Senbet and Otchere, 2006).

## 5.5 Conclusion

Two research questions were proposed for the purposes of this research. Both research questions were answered. The findings however do not entirely appear to be in line with the literature published.

### *5.5.1 Research question 1:*

Research Question 1 investigated whether or not corporate strategic planning tools are being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability?

The findings of the research report showed that only 58% of the respondents agreed that their corporate strategies addressed their current challenges. The remainder of the respondents replied that their strategies were not addressing the current challenges, and of the 42% of respondents, 80% of them were employed by MNEs (see Figure 5). If the strategies that were being implemented at the time of the interviews did not address the challenges the organisations' were experiencing, then it is highly unlikely that those strategies were effective enough to ensure future growth and profitability.

### *5.5.2 Research question 2:*

Research Question 2 investigated whether incorporating scenario planning into the strategies of the MNEs in South Africa would benefit these organisations.

The findings of this research report suggest that incorporating scenario planning into the strategies of these organisations would indeed be beneficial to their current and long term success.

# CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

## 6.1 Introduction

In this chapter the conclusions of this study are discussed. Recommendations are made to Pharmaceutical companies operating in South Africa, suggesting alternatives to better design their strategies and how they can incorporate scenario planning into their strategies.

Recommendations are also made to future researchers who wish to pursue the topic of scenario planning and its benefit in corporate strategies.

## 6.2 Conclusions of the study

This study was conducted with the purpose of highlighting the challenges faced by MNEs in the Pharmaceutical industry in South Africa, whether the strategies implemented by these organisations have sufficiently addressed these challenges and whether incorporating scenario planning into their strategic planning would be of benefit to them.

A literature analysis completed for purposes of this study revealed that to test the quality of a strategy (Hambrick and Fredrickson, 2001), and incorporate scenario planning into the design of the strategy is of great benefit to an organisation.

Research Question 1 investigated whether or not corporate strategic planning tools are being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability? However, the findings of the research conducted showed that Pharmaceutical companies in South Africa generally do not have a formal method of designing or testing their strategies. 33% of companies use a formal process, 8% use an informal process and 50% use other methods to design their strategies as depicted in Figure 6 pg. 29 of this research report.

Research Question 2 investigated whether incorporating scenario planning into the strategies of the MNE's in South Africa would benefit these organisations. The findings of the research conducted showed that 17% of all pharmaceutical in companies South Africa incorporate scenario planning into their strategic planning as depicted in Figure 8 of this research report.

Further questioning into which tools are used to plan for the future revealed that 50% the respondents used financial tools (forecasting) for this exercise, 83% of these companies were MNEs as depicted in Figure 7 of this research report. This approach is not recommended by scenario planning experts.

Furthermore, 67% of the respondents stated that scenario planning can be useful as depicted in Figure 9, but when asked whether their respective organisations scenario plan, 58% of the respondents explained that they do not. Of those organisations not using scenario planning, 71% were MNEs as depicted in Figure 13.

## 6.3 Recommendations

Based on the findings of this research report, various recommendations can be suggested to the Pharmaceutical MNEs operating in South Africa.

### *6.3.1 Understand the competitive challenges before designing the strategy*

In order for the MNEs to have a competitive strategy that can effectively address their environmental challenges in the South African Pharmaceutical industry, they should analyse their competitive environment thoroughly before commencing on the design of a strategy (Porter, 2008) .

Michael Porter, founder of the five competitive forces that shape strategy, stated that understanding the forces that shape industry competition is the starting point for developing a strategy. Every company should already know the average profitability of its industry and how that has been changing over time.

The five forces reveal the nature of industry profitability. Only then can a company incorporate industry conditions into strategy (Porter, 2008).

Every MNE should incorporate the competitive conditions of its industry into its strategy. In fact, the strategy should be built to assist the MNE with how best to address these conditions and how best to succeed amidst them.

Implementing the model that Michael Porter designed into the process used by MNEs to design their strategy would be of benefit to these organisations (see Figure 2). This model would enable MNEs to analyse the South African Pharmaceutical industry in detail and would assist them in designing their respective strategies knowing what all the industry challenges are. The model designed by Porter identifies all five vital forces that can shape the strategy of any organisation, namely:

1) **Rivalry amongst existing competitors**

2) **Threat of new entrants**

3) **Bargaining power of buyers**

4) **Threat of substitute products or services**

5) **Bargaining power of suppliers**

Only once the MNEs understand the possible impact of these forces on their revenue, can they then design strategies that will ensure their respective successes competing in the local pharmaceutical industry.

### *6.3.2 Test the strategy*

The second recommendation made by the researcher to the MNEs is to test their relevant strategies once they have been formulated. This is an important exercise that each MNE should do to ensure that the strategy is in fact aligned with the key objectives of the organisation and to ensure that it addresses all the environmental forces that will ultimately influence the success of the organisation.

In the literature review an effective guide to test the strategy was suggested by Hambrick and Frederickson (Hambrick and Fredrickson, 2001). This guide explained that six questions should be asked once the strategy is created to ensure that it is the best possible strategy that can be implemented by the organisation to ensure success. The questions suggested were:

1) **Does the strategy fit with what is happening in the environment?**

2) **Does the strategy exploit your key resources?**

3) **Will your envisioned differentiators be sustainable?**

4) **Are the same elements of your strategy internally consistent?**

5) **Do you have enough resources to pursue this strategy?**

6) **Is your strategy implementable?**

Considering the time and resources invested by an organisation to create its strategy, the exercise of testing its strategy should be mandatory.

### *6.3.3 Incorporate scenario planning into the strategy design*

The final recommendation suggested to MNEs is to incorporate scenario planning into the designing of their strategies.

Scenarios will either help decision makers or be of little use to them, depending on how they are constructed and presented, not just on the outcome they focus on (Wack, 2002). With that in mind the researcher attempted to suggest a "user friendly" framework that can be used by MNEs for scenario planning.

### *6.3.4 Who will participate?*

The first step to starting the scenario planning process is to appoint a facilitator to manage the process. A facilitator who is impartial or objective is recommended. Personal life experiences of the participants can often place constraints on the scenario planning process (O'Brien, 2004), hence the need

for a facilitator to manage the process, encourage the creativity of ideas and challenge the participants on the scenarios they suggest.

Once a facilitator is selected the participants need to be selected. The participants involved in this process should be all employees that are involved with the design of the strategy. The participants need to be informed that this process requires their full attention and that creativity will be encouraged.

The facilitator should start the process ensuring that the participants have a clear understanding of what scenario planning is, its benefits and why it is an important exercise. Not conveying this message correctly can result in a negative perception of the process and therefore could result in the participants resisting the process.

### *6.3.5 Identifying the uncertainties*

Once the participants are engaged and ready to complete the scenario planning exercise the first step is to identify the possible risks and opportunities that can arise in the future. The model that is suggested for this exercise is the PESTLE model (see Figure 1) which is taught in most business schools around the world (Johnson et al., 2006).

Completing the PESTLE model assists the participants is analysing all the aspects of the environment in which their organisation is operating in and is able to assist them in identifying the uncertainties which may occur in the future. Some of these uncertainties are opportunities for their organisation, others are risks.

### *6.3.6 How many scenarios?*

When all the uncertainties have been identified the participants then need to decide which uncertainties they will build scenarios for. Ideally the uncertainties selected should be the ones that can have the greatest impact on the organisation's future.

It is suggested that the appropriate number of scenarios generally considered is three or four; two scenarios usually do not expand thinking enough, whereas more than four scenarios may confuse users and limit their ability to explore uncertainty (Wack, 1985 , Schwartz, 1991, van der Heijden, 1996).

### *6.3.7 The Scenario planning process*

Once the number of scenarios has been decided, a plan needs to be designed for each one. It is during this part of the exercise that all the participants contribute their ideas and suggestions. All possible outcomes and actions should be communicated by the participants.

### *6.3.8 Possible outcomes for each scenario*

All possible outcomes for a specific scenario should be written down by the facilitator. Once this is done, the participants should offer their opinions regarding the likelihood of each outcome suggested. The outcome of the scenario which most participants agree has the highest likelihood of happening should be the outcome to which an action needs to be agreed on.

### *6.3.9 Responding actions for outcomes*

Once the outcome is decided on, all the possible actions that the organisation could take to address this outcome should be written down by the facilitator. Once this is done the participants should offer their opinions regarding which action would have the best effect on responding to the outcome. The action which most participants agree would have the best effect is the action for which a plan will need to be formulated.

### *6.3.10 Planning for each scenario*

The last part of the scenario planning process is the formulation of a plan of action to address the possible outcome of a scenario should the scenario come to pass in the future. This is the most critical part of the exercise since it is the

roadmap that will be used in addressing the scenario. This exercise needs to be done for each of the scenarios that have been identified.

### *6.3.11 Updating the scenarios*

Finally, once all the scenarios had been identified, the possible outcomes have been agreed on and a plan of action has been created to address each of them; the scenarios need to be frequently reviewed.

A business environment changes, and for this reason it is important to revisit the scenarios and ensure that they are still relevant and that the outcomes and plans of action for each scenario are still correct. The suggestion of the researcher is that the scenarios should be reviewed whenever a business review is done within the organisation or whenever the strategy is reworked.

## 6.4 Suggestions for further research

As a result of this research report, some suggested topics for further research that could benefit organisations in all sectors include the following:

### *6.4.1 A systematic strategic planning framework incorporating scenario planning*

Whilst many tools exist for strategic planning, this research has shown that organisations tend to not follow a formal process when designing their strategies, and most of them tend to use in-house methods.

A topic for further research could be to compare the success of strategies designed by organisations that use tools suggested by business schools and strategy experts compared to the success of strategies designed by organisations that create their own internal methods.

### *6.4.2 Pre and post scenario planning implementation – A case study*

This research report suggests that scenario planning should be implemented by all MNEs operating in the Pharmaceutical industry in South Africa. A guide on how to scenario plan was suggested.

A suggestion for further research would be to complete a case study of an organisation and track its strategic success pre-scenario planning and post-scenario planning. This research would prove or disprove the researcher's opinion and the opinion of many literary scholars who suggest that by incorporating scenario planning in the strategy of any organisation it will benefit the organisation in the long term.

### *6.4.3 Quantitative study testing the tool*

This research report was done using a qualitative method and was restricted to the Pharmaceutical industry in South Africa. Research using a quantitative study to test the percentage of companies that use the strategic tools could also be conducted.

Using a quantitative method would allow for companies in all industries to be included and would allow for the results to be quantified using a statistical method.

### *6.4.4 The use of scenario planning in other industries*

Lastly, assessing the use of scenario planning in other industries in South Africa could also be a topic for further research.

This research report has highlighted the situation in the Pharmaceutical industry with regards to scenario planning. Researching the situation in other industries could also be of interest.

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# APPENDIX A

## Open ended Questionnaire

1) What are the most significant industry challenges currently facing your organisation?
2) Does your current corporate strategy adequately address these challenges? Why?
3) Is the strategy of your organisation locally created? If so, who are the key members of the team determining what the current strategy should be? Positions, not names, will be required.
4) How does your organisation formulate its strategy?
5) What tools does your organisation currently use to plan for the future?
6) What are your viewpoints regarding scenario planning?
7) Does your organisation use scenario planning as a strategic tool?
8) In your opinion, would your organisation benefit from scenario planning? Why?
9) Where do you see your organisation in the next 5 to 10 years?

# APPENDIX B

## Table 2: List of respondents

| Organisation | Role |
|---|---|
| Adcock Ingram | Senior Manager |
| Adcock Ingram | Manager |
| Aspen Pharmacare | Director |
| Astra Zeneca | Director |
| IMSA | Director |
| MSD (Pty)Ltd | Director |
| MSD (Pty)Ltd | Director |
| MSD (Pty)Ltd | Director |
| MSD Animal Health | Director |
| Pharmadynamics | Director |
| Sanofi Aventis | Director |
| TEVA Pharmaceuticals | Director |

# APPENDIX C

**Consistency matrix**

| **Research problem stated here** | | | | | |
|---|---|---|---|---|---|
| **Sub-problem** | **Literature Review** | **Research questions** | **Source of data** | **Type of data** | **Analysis** |
| Sub-problem 1 is to examine to what extent are corporate strategic planning tools being employed by Pharmaceutical MNEs to address their current challenges and to ensure future growth and profitability? | (GSK, 2009)<br>(Ingram, 2012)<br>(Hough et al., 2008)<br>(Government, 2008)<br>(Government(b), 2009)<br>(Mangalmurti, 2006)<br>(Health, 2011)<br>(Pérez Casas et al., 2001)<br>(Bruni and Verona, 2009)<br>(Porter, 2008a)<br>(Godfrey, 2008b)<br>(Hambrick and Fredrickson, 2001) | Are the strategies currently being implemented by the pharmaceutical MNEs effective enough to ensure future growth and profitability? | **Q1 – 4 of Questionnaire**<br>1) What are the most significant industry challenges currently facing your organisation?<br>2) Does your current corporate strategy adequately address these challenges? Why?<br>3) Is the strategy of your organisation locally created? If so, who are the key members of the team determining what the current strategy should be? Positions not names will be required<br>4) What models does your organisation use to formulate the strategy? | Empirical, primary, textual data will be captured by means of a Semi-structured interview | Content Analysis |

| Research problem stated here | | | | | |
|---|---|---|---|---|---|
| **Sub-problem** | **Literature Review** | **Research questions** | **Source of data** | **Type of data** | **Analysis** |
| Sub-problem 2 is to assess how would incorporating scenario planning into the strategies used by Pharmaceutical MNEs in South Africa benefit these organisations? | (Schoemaker, 1991)<br>(Sunter and Ilbury, 2001a)<br>(Wack, 1985b)<br>(Kahn and Wiener, 1967)<br>(Fahey, 1999) | Will incorporating scenario planning in the strategies used by pharmaceutical MNEs in South Africa benefit these organisations in the short and long term? | **Q5 – 10 of Questionnaire**<br>5) What are your viewpoints regarding scenario planning?<br>6) Does your organisation use scenario planning as a strategic tool?<br>7) In your opinion, would your organisation benefit from scenario planning? Why?<br>8) Where do you see your organisation in the next 5 to 10 years? | Empirical, primary, textual data will be captured by means of a Semi-structured interview | Content Analysis |