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Successful Strategic Alliances in the Energy Industry 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, February 2010

ABSTRACT

There is a general trend for organisations to enter into strategic alliances to manage resources and gain competitive advantage. Generally these alliances are formed in order to obtain skills or resources that can fulfil their immediate requirement. Organisations are too focused on the immediate need rather than considering the impact on their business in the long term. This result in many alliances to fail causing damage to both organisations involved.

The role of the energy industry is critical in contributing to the growth in the economy of South Africa. The skill and resources used in these industries are vital and valuable. Failing of alliances in these industries could cause damage to the economy of the country. This research identifies some of the critical success factors which could assist in creating and maintaining a successful strategic alliance in the energy industry in South Africa.

The research methodology used for this study was qualitative analysis, in order to find the critical success factors for strategic alliances. The data was collected by interviewing employees of the organisations in the energy industry and their alliance partners using a questionnaire. Further effort was made to find the normally used best practices utilised in this industry.

One of the key findings from this research was that critical success factors were present in strategic alliances in the energy industry in South Africa. The other substantial finding in this research was that the support and monitoring of senior management during the formation and execution of a successful strategic alliance.

Based on the key findings, a variety of recommendations were made to the businesses in the energy industry in South Africa and to the organisations entering into alliances in this industry. This research recommends ways in which these critical success factors are properly implemented in order to obtain successful strategic alliances in the energy industry in South Africa.

DECLARATION

I, Aju Chacko Joseph, 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.



Aju Chacko Joseph

Signed at Johannesburg

On the 19th day of FEBRUARY 2010

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CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The purpose of this research was to examine the success factors in strategic alliances, for the energy industry in South Africa. This research also focuses on the support from management in order to make these alliances successful.

A strategic alliance is “an agreement between firms to do business together in ways that go beyond normal company-to-company dealings, but fall short of a merger or a full partnership” (Elmuti and Kathawala 2001).

Strategic alliances generally represent inter-firm cooperative agreements aimed at achieving competitive advantage for the partners. Strategic alliances are created in organisations in order to share its support functions and to concentrate on its core business (Porter 1998) in order to gain competitive advantage.

Firstly, this study identifies the critical success factors of strategic alliances for the energy industry in South Africa.

Secondly, the research examines the influence of management in a strategic alliance in order to make the alliance successful.

1.2 Context of the study

Strategic alliances are one of the effective ways to diffuse new technologies in order to enter a new market allowing businesses to learn quickly from the leading firms in a given field (Elmuti and Kathawala 2001). Considerable time and energy must be put forth by all those are involved in order to create a successful alliance. It is also one of the fastest growing trends that is becoming an essential driver of superior growth in today’s businesses (Kotabe and Scott Swan 1995).

Strategic alliances continue to be the important tools of competitive strategy (Inkpen and Ross 2001). Organisations generally tend to consider this to

support and strengthen their businesses (Dyer, Kale and Singh 2004), but research indicates that most alliances either fail or, on average, do not add shareholder value. According to Timmers (1999) a strategic alliance is a business to business collaboration. It is essentially a partnership in which business combine efforts (Harbison and Pekar 1997) in projects ranging from getting better deals by minimising risk and maximising their leverage and profit.

Research states that the number of strategic alliances has almost doubled in the past ten years (Morris and Hergert 1987) and is expected to increase in the future. In spite of these, there are also some disadvantages for strategic alliances. The literature reveals that strategic alliances are unstable and have shown failure rates of close to 50% (Inkpen and Ross 2001), others mention a projected failure of 70% (Day 1995; Zineldin and Dodourova 2005) leading to wasted resources, diverted senior management attention, organisational conflicts and losing shareholder value (Inkpen and Ross 2001).

Some of these alliances could be affected by poor performance and inefficiency (Das and Teng 2003) in providing expected value. Organisations need to be aware of the issues that may arise (Cullinan, Le Roux and Weddigen 2004) when considering an alliance. This research concentrates on the areas on which the success of the alliance depends and will focus on these issues in an attempt to identify the critical success factors in a strategic alliance.

Identifying and implementing success factors are key objectives for successful alliance between any organisations (Choi 2004). The literature reveals that organisations tend to ignore the success factors at alliance formation stages resulting in the ultimate failure of alliances.

For this reason, the study not only identifies the key challenges in strategic alliances and translates these key challenges into critical success factors, but also incorporates how these success factors can be recommended for the application in the energy industry sector in South Africa.

This research seeks to assist organisations in the energy sector to formulate strategic approaches for entering into alliances with suitable organisations. This was done by looking into critical questions that could be considered before the

decision to ally was made. This should assist these organisations to ensure that their strategic alliances should satisfy the following:

- Properly considered and investigated prior to taking the decision to form an alliance with other organisations.
- Assist both organisations to achieve sustainable growth or other strategic goals; and
- Both organisations continue to deliver value to shareholders.

1.3 Problem statement

The purpose of this research is to identify critical success factors in the energy generating sector of South Africa.

Strategic alliances are not simple to create or develop. Support of strategic alliances is another issue that industries currently face. These projects often fail because of tactical errors made by management (Elmuti and Kathawala 2001). It is essential that corporations enter into strategic alliance arrangements with a comprehensive plan outlining detailed expectations, requirements, and expected benefits. A review of the literature revealed gaps in underlying causes of successful alliances, factors affecting strategic alliance outcomes (Taylor 2005).

1.3.1 *Main problem*

This research attempts to identify the critical success factors in strategic alliances for the energy industry in South Africa. In order to achieve this, it was necessary to examine the rationale behind companies entering into a strategic alliance and the type of issues which may arise in the alliance.

The issues identified were translated into critical success factors for the South African energy industry sector. This was further translated into critical questions which were asked to the decision makers of strategic alliances.

1.3.2 *Sub-problems*

The main problem for this research can be divided into two sub-problems as mentioned below:

- The first sub-problem was to examine critical success factors in strategic alliances for the South African energy industry sector.
- The second sub-problem was to examine the role of senior management in order to sustain the alliances in the South African energy industry sector.

1.4 Significance of the study

The study has enormous significance to the South African energy industry sector, reflecting strategic alliances which provide insight into the critical success factors for organisations entering into strategic alliances with other organisations. This research also provides organisations with a better understanding of the expected challenges in strategic alliances, a comprehensive overview of the key areas affected by the alliance and key issues were addressed as part of the diligence process prior to concluding the business deal.

Eskom, which is one of the leading organisations in the energy industry has already led a strategic alliance with domestic manufacturers for the development of a South African pre-paid metering technology (Iliev 2005). According to Iliev (2005), there was intensive interaction between Eskom and the manufacturers resulting in the development of strong relationships between the various participants of the strategic alliance and Eskom.

The organisation also played the role of an information broker, which was important in the rapid diffusion of preferred technology solutions between different members of the alliance. Eskom's R&D activities benefited the

industry, as the company made the results of its research freely available to the participants in the alliance.

Alliances often result in outcomes that are vastly different from initial expectations and intentions of the partners (Perks 2004). Hence in this research, it was important to search for explanations for these divergent outcomes. This can then be followed by precautionary measures to prevent these undesirable outcomes.

Even though most of the research suggests that the alliance activity is prevalent in organisations and is becoming more popular overtime (Inkpen and Ross 2001), no research or statistics confirm the number of strategic alliances entered to date. This could occur due to the variety of alliance forms that are included in the term 'strategic alliance' which can include the more formalised joined ventures, partnerships, collaborations, licensing relationships, franchising agreements, joint purchasing agreements and R&D consortiums etc (Choi 2004) which makes it difficult in terms of measuring these numbers.

In an interview with the president of Sverdrup Corporation, (Finnie, Sellew, Uselton and Vehige 1998) it was discovered that the organisation approached alliances differently based on their value. In Sverdrup alliances over $50 million warranted a formalised arrangement (Finnie et al. 1998), while smaller alliances were coordinated through memorandum of agreements, letters of intent etc.

As per the research done by Lorange and Roos (1992), identification of a potential partner was focused on by analysing their firm's finances, sales, physical assets etc. Those organisations largely ignored many issues raised in this report at the due diligence stage. According to Inkpen (2001), Zineldin and Dodourova (2005), this alliance can be a failure.

Most organisations have different areas of focus (Forrest 1990) in strategic alliances. This literature reveals that due diligence investigation should examine and focus on the areas raised in this research. Since these issues play an important role in the success or failure of any strategic alliance, a complete and properly carried out due diligence investigation process, could itself be regarded as a critical success factor in any alliance.

From the literature it was evident that due diligence is the unglamorous part of deal making (Cullinan et al. 2004). According to Cullian, Le Roux and Weddign (2004), this is however viewed by most employees as the boring part of any alliance transaction. Some believe that, due diligence often becomes an attempt to validate the potential partner's financial affairs (Puranam, Powell and Singh 2006) instead of conducting a fair assessment of the strategic intent of the organisation, and the ability to obtain value from the deal. They attribute this to the excitement of the deal (Beckmann 2007) and the difficulties encountered in slowing the transaction's momentum, once senior executives have approved it.

In the literature it was found that, the greater the level of analysis undertaken before alliance formation, the better the performance of the alliance (Glaister and Buckley 1999). They attribute this to the opportunities presented through a detailed due diligence analysis. This identifies whether the right partner was selected or not and whether a strategic fit can be achieved (Rosenbloom 2002) by giving the existing capabilities of the partners to the alliance.

The study will also provide guidance to the organisations in various industries in order to focus strategically during alliances.

1.5 Delimitations of the study

The research was limited in the following respects:

i) This research does not cover the outsourcing of services, or any supplier, licensing or franchising relationships, between companies.

ii) This research does not specifically examine mergers and acquisitions or hostile takeovers.

iii) This research was qualitative in nature, and does not include any quantitative analysis.

iv) This research does not deal with any exhaustive exploration of conceivable issues arising in alliances; however, an attempt was

made to consult a reasonable selection of the major published articles and theorists in the issues selected for discussion.

v) This research does not take into account the economic issues, of the country, while establishing a strategic alliance.

vi) This research does not cover funding and financial events that arise in particular strategic alliances.

vii) Although the study was not limited to local (i.e., South African) learning's and articles, the findings and results of the study was appropriate for a South African environment. Further research could be done in this field which can be applicable to international organisations.

1.6 Definition of terms

The definition of terms used in the research is as follows:

i) **"Alliances" or "strategic alliances":** for the purpose of this research, shall mean a collaboration between two or more companies for a defined (long-term) period of time, in which each partner company contributes resources necessary to achieve certain mutual goals, and includes partnerships, joint ventures and agreements to collaborate.

ii) **"Company (ies)" or "organisations":** shall mean all types of entities including, but not limited to, organisations like multinational organisations, national organisations, parastatals, private and public organisations, close corporations and partnerships etc.

1.7 Assumptions

Some of the assumptions made for the purpose of this research are as follows:

i) Organisations are keen to enter into strategic alliances with partners.

ii) Organisations wish to expand upon, and not cannibalise, their core business.

iii) Literature on International strategic alliances can add value, insight and guidance into South African strategic alliances.

iv) The international published literature and case studies considered and studied, together with the less extensive South African strategic alliance literature and case studies, shall provide a basis for this research.

v) An extensive review of the international and South African literature and case studies shall provide sufficient research finds in order for the outcome of the study to have a high degree of validity and reliability.

CHAPTER 2: LITERATURE REVIEW

Firms choosing to enter into an alliance can be distinguished in terms of its motivation to exploit an existing capability. Alliances are also done to explore new opportunities in the industry (Mowery, Oxley and Silverman 1996). Strategic alliance research has become an important factor for industries (Koza and Lewin 1998), that are challenging the traditional centrality of the firm as a focus for research. Research on strategic alliances is not a new endeavour. According to Koza and Lewin (1998), economists have traditionally been interested in the potential and real anti-competitive implications of joint ventures and other forms of cooperation between and among firms. This research focuses on strategic alliance for energy industry in South Africa and concentrates on its critical success factors.

2.1 Introduction

The South African electricity industry is currently on the brink of considerable restructuring, implying changes in ownership, structure and regulation, potentially encompassing both the electricity supply and distribution industries (Winkler and Mavhungu 2002). There is a huge possibility for organisations in the energy industry to choose various suppliers for alliances, in future, to function efficiently. According to Iliev (2005), Eskom has already done such a strategic alliance with domestic manufacturers for the development of a South African pre-paid metering technology (Iliev 2005) for their electricity distribution systems. Eskom also has alliance with Fluor and Pangaea (Reidy 2005), who provide engineering, procurement and construction management services. This helps Eskom to concentrate on its core business i.e., generation and distribution of electricity.

2.2 Background discussion of Strategic Alliance.

The South African electricity supply industry (ESI) is dominated by a state-owned (Eberhard 2001) and vertically integrated utility. Any organisation that needs to have alliance with organisations related to their industry (Draulans,

Deman and Volberda 2003) has to concentrate on its core business and to perform well compared to their competitors (Nickell, Nicolitsas and Dryden 1997). In order to understand the benefits of entering into strategic alliances by organisations, a literature review has been undertaken. The literature review also draws information from a variety of disciplines namely marketing, operational and people issues etc facing strategic alliances. The literature has been conducted under two broad categories as mentioned below:

2.2.1 Rationale behind organisations entering into strategic alliances

For many managers and researchers, the observation that strategic alliances have altered the business landscape seems apparent (Reuer 2004), even if the implication is less clear. According to Reuer (2004) the number of alliances increased dramatically during the past two decades, but the character of interfirm collaboration has changed several fundamental ways. This section of the study examines the motivations behind a company considering the formation of strategic alliance.

Some of the fundamental reasons for organisations to enter into strategic alliance are to reduce environmental uncertainty, control more of the participants' immediate environment (Bretherton 2003) and to make use of complementary skills and resources. This helps the organisation to provide a more comprehensive customer offering (Clark and Tracey 2004) which helps them to achieve changes in market structure.

In his research, Bretherton (2003) found that organisations used strategic alliances to achieve sustainable competitive advantage by enhancing their market position. They were also successful in accessing scarce resources and reducing production cost Issues arising while organisations enter into strategic alliance.

Strategic alliances have become one of the most commonly adopted firm strategies (Gulati and Singh 1998), by using it as a strategic tool and expect to benefit from synergies (Gadiesh, Haas and Cullinan 2001), such as

improvements in competitiveness, customer value or product innovation that can be achieved by integrating two entities.

Strategic alliances between firms are a ubiquitous phenomenon. Their proliferation has led to a growing stream of research by strategy and organisational scholars who have examined some of the causes and consequences of such partnerships, mostly at the dyadic level (Gulati 1998). According to Pekar (2003), the fundamental purpose of an alliance is to facilitate collaboration and varying degrees of integration between companies often leading to merger or acquisition.

In most studies researchers have considered alliance motivation based on the needs and opportunities engendered by either market uncertainties or firm resource conditions (Park and Zhou 2005). However, there has been little attention given to understand how the competitive dynamics in a market affect competitors' alliance strategy. According to Park and Zhou (2005), the traditional conceptualization of alliance formation was based on the classic cost-benefit analysis in a very narrow term, that focused on the direct complementary benefits and costs of managing an alliance.

According to Gulati and Singh (1998), a great deal of research has been done on why companies form strategic alliances for new product development. His finding was that organisations need to align their partners' rights and responsibilities through contracting (Gulati and Singh 1998). Organisations are also using alliances for developing complex new products depending on several types of competencies (Lorange and Roos 1992; Doz and Hamel 1998). Organisations may also consider alliance for managing risk in uncertain markets, share large capital investment costs and also for innovative ideas (Bamford, Ernst and Fubini 2004).

Some organisations would only consider participating in an alliance when expected gains are greater than expected cost incurred during alliance (Park and Zhou 2005). Alliances are often suitable when competition is dependent upon the organisations ability to create and obtain knowledge quickly and economically (Sampson 2007).

According to the literature, managing the performance risk of an alliance was critical. Despite all the best efforts of the partner firms, an alliance can still fail because of internal and external factors, environmental factors and market factors (Das and Teng 1999).Some of the external factors include economy, market and competition of external organisations that compete in an alliance. Internal factors that could arise in an alliance can be lack of competence in critical areas, or sheer bad luck (Das and Teng 1999).

Environmental factors such as government policy changes, war and economic recession, also, can affect the performance of strategic alliances. Some of the market factors that could create risk in alliance can be fierce competition and demand fluctuations in the economy. These factors can sometimes be more important than resource commitment.

The risk of performance in an alliance can be reduced by managing the effects of these external factors within the organisations. An alliance can be successful depending upon the capability of senior management to mitigate the risk before it becomes a potential threat (Lorange, Roos and Brønn 1992).

This research shows that the rationale behind companies entering into strategic alliances were wide and linked to specific circumstances surrounding the partners (Hagedoorn 1993). Organisations should play a critical role in identifying the alliance type, suitable partners and issues that could potentially arise (Zinn and Parasuraman 1997) in the type of alliance etc, to identify and manage strategic alliance issues.

2.2.2 Risks faced by organisations while entering into strategic alliances.

A successful strategic alliance depends substantially on effective cooperation between the partners (Das and Teng 1998). It would be a serious problem if one partner firm does not commit itself to cooperation, as fully expected by the other partners. Risk sharing or risk controlling have been proposed in research as one of the important justifications (Kogut 1988) for joining strategic alliances. Many researchers also identified risk control and risk reduction in R & D as a key rationale for R & D related alliances (Osborn and Baughn 1990; Teece

1992; Gulati 1995). Others have referred to risk reduction in investments as a stimulus for strategic alliances (Hagedoorn 1993). In the process of strategic alliance making, risk considerations were considered as a highly crucial factor (Nueno and Oosterveld 1988; Brouthers, Brouthers and Wilkinson 1995).

Organisations interest in the importance of risk taking, in strategy, has grown tremendously (Bettis 1983) in recent years. Strategists know that corporate disasters could occur if risk was handled improperly. The process of handling risk appropriately has been problematic and also has received attention recently (Baird and Thomas 1985). The level of risk present and the risk-handling behaviour of the strategic decision maker, in formulating intended strategy, often may be critical to strategic success for strategic alliances (Mintzberg 1978).

The emergent pattern of realized strategies could be understood only by studying the risk-taking propensities of the decision makers as they interact with particular situations that require them to make strategic decisions.

According to Baird and Thomas (1985), the condition of risk exists in strategic decisions when complete information was unavailable (Ansoff 1965), and decisions were to be made which involved uncertain outcomes that were important, in the long run, of firms' survival (Mintzberg, Raisinghani and Theoret 1976).

A method of characterizing strategic risk was useful only to the extent when it was incorporated into the strategy formulation process. However, risk has rarely been addressed as a specific area of study in strategy formulation (Baird and Thomas 1985).

Some of the issues faced by organisations entering into strategic alliances were control, flexibility, security, productivity etc.(Das and Teng 1999). Control was an issue which organisations faced, when a partner firm contributes primarily property resources and considers relational risk (Das and Teng 1999) to be the major risk. The main concern here was that its properties may be misused and that the other party may reap undue benefits.

Flexibility also carries major risk, as the alliance may fail even if the partners were fully committed (Das and Teng 1999). It was recommended that the organisation should be concerned about losing its invested resources as they may not be able to recover financial and physical resources that were invested in the alliance.

According to Das and Teng (1999), Knowledge plays an increasingly important role in today's competitive market. Organisations forming alliances could learn others' knowledge by having access to a large resource pool. Alliances become learning races, in which the partner that more quickly grasps the other's knowledge, gains more bargaining power and obtains an upper hand in the relationship (Das and Teng 1999). This leads to relational risk in terms of the likelihood of one's technological and managerial know-how being stolen by a partner firm.

In organisations where knowledge creation was the core business, high performance risk was considered as the major risk (Das and Teng 1999) . This often led to productivity orientation risk, where one’s knowledge in combination with other resources may not result in acceptable alliance performance. There were also risks involved in achieving partner fit in an alliance deal between organisations. Selecting alliance partners in forming alliances was not an easy decision.

There were certain patterns of failure observed where, alliances of strong equals were more likely to succeed (Bleeke and Ernst 1992) than alliances between weak and strong firms, and also between weak firms in the industry. According to Das and Teng (1999), from the point of view of risk, partner selection was considered as the risk of finding a fit between partner firms. Partner firms have resource fit and strategic fit.

Resource fit refers to the degree to which partners possess compatible resources. Strategic fit mentions the degree to which partners have compatible goals in an alliance. These two types of fit were required to be achieved simultaneously for the success in an alliance (Das and Teng 1999). This is summarised in Figure 1.

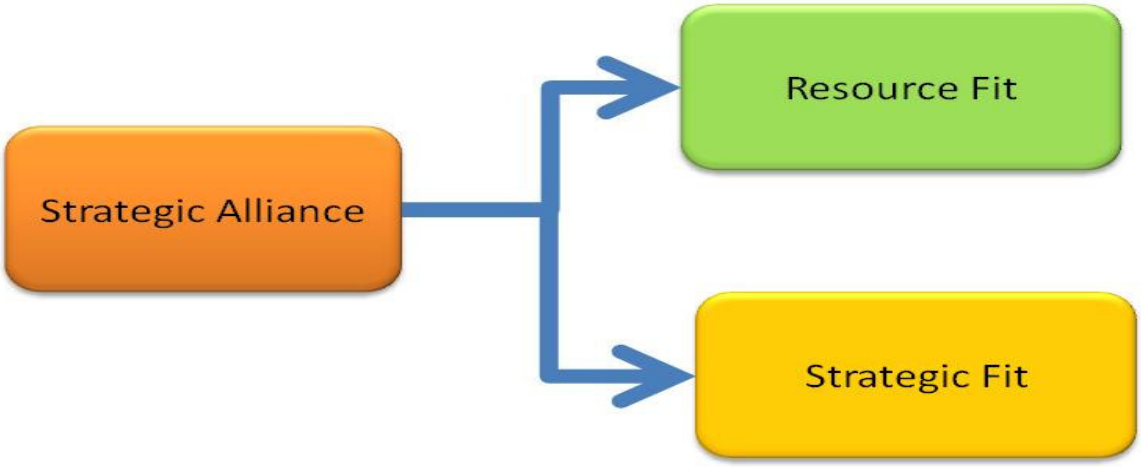


Figure 1: Resource fit and Strategic fit (Das and Teng 1999) in an alliance

Organisations pursue common interests in the alliances, so that they can restrain their self-interested activities which may harm their partners. Sufficient cooperation was the foundation for a successful alliance as it was necessary for partner firms to work toward the realization of collaborative advantage. There were also risks in managing collaboration in alliances within organisations (Das and Teng 1999). In their research, Das and Teng (1999) found that the absence of sufficient cooperation leads to risk in managing collaboration. This may be in the form of having either insufficient cooperation or too much, affecting the performance of the organisation.

Managing an alliance efficiently could be viewed as a process consisting of four essential stages as shown in Figure 2. This includes selecting partners, structuring the alliance, operating the alliance, and evaluating alliance performance.

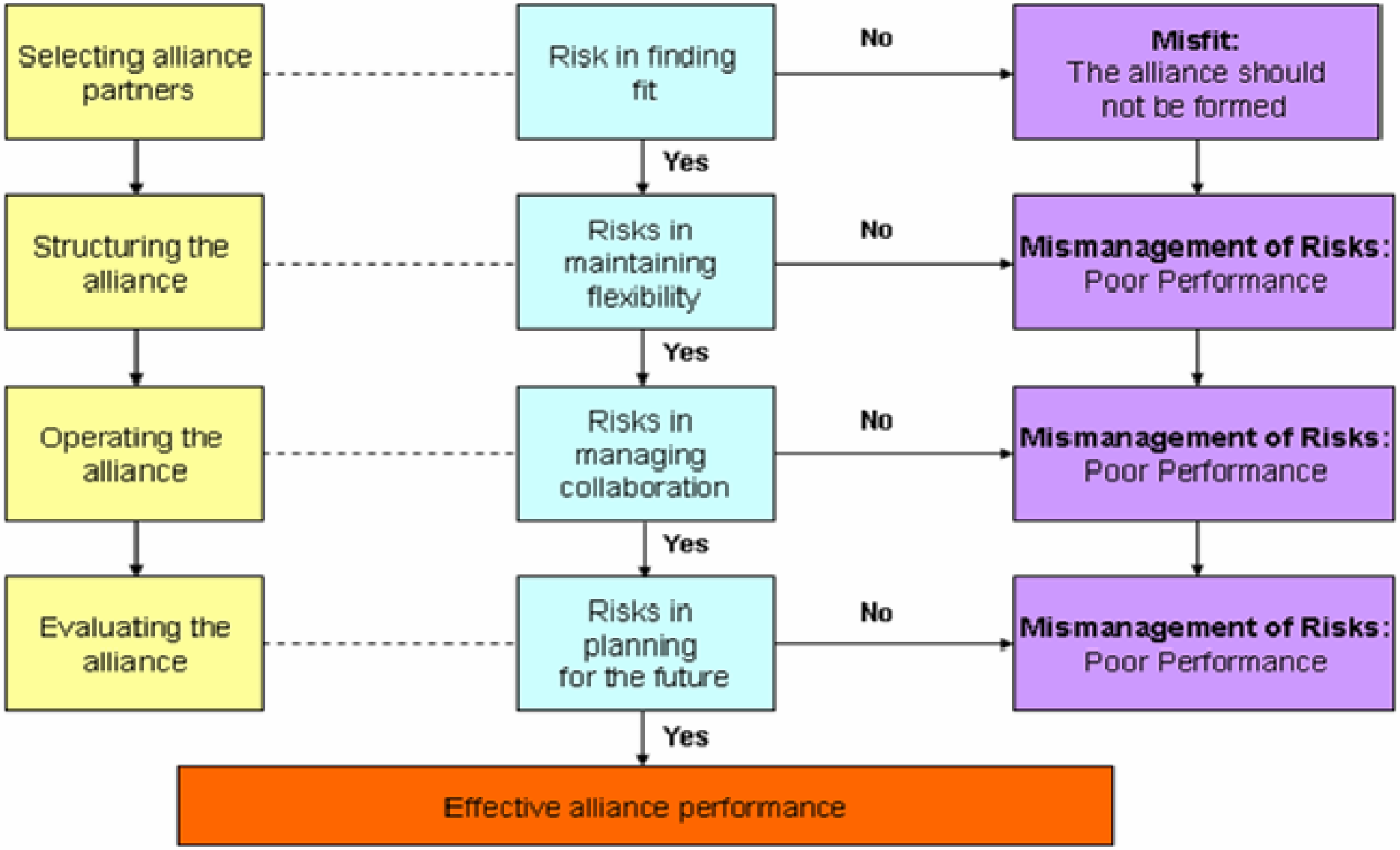


Figure 2: Managing Risks and their impact (Das and Teng 1999) in Organisational performance

These stages help senior management to decide upon, whether forming an alliance will be successful or not. This can be obtained by following the process of finding a fit, managing flexibility, managing collaboration and planning risks in the future.

Effective alliance performance can be achieved if the process was followed diligently. Das and Teng (1999) also warns that strategic alliances stand out as a high-risk strategy, as partner firm's have less control over the alliance than it has over its own subsidiaries. Organisations have to consider all these risks before entering into an alliance to be successful in their industry.

2.3 Examining critical success factors in the Energy Industry

The first sub-problem is to examine critical success factors in strategic alliances for the South African energy industry sector.

2.3.1 Critical success factors in strategic alliances

The most advanced form of inter-firm cooperation occurs when a strategic alliance is formed between partnering organisations. Strategic alliances enable organisations to combine their individual strengths and work together to reduce non value-adding activities and facilitate improved performance (Whipple and Frankel 2000). However in his research Harrigan (2002) states that success rates for "interfirm ventures" are low.

The research done by Day (1995), Zineldin and Dodourova (2005) states that, about 70% of joint ventures have failed to meet partner expectations or have been terminated (Day 1995). In spite of the high failure rate, these arrangements are often necessary in today's global environment because organisations lack resources to achieve a sustainable competitive advantage on their own (Brouthers et al. 1995).

2.3.2 Alliances in South African energy industry sector

Eskom which is one of the leading organisations in the energy industry in South Africa, set out from the beginning to develop local suppliers, (Anderson and Bezuidenhoudt 1996), who are now forming alliances with overseas distributors to make the technology available in Europe and elsewhere.

According to Iliev (2005), Eskom led a strategic alliance of domestic manufacturers, for the development of a South African pre-paid metering technology, resulting in intensive interaction between Eskom and the manufacturers. This created the “development of strong relationships” between the various participants of the strategic alliance and Eskom (Iliev 2005).

Success in strategic alliances was characterised by significant technological upheaval premised on multiple-loop learning processes between groups of actors, and interacting with the environment aimed at both decreasing the level of uncertainty and impacting the environment in the interest of organisations participating in the alliance (Clark and Tracey 2004). Eskom needed the role of a strategic alliance leader in order to be in a position to co-ordinate resource allocations to the different organisations. An important aspect of Eskom’s strategic alliance leader behaviour, is that it was highly dynamic (Iliev 2005) in nature and changed quite radically through time.

Eskom also has recently increased its purchases of American products and services and hired a number of American organisations, such as Black and Veatch, Fluor Daniel and Honeywell (Allen 2007), to assist them on the initial stages of project planning. According to Allen (2007), Eskom also hosted a large group of American equipment suppliers to discuss their procurement needs and followed-up by sending representatives to the United States for recent trade shows and conferences.

2.3.3 Research Proposition 1

Critical success factors should be present in any organisations who participate in strategic alliances in order to perform successfully in their respective industries.

2.4 Identifying the critical success factors in Energy Industry

The second sub-problem is to examine the role of senior management in order to sustain the alliances in the South African energy industry sector.

2.4.1 Identify critical success factors of strategic alliance

Intense competition in the marketplace was forcing organisations to examine different ways by which they could enhance or retain their competitive edge. Strategic alliance was one such option through which an organisation can leverage its resources to emerge (Rai, Borah and Ramaprasad 1996) as an effective competitor.

In his research Whipple and Frankel (2000) mentions five critical success factors in strategic alliance. They are Trust, Senior Management Support, Ability to Meet Performance, Expectations, Clear Goals and Partner compatibility.

Trust was an important area in an alliance since each party depends on the other to satisfy mutual goals. Trust must be present for partners to share critical information to manage the alliance (Moore 1998) and for each partner to believe its long-term performance to be met.

Senior management support provides both encouragement and resources to individuals working in the organisations (Whipple and Frankel 2000) which are involved in alliance activity. According to Whipple and Frankel (2000), the ability to meet performance expectations focuses on the core of an alliance's rationale, i.e. to improve each firm's competitive position in the market.

Organisations also require the establishment and execution of clearly defined goals (Grant and Baden-Fuller 2005) and well-defined procedures (Horvath and Greenberg 1989) to achieve these goals in order to achieve success in an alliance. This includes partners having a common vision of the future (Spekman, Kamauff and Myhr 1998).

Partner compatibility was also an important area of success as it enabled the ability to plan and work together in a productive, solution-oriented manner (Whipple and Frankel 2000).

Strategic alliances have become important business management instruments to improve the competitiveness of companies (W. H. Hoffmann and R. Schlosser 2001), especially in complex and turbulent environments. Alliances also help to bridge the gap between the firm's present resources and its expected future (Das and Teng 2000) requirements. In this time of globalisation and radical technological change, alliances have become important strategic guides (James 1985) in most industries.

Strategic alliances can also be considered as a collaborative effort between two or more firms whereby the firms pool their resources in an effort to achieve mutually compatible goals which are difficult to achieve (Hunt, Lambe and Wittmann 2002) individually. According to the literature, success of alliance also relies on three factors (Wittmann, Hunt and Arnett 2008), namely alliance competence, resources and partnership cooperation.

Factors like strategy formulation, identification of potential partners, evaluation and selection of potential partners, negotiation of the alliance and agreement, implementation, relevant experience, embedding of knowledge (Villiers 2009) goodwill and reputation in the industry also leads to alliance capability and continued alliance success. Figure 3 shows some of the critical success factors which organisations should consider before participating in an alliance.



Figure 3 : Critical Success Factors (Whipple and Frankel 2000; Wittmann et al. 2008; Villiers 2009)

2.4.2 Role of senior management in strategic alliances

An insight can be drawn from this research, about how best practice alliances really work for organisations in strategic alliance. During the formation phase in multicultural and multinational settings, the management of people and their competencies will have a large impact (Lorange et al. 1992) on the overall longterm operations and effectiveness of the alliance.

Management often tends to view the strategic alliance as being a set of internal co-operation problems. While they spend their time discussing various parts of the network and how the alliance is going to work, they lose their concentration on the customer (Elmuti and Kathawala 2001) and competitors move ahead. Keeping an eye on the external environment therefore is of utmost importance. It is the responsibility of senior management at the partner firms to see that no one person monopolizes (Kaplan, Murray and Henderson 2003) any part of the strategic alliance.

Successful alliance partners share many strong similarities regarding performance and relationships. The key point is that both partners agree on the characteristics and success factors that must be present for a mutually successful alliance to develop and to be maintained (Whipple and Frankel 2000).

Management must recognize the importance of cooperation and should ensure participation is based on its own particular goals (Brouthers et al. 1995). Failure of management to critically assess its strategic logic before forging a relationship with another organisation (Rangan and Yoshino 1996) can be considered a major cause of failed alliances.

The role of senior management was critical and should be involved in all stages of the strategic alliance process (Devlin and Bleackley 1988) especially by giving special attention to the decision to form a strategic alliance, choice of alliance partner and planned management of the alliance. According to Lorange, Roos and Brønn (1992) the involvement of top management in a very early stage determines the success of a strategic alliance. Organisations in strategic alliance must also recognize their dependence on their customers.

According to Brouthers (1995), management must have goals for both the alliance and the firm as a whole. Senior Management must be convinced that the goals and objectives of the alliance (Spekman, Isabella, MacAvoy and Forbes 1996) are still on target. Careful and disciplined thinking on the part of organisations senior management is necessary to utilise the full potential of strategic alliance (Rangan and Yoshino 1996). According to the research done by Walters, Peters and Dess (1994) if there is no endorsement and enthusiasm

from senior management at the operating level, the alliance will struggle when tough issues arise.

While that dependence may affect a firm's alliance planning procedures, it is by no means a hindrance to successful alliances. Usually organisations tend to forget that there is considerable room for improvement (Leech and Williams 2004). Significant opportunities for improving goal clarification, communication, and performance evaluation also exist as a part of any strategic alliance.

2.4.3 Research Proposition 2

Strategic alliances are supported by senior management within the organisations.

2.5 Conclusion of Literature Review

Inter-firm strategic alliances appear to have become more important as a part of business. Organisations enter into alliance to reduce environmental uncertainty and also to make use of complementary skills and resources (Bretherton 2003). This helps organisations to perform efficiently by focusing on their core business and also provides a more comprehensive customer offering. Organisations use strategic alliances to achieve sustainable and competitive edge.

The organisations were also successful in accessing scarce resources and reducing production costs arising while organisations enter into strategic alliance. Strategic alliances have become one of the most commonly adopted strategies (R. Gulati 1998; Gulati and Singh 1998) in the organisation, using it as a strategic tool and expect to benefit from synergies (Gadiesh et al. 2001). By integrating two entities, organisations can have benefits of improvement in competitiveness, customer value or product innovation etc.

Strategic alliances however stand out as a high-risk strategy as the partner firm has less control (Das and Teng 1999) over the alliance than it has over its own subsidiaries. According to Das and Teng (1999) the two major types of risk in alliances are relational risk and performance risk. They represent two major

sources of unsatisfactory performance, one internal to the relationship and the other external to the relationship.

Organisation considers alternative potential partners in case of strategic alliance and the selection of an ideal business partner is always a key issue (Pekar 2003) during alliance processes. The selection of an alliance partner can have different aspects which depend on capability issues, resource issues and previous business issues (Inkpen and Ross 2001) etc.

However, in case of cross-border alliances, it is recommended that organisations view their partner selection (Cavusgil 1998) and country targeting as interdependent choices. There is also a possibility in lack of trust and commitment in organisations alliances (Park and Ungson 2001).

The emerging area of strategic alliances in organisations has received considerable attention, yet there are many unanswered questions regarding the dynamics of such relationships. From the literature, it is evident that the involvement of top management in a very early stage determines the success (Lorange et al. 1992) of strategic alliance.

From the perspective of organisation in the alliance, some attributes like trust, coordination, interdependence, information quality, participation, information sharing, joint problem solving were contributing to the success of an alliance. Avoiding the use of severe conflict resolution tactics, and the existence of a formal supplier/commodity alliance selection process (Monczka, Petersen, Handfield and Ragatz 1998) etc. were also found to be significantly related to partnership success.

In this study, it was also found that Organisation has sources of critical success factors including environmental analysis, analysis of industry structure, industry/business experts, analysis of competition, analysis of dominant organisation in the industry, company assessment (Leidecker and Bruno 1984) etc. in a successful alliance.

2.5.1 Research Proposition 1:

Critical success factors should be present in any organisations who participate in strategic alliances in order to perform successfully in their respective industry.

Reference:

- (Allen 2007)
- (Anderson and Bezuidenhoudt 1996)
- (Bretherton 2003)
- (Brouthers et al. 1995).
- (Clark and Tracey 2004)
- (Day 1995).
- (Gadiesh et al. 2001)
- (Iliev 2005)
- (R. Gulati 1998)
- (Whipple and Frankel 2000).
- (Harrigan 2002)
- (Zineldin and Dodourova 2005)

2.5.2 Research Proposition 2:

Strategic alliances are supported by senior management within the organisations.

Reference:

- (Cavusgil 1998)
- (Das and Teng 1999)
- (Inkpen and Ross 2001)
- (Leech and Williams 2004).
- (Leidecker and Bruno 1984)
- (Monczka et al. 1998)
- (Moore 1998)
- (Park and Ungson 2001)
- (Pekar 2003)
- (Spekman et al. 1998).
- (Whipple and Frankel 2000)

CHAPTER 3: RESEARCH METHODOLOGY

The purpose of this research was to look for critical success factors in strategic alliances for the energy industry in South Africa. In this research it was found that there is limited information available for critical success factors in the energy Industry. This may be due to the nature of existing research limited to either industry specific or in the field of alliance relationship (Palakshappa and Gordon 2006) between organisations.

Literature on strategic alliances shows a growing trend from the traditional emphasis on objective measures (Pansiri 2005), towards a multiple method of research. In the literature review it was evident that there was an imbalance in the phenomenon of strategic alliances (Doz 1996), and there was limited research that concentrate on strategic alliances as processes that evolve. Researchers mostly assume that the outcome of strategic alliance corresponds only to the implementation and achievement of strategic objectives set for the alliance.

In order to determine the critical success factors, various organisations in the electrical energy sector were taken into consideration. An attempt was made to confirm whether critical success factors should be present in any organisations who participated in strategic alliances in order to perform successfully.

The role of senior management in organisations was also analysed to find out whether they support strategic alliances. Validity and Reliability for the data was also discussed in detail.

3.1 Research methodology /paradigm

The research method employed in this study was qualitative in nature. The literature review was used to identify existing critical success factors in strategic alliances for the energy industry in South Africa.

Examining relationships between and among variables was central to answering questions and propositions (Creswell 2003) through surveys and

experiments. The survey design provides qualitative descriptions of trends, attitudes and opinions of a population by studying the sample of the population (Creswell, Plano Clark, Gutmann and Hanson 2003). The researchers then analyse the results to generalise or make claims about the population.

A review of the extensive literature on strategic alliances enables the development of non-fragmented alliances in a wide variety of issues relating to strategic alliances. This enables a distillation for the findings into critical success factors applicable to strategic alliances generally.

Quantitative research is always 'objective', while qualitative methods are 'subjective' and will always lead to more meaningful analysis (Laurie and Sullivan 1991).

Qualitative inquiry employs different knowledge claims, strategies of inquiry, methods of data collection and analysis. Qualitative procedures rely on text and image data. They also have unique steps in data analysis, and draw on diverse strategies of inquiry. The strategies of inquiry chosen in a qualitative project (Creswell 1998; Strauss and Corbin 1998; Denzin and Lincoln 2000; Schwandt 2000) will have dramatic influence on the procedures.

3.2 Research Design

The research design used in this research was qualitative analysis. The methodological approach adopted in this research was in the form of an interview. This approach was adopted as there was no existing quantitative data available for strategic alliances in the energy industry in South Africa.

Interviews are very useful for gaining information on the perceptions, beliefs and ideas of people. The same techniques capture changes in their opinions on what motivates and encourages them (Weiss 1995). From this method one can deduce the organisations' norms and culture.

There can be strong potential for bias in the hands of those who are untrained, or careless interviewer (Kvale 1994), and not all interview information may be

accurate. Interviews are one of the most valuable sources of information about an organisation. However, credibility is on the line when the researcher does an interview (Britten 1995).

A qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives, ethnographic design, and observation of behaviour (Creswell 2003). The research collects open-ended, emerging data with the primary intent of developing themes from the data.

Data collection methods include interviews, observations, field notes and documents, amongst others (Wolcott 1994). Data is most often analysed through an inductive, ongoing and evolving process of identifying themes within a particular context (Miles and Huberman 1994), also known as thematic analysis.

The focus of qualitative research tends to be on understanding the meaning imbedded in participant experiences through open-ended questions (Lincoln and Guba 1985) with an unstructured and subjective approach. According to Patton , the qualitative research is mostly conducted in a naturalist setting with a purposive sample (Quinn Patton 2002) and tends to be holistic, descriptive and focuses (Denzin and Lincoln 2000) on the depth and details of experiences.

In primary data collection the data is collected using methods such as interviews and questionnaires. There are many methods of collecting primary data and the main methods include: questionnaires, interviews, focus group interviews (Creswell 2003), observation, case-studies, diaries, critical incidents (Denzin and Lincoln 2000) and portfolios.

In qualitative interviews, open-ended responses to questions provide the evaluator with quotations (Patton 1987), which are the main source of raw data. According to Patton (1987), quotations will "reveal" the respondents' levels of emotions and their basic perceptions. The task for the qualitative evaluator is to provide a framework within which people can respond in a way that represents accurately and thoroughly (Sewell 2002) their point of view about the research.

Researches identified four types of qualitative interviewing for research (Patton 1990) or evaluation such as :

- The informal conversational interview,
- The interview guide approach,
- The standardized open-ended interview, and
- The closed, fixed-response interview.

At the most basic level, interviews are conversations (Kvale 1996) between interviewer and interviewee. According to Kvale (1996), qualitative research interviews are defined as ‘attempts to understand the world from the subjects' point of view to ‘unfold the meaning of peoples experiences’. Interviews for research or evaluation purposes differ from other familiar kinds of interviews (Sewell 2002) or conversations. Table 1 shows some of the advantages and disadvantages of using interview research techniques.

According to Sewell (2002), professional interviews involve an interviewer who is in charge of structuring and directing the questioning. Even though Interviews for research or evaluation purposes may also promote understanding and change, the emphasis is on intellectual understanding rather than on producing personal change (Kvale 1996).

In this research, the information obtained from the interview would give an insight on whether any critical success factors exist in strategic alliances for the energy industry in South Africa. The data obtained was further analysed to understand whether senior management were really interested or not in the success factors of strategic alliances.

Advantages	Disadvantages
• Allows evaluator to probe for more details	• Interviewee may be more reactive to personalities, moods, and interpersonal dynamics
• Interviewers have the flexibility to use their knowledge, expertise, and interpersonal skills	• Analyzing and interpreting qualitative interviews is much more time-consuming
• Researcher can adapt the questions as necessary	• The interviewer can affect the data
• More detailed questions can be asked if necessary	• The interviewer's emotions / looks might affect the interviewees responses
• They usually achieve a high response rate	• Different interviewers may understand and transcribe interviews in different ways.
• Ambiguities can be clarified and incomplete answers followed up	• Interviewers may make subjective or biased judgements.
• Precise wording can be tailored to respondent and precise meaning of questions clarified	• Subjective evaluations are made
• Interviewees are not influenced by others in the group	• Interviewers form stereotypes concerning the characteristics required for success on the job
• Interviewer can establish both rapport and trust.	• Negative information seems to be given more weight.
• Interviewer can obtain supplementary information	• Participants can be easily distracted

Table 1: Advantages and disadvantages (Kvale 1994, 1996; Sewell 2002) of using interview research techniques

3.3 Population and sample

3.3.1 Population

The population defined for this research would be decision makers in senior management in energy industry sectors within South Africa. Some of the energy industries in South Africa include hydro power, coal, petrol and nuclear energy.

Generation of electricity is considered critical to the development of any country. According to (Yoo and Lee 2009) electricity has been the foundation of economic growth. It also constitutes one of the vital infra-structural inputs in socio-economic development in the country. This research is limited to the electricity industry in South Africa.

Eskom generates around 95% of total electricity (Reporter 2008; Goswami 2009) in South Africa. The remaining 5% is generated by City Power and independent suppliers which includes IPSA Group PLC ("IPSA") and Talbot Green Energy (City 2009; IPSA 2009; Talbot 2009).

City Power does not make power, but rather buys it from major generators (Davie 2009), the other independent suppliers are currently in the concept phase and not generating electricity (Andrews 2009) for the nation.

Eskom generates most of the electricity in South Africa. To continue this research on strategic alliances, Eskom and its alliances were chosen as a convenience sample. This study concentrates on Eskom and the alliances it has formed. Eskom is a parastatal organisation with various subsidiaries.

Some of the leading organisations who deal with strategic alliances within the energy industry in South Africa are given in alphabetical order:

- Arivia.kom
- Black & Veatch (South Africa)
- Nyeleti Consultants
- PB Power
- Medupi Project
- Kusile Project

3.3.2 Sample and sampling method

When conducting research it has to be clear how the researcher will analyse the population. One cannot possibly analyse the whole population to understand trends and opinions as this would be too costly and unfeasible (Oulton 1995).

In this research it was important that the questions were asked to the relevant decision makers who are involved in strategic alliances in the energy industry. These decision makers represented the population of that project. For the purpose of this research a convenience sample was taken from the largest electricity distributor (i.e., Eskom) in South Africa.

In the sample certain companies which have alliances with Eskom were considered. For example Medupi Power Station project has a strategic alliance with Arivia.kom and PB Power. Likewise Kusile Power Station project has a strategic alliance with Arivia.kom, Black & Veatch (South Africa) and Nyeleti Consultants to provide necessary infrastructure for their project.

The decision makers interviewed for this research were Project Manager - Kusile Power Station, Project Manager - Medupi Power Station, Business Manager - Arivia.kom, Project Manager - Black & Veatch (South Africa), Project Manager – PB Power, Project Manager - Nyeleti Consultants etc.

In this research a combination of Interview Guide Approach and Standardized Open-Ended Interview methods (Sewell 2002) were used as the sampling method. The interview guide approach is where the interviewer has an outline of topics or issues to be covered, but is free to vary the wording and order of the questions to some extent. One of the advantages of this method is that the data is somewhat more systematic and comprehensive than in the informal conversational interview, while the tone of the interview still remains fairly conversational and informal (Patton 1990).

However, the drawback of this method is that outlined topics will prevent other important topics from being raised by the respondent and comparing or analyzing data was difficult because different respondents are responding to somewhat different questions (McNeill and Chapman 2005). This drawback

was covered by the Standardized Open-Ended Interview method in which the interviewer follows some sort of consistency in the questions asked to the respondent during the interview process. Table 2, shows the profile and number of respondents from whom the data was obtained.

Description of respondent type	Number to be sampled
Project Manager - Kusile Power Station	2
Project Manager - Medupi Power Station	2
Project Manager – PB Power	2
Business Manager - Arivia.kom	2
Project Manager - Black & Veatch (South Africa)	2
Project Manager - Nyeleti Consultants	2

Table 2 : Profile of respondents

3.4 The research instrument

An open-ended questionnaire was used as the research instrument for the purpose of this research. They provide responses which were recorded in the respondents' own words (Fraenkel and Wallen 2000). Open-ended questions are useful for obtaining in-depth information (Varkevisser and Pathmanathan 2003) on the following:

- Facts with which the researcher is not very familiar,
- Opinions, attitudes and suggestions of informants, or
- Sensitive issues.

According to Varkevisser and Pathmanathan (2003), some of the advantages of open-ended questions are as follows:

- They allow the researcher to probe more deeply into issues of interest being raised.

- Issues not previously thought of when planning the study may be explored, thus providing valuable new insights on the problem.
- Information provided in the respondents' own words might be useful as examples or illustrations, which add interest to the final report.
- Often, re-reading an answer in a later phase of the analysis offers the possibility for different interpretations in relation to other data collected, which would have been impossible if the answer had been pre-categorised.

However there are also risks in selecting this research instrument. Skilled interviewers are needed (Marrelli, Tondora and Hoge 2005) for this method, to get the discussion started and to focus on relevant issues recording all the information collected. There is a big risk in incomplete recording of all relevant issues covered in the discussion. This method also requires experience and is a time consuming process. The problems faced can be minimised by training or preparing (Varkevisser and Pathmanathan 2003) the interviewers for the task and also by preparing the list of further questions to probe for answers in a systematic way etc.

The open-ended questionnaire for the research is provided in Appendix A. The name and contact details of the respondents was kept confidential in this research.

3.5 Procedure for data collection

The sample taken for this research was the information obtained from the decision makers in senior management in energy industry sectors within South Africa. Individual interviews were organised by the interviewees and open-ended questionnaires (Hollway and Jefferson 2000) will be presented in the interview. A total of twelve decision maker's were interviewed who represented the sample of a specific project in Eskom. The information obtained was carefully recorded electronically and then analysed for the purpose of this research.

3.6 Data analysis and interpretation

Researchers often find data analysis as the most important part of carrying out their research. Analyzing the data and interpreting the results are the “reward” for the work of collecting the data (Saunders, Lewis and Thornhill 2007).

Some of the techniques that are commonly used in descriptive statistics can be categorised as Graphical displays, Tabular description and Summary statistics. Graphical display of the data summarise the data in graphs and facilitate comparisons. Tabular description uses tables of numbers to summarise the data and summary statistics (StatSoft 2002) which summarize the data.

3.7 Limitations of the study

Some of the limitations related to open-ended questionnaires are (Sewell 2002) mentioned as follows:

- Participants may say more than they intended to say, and later regret having done so.
- May be more reactive to personalities, moods, and interpersonal dynamics between the interviewer and the interviewee.
- Training interviewers and conducting interviews can be expensive and time-consuming.
- Qualitative interviewing requires considerable skill and experience.
- Analyzing and interpreting qualitative interviews is much more complicated and time-consuming.
- More subjective than quantitative interviews because the evaluator / researcher decides which quotes or specific examples to report.

3.8 Validity and reliability

The validity of an instrument refers to how well it measures what is under investigation, while reliability is concerned with the accuracy and consistency of

the instrument (Carmines and Zeller 1979). Research that is to be credible requires both validity and reliability. Validity deals with the accuracy of the instrument to the extent that it measures what we wish to measure. Reliability refers to the research measurement procedure's accuracy and precision (Bendixen 2004).

According to Bendixen (2004), two types of validity can occur in a research. The first type being external validity which deals with the 'generalisability' of the research across persons, settings and times. Thus, if research is externally valid, then the same results will be obtained regardless of the researcher, the context, or the period. The second type being internal validity, is also known as content or face validity, and deals with the extent to which the measuring instrument (Bendixen 2004) provides adequate coverage of the topic under study.

Bendixen (2004) also outlines the following description of reliability of the research:

- **The stability of the research** – An instrument is said to be stable if it secures reliable and coherent results with repeated measurements on the same subject.

- **The equivalence of the research** – Equivalence is a measure of the degrees of error brought in by different researchers, or by different samples of items in the questions.

- **The internal consistency of the research** – This concept deals with the uniformity and homogeneity among the scaled and measurable items researched.

In order for the research to have value, it needed to have high levels of validity and reliability. According to Leedy and Ormrod (2001), validity of the research project is referred to "accuracy, meaningfulness and credibility" of the study as a whole. Reliability is concerned with the estimates of the degree that the measurement (Emory and Cooper 1991) is free from random or unstable error.

3.8.1 External validity

External validity refers to the extent to which generalisations into other areas (Leedy and Ormrod 2001) that can be made from the results of this research. One method to improve external validity of the research was to use a representative sample. In other words, the researcher could only use the results, obtained from the sample studies to make a generalization about the entire population if the sample (Aaker, Day and Kumar 1983) was truly representative of the population. Every effort was made to satisfy the external validity of this study by using a representative (Robson 2002) drawn from the population.

3.8.2 Internal validity

According to Leedy and Ormrod (2001), internal validity refers to the extent to which the researcher is able to draw accurate conclusions from the study. This involved reducing the possibility that the research results (Stake 1995) came about for reasons other than those concluded in the study. Internal validity serves to rate the credibility or authenticity of the research (Miles and Huberman 1994) about how much truth does the research contain and how believable the research is.

3.8.3 Reliability

Reliability should ensure that similar research conducted in the future should lead to similar results (Leedy and Ormrod 2001). The question has to be worded clearly to reduce misinterpretation among the respondents. This ensures that the questionnaire would not be interpreted differently (Carmines and Zeller 1979) if completed by a different sample of respondents. The reliability of the study has to be enhanced through establishing congruency between the research problem, the study objectives, the literature reviewed (Miles and Huberman 1994), the formulated propositions and the study method.

CHAPTER 4: PRESENTATION OF RESULTS

4.1 Introduction

The study was designed for senior managers who are exposed to and participated in strategic alliances from the organisations. They hold positions of influence and would make informed comments on strategic alliances. Some of the success factors that were considered during this research (Werner H. Hoffmann and Roman Schlosser 2001) can be categorised as follows:

- Building on established trust- based relationships and partner factors.
- Strategic analysis and decision to co-operate.
- People and cultural factors.
- Designing the partnership.
- Contributing skills and specific strengths.
- Keeping and protecting core competencies.
- Management, leadership and control factors.
- Deriving alliance objectives from business strategy.
- Legal factors.
- Agreement on clear and realistic objectives.
- Resources and skills factors.
- Geographic location and international resources.

4.2 Demographic profile of respondents

The research aimed to study the critical success factors in strategic alliance which made an alliance successful in the energy industry in South Africa. The role of senior management in the alliance was also considered during this research. The sample taken for this research was from the organisations located in Gauteng province, South Africa.

A research questionnaire of seven questions was prepared for the purpose of this research. The questionnaire was aimed to interview respondents from these organisations and find out the critical success factors as well as the role of their senior management in a successful alliance.

4.3 Results pertaining to Proposition 1

Critical success factors should be present in any organisations who participate in strategic alliances in order to perform successfully in their respective industries.

An open ended questionnaire (see Appendix A) was prepared for the purpose of this research. This questionnaire had seven questions relevant to collect information for the purpose of this research. The respondents were asked to answer these questions during the interview. Some of the questions prompted the respondents to verify their exposure in a strategic alliance. This was in order to verify whether each respondent was involved in a strategic alliance or not, due to validity and reliability reasons. All the respondents interviewed had taken part in strategic alliances.

4.3.1 Critical Success Factors Priority list by the Respondents

In question number 3 of the open ended questionnaire (see Appendix A); the respondents were given options to rate 15 critical success factors according to their experience in the alliance. The data was collected and then ranked according to the response obtained in descending order. The primary option out of the different critical success factors from the respondents were as shown in Table 3.

Critical Success Factors Priority List	
Critical Success Factors	**No of Respondents**
Trust	8
Clear Goals	7
Partnership Cooperation	7
Alliance Competence	6
Goodwill	5
Resources	5
Experience	5
Embedding of Knowledge	4
Partner Compatibility	4
Senior Management	4
Measuring Performance	3
Negotiation of Alliance	3
Expectations	2
Potential Partners	2
Strategy Formulation	2

Table 3: Critical Success Factors Priority list from the respondents

A graphical representation of the critical success factors priority list from respondents can be shown in the Figure 4.



Figure 4: Critical Success Factors Priority List from the respondents

From the analysis, the following was observed:

- The respondent rated trust as the primary important factor.
- The second option was clear goals and partnership cooperation.
- The third option was alliance competence.
- The fourth option was goodwill, resources and experience.
- The fifth option was embedding of knowledge, partner compatibility and senior management.
- The sixth option was measuring performance and negotiation of alliance.
- The seventh option was expectations, potential partners and strategy formulation.

4.3.2 Conclusion regarding Proposition 1

From the above mentioned table and graphs, it is evident that there is consideration given to critical success factors during a strategic alliance. The preferences of critical success factors from the respondents were considered in this research.

4.4 Results pertaining to Proposition 2

Strategic alliances are supported by senior management within the organisations.

The open ended questionnaire prepared for the purpose of this research was also focused in finding out the role of senior management in the success of a strategic alliance. Question six and seven gave emphasis on the overall situation during the alliance and the involvement of senior management, as mentioned in Appendix A.

The answers from the respondents to these questions were as follows:

- At the beginning of an alliance the role of management is extremely important. I think they identify the business opportunity, and then agree on who the alliance members are going to be. Once the alliance gets to an execution mode, they lay down the roadmap to achieve it. Then they provide resources to execute it. Once the setup is in place then they are more into a leadership role. They provide the necessary support when it is required. And then once they have done that, then they are more into an oversight role and are approachable when their support is needed.

- Any successful manager or management team would always make themselves available if needed whether it be to actually take an active role in a particular issue or to be as a sounding board to provide advise to their team when they come across that need input.

- Management will only seek a strategic alliance when there is deficiency in the business. If there are skills internally, they will not consider a strategic alliance.

- Management will support strategic alliances within boundaries. They will make sure that necessary rules and regulations are considered at the execution of strategic alliances.

- Management supports the alliance while the project manager takes care of the details for the project team.

- The alliance will be done on a senior management level. They handle all type of negotiations.

- After the tendering process, the management of the organisation decides whether we go for the tender or not.

- The management has the final decision. However, the work gets done by the technical staff. The management manages the joint venture (alliance).

- Alliances are done through management level.

- Senior management need to have a clear path and also provides resources.
- Senior management had a huge role to play in the agreement and negotiation.
- Senior management's commitment and trust is essential for both parties.
- Management is a very important indicator.
- The management team at the highest levels have to be committed to the alliance.
- Senior management should be more than just business partners (relationship). Like each other, respect each other and work well with each other.
- Management needs to play an active role.
- Management needs to understand what is going on in the alliance.
- Management should show their employees that they are committed to strategic alliances.

From the above statements by the respondents the themes were identified. The themes corresponding to "role of senior management" is presented randomly in Table 4.

Role of Senior Management
Identify business opportunity
Selection of alliance members
Providing guidance and resources
Oversee the alliance process
Approachable in crisis situations
Support alliances within boundaries
Consideration to rules and regulations
Alliance will be done at senior management level
Final decision done by management
Need to have clear path
Commitment and trust

Table 4: Role of Senior Management in strategic alliance

4.4.1 Conclusion regarding Proposition 2

All the respondents agreed that there should be presence of senior management for the success of strategic alliances. They also mentioned that senior management should get involved in a very early stage in an alliance, by identifying the needs from their organisation and also select their alliance partners.

4.5 Summary of the results

The data was collected using the interview approach. An open ended questionnaire was prepared to obtain data from the respondents in this research. The results for the two propositions were discussed in this chapter. The significance of trust and strategy formulation in a strategic alliance was highlighted in most of the interviews. Some respondents have varied opinions on other critical success factors like clear goals, partnership cooperation, partner compatibility and senior management. Most of the respondents agreed that the role of senior management in any strategic alliance was critical. They also agreed that the senior management was approachable and participated in each phase of an alliance.

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 Introduction

This chapter presents the discussion of results in the context of the reviewed literature and in relation to the propositions. Data was collected using an open ended questionnaire. After collecting the data, content (thematic) analysis was done to analyse and categorise the data.

5.2 Demographic profile of respondents

The respondents represented different strategic alliances in the energy industry in South Africa. Some of these respondents have an international exposure to alliances within their organisation. Some of the alliances formed are in the area of information technology, project management, engineering design, and procurement expertise.

The questionnaire prompted the respondents to provide more information about the critical success factors of alliances they participated in. It was also focused on the role of senior management in the success of the alliance.

The respondents were selected from organisations within the Gauteng province in South Africa.

5.3 Discussion pertaining to Proposition 1

The first proposition states that critical success factors should be present in any organisations who participate in strategic alliances in order to perform successfully in their respective industries. This proposition tries to identify the critical success factors used in successful strategic alliances.

The data obtained from the interview was analysed and the critical success factors were presented in descending order of priority. The critical success factors priority list is shown in the Table 3. The graphical representation of the critical success factors priority list is shown in Figure 4.

The responses corresponding from the interview to each critical success factors are mentioned below:

5.3.1 Trust

Trust plays an important role in strategic alliance as both parties depend on the other to satisfy mutual goals. According to Moore (1998), trust must be present for partners to share critical information to manage the alliance. It also depends on the life of long-term alliances.

Even though the critical success factor "trust" was rated at the top level, the respondents did not elaborate on this topic at the interview. This could be due to the fact that in an alliance trust might be considered as minimum criteria. Trusting both alliance partners are one of the important factors for any long-term strategic relationship. The response of trust is as mentioned in Table 5.

Trust
Trusting your partner is critical in an alliance

Table 5: "Trust" as a critical success factor

5.3.2 Clear Goals

Organisations participating in alliance should have clear goals (Zahorsky 2009) of what is to be achieved, from the beginning. By setting clear goals, strategic alliances will have more clearly defined roles with their alliance partners. This also avoids further miscommunications and helps healthy relationship during the life of the alliance.

Clear Goals was another success factor rated high by the respondents who were interviewed for this research. The answer for this critical success factor varied from respondent to respondent. This might be the factor that, for each project, there might be different goals to achieve. All the respondents clearly stated that in a strategic alliance, one has to clearly understand what goals are expected from both the parties. These clear goals will help to achieve the objective of strategic alliance formation. The respondent's views of clear goals are mentioned in Table 6.

Clear Goals
Understanding of both parties
Open & Honest communication
Way of handling disputes
Two organisations working as one
Common goals and Objectives
Reliability
Availability
Accessibility
Levels of Performance

Table 6: "Clear Goals" as a critical success factor

5.3.3 Partnership Cooperation

Partnership cooperation helps organisations in strategic partnerships to capitalise on technological advances (Connell 2008) and also achieve objectives efficiently. It also helps organisations to move into broader markets which they cannot achieve individually.

It is evident from this research that without partnership cooperation, the alliance will not be successful. Here both the organisation's goals and objectives should be the same. The terms used by the respondents for partnership cooperation are as mentioned below in Table 7.

Partnership Cooperation
Organisation's ability for adaptation
Adhere to rules and regulations, procedures and policies
Should not disrespect each other
Leadership and communication
Having a clear path
Good fit
Clearly defined roles
Mature and well seasoned business practices
Relationship between alliance parthers, clients and end-users
Similar cultures between alliance and partners

Table 7: "Partnership Cooperation" as a critical success factor

5.3.4 Alliance Competence

Strategic alliances are formed to gain expertise which can enable the organisations to collectively achieve a particular goal. It is beneficial to both parties in the long run. This may include company policies and other regulations which help both organisations to maintain a relationship during the life of that alliance. Alliance competences which were mentioned by the respondents are shown in Table 8.

Alliance Competence
Technical Ability
Empowerment Profile
Trustworthiness
Communication
BEE Profile
Division of work
Legal Agreement
Team Structure
Determination & Commitment of alliance partners
Maintaining Respect & Relationship
Following Tendering process
Common Agreement
Trust & Support
Pricing Model

Table 8: "Alliance Competence" as a critical success factor

5.3.5 Goodwill

Any organisation before going into alliance should consider the goodwill of their counterpart. Some of the respondents at the time of interview selected Goodwill as their preferred critical success factor. However there was not much thought given to it. Of the interviews conducted there was only one definition mentioned by the respondents which was related to goodwill of the organisations. This is shown in Table 9.

Goodwill
Market influences

Table 9: "Goodwill" as a critical success factor

5.3.6 Resources

One of the major reasons why organisations participate in a strategic alliance is to gain resources. This enables both organisations to optimise their resources and increase efficiency to achieve a common goal. Even though the respondents rated resources as one of their critical factors, there was not enough information provided at the time of the interview. It was also noted that respondents mentioned their human capital as a resource. Assets like equipment, automotives, heavy machinery etc. can also be designated resources. However the respondents concentrated mainly on human capital as shown in Table 10.

Resources
Optimal Staffing for projects
Staffing / resources of project optimisation

Table 10: "Resources" as a critical success factor

5.3.7 Experience

Experience is one of the critical success factors that were considered during any alliance. This was relevant to individual projects. Both the organisations will investigate each others experience in the industry and the value they bring into the table during the time of an alliance. The respondents in the interview considered "experience" as shown in Table 11.

Experience
Experience in the field
Technical Ability
Special Skills
Risk Management
Talent

Table 11: "Experience" as a critical success factor

5.3.8 Embedding of Knowledge

From the literature, sharing of knowledge or "skills transfer" was one of the major outcomes considered during a strategic alliance. Both the organisations learn from each other during the execution of an alliance. This helps the organisation to inherit new or rare skills, hence giving both of them a competitive edge to perform well in their industry.

However, in the interview the respondents did not rate this critical success factor as high. This may be due to the fact that organisations entering into the alliance did not consider this as important. The key words mentioned by the respondents that related to "embedding of knowledge" are mentioned in Table12.

Embedding of Knowledge
Expertise from strategic alliance
Internal knowledge base
Knowledge of the partner
Embedment of Knowledge (Skills transfer)
Exchange of skills

Table 12: "Embedding of Knowledge" as a critical success factor

5.3.9 Partner Compatibility

In any alliances, both the organisations consider whether their partners are compatible to do work or not. An organisation may have enough resources and experience, but without job compatibility and relevant knowledge it may be difficult to achieve the goal. In the interview respondents mentioned "partner compatibility" as shown in Table 13.

Partner Compatibility
Commercial aspects recommended by Organisations
Compliance to Eskom governance
Interest were aligned
Expectations established

Table 13: "Partner Compatibility" as a critical success factor

5.3.10 Senior Management

The role of senior management is critical in any alliance. From the literature it was evident that senior management should be involved in the alliance from a very early stage. The information obtained from the respondents during the interview confirms the same. However the respondents commented that the senior management's presence is to oversee the whole alliance process. Some of the responses related to "senior management" are as shown in Table 14.

Senior Management
Senior Management Commitment
Annual Meetings
Management Committee Meetings
Good experience & Skills
Identifying Strength & Weaknesses
Corporate Culture
Same Objectives & Goals
Commitment
Integrity
Building up relationships
Getting to collaborate & cooperate to one another

Table 14: "Senior Management" as a critical success factor

5.3.11 Measuring Performance

During any alliance, the one partner doesn't have enough expertise to judge the work done by their counterpart. The only way to review their performance is by measuring them. This could either be in the form of deliverables with fixed time frames or in milestones where both the parties are aware of this process. The responses relevant to the critical success factor "measuring performance" are shown in Table 15.

Measuring Performance
Accountability (performance measurement to evaluate the alliance)
Schedule deliverables
Providing deliverables on time
Schedule Compliance, integration and updating of status of project
Clear goal with respect to deliverables
Profitability for both parties

Table 15: "Measuring Performance" as a critical success factor

5.3.12 Negotiation of Alliance

Negotiation of the alliance plays a critical role in forming a strategic alliance. This provides clarity to both organisations to execute their objectives for long term. However care should be given by the management, not to degrade their alliance partners' capability. The response commented on "negotiation of alliance" can be shown in Table 16.

Negotiation of Alliance
Commitment to develop local skills
Professional Relationship
Long term relationship
Technical Criteria
Commercial Criteria

Table 16: "Negotiation of Alliance" as a critical success factor

5.3.13 Expectations

There should be expectations from both the alliance partners before and after forming an alliance. "Expectation" is one of the critical success factors which deals with core values within the organisation and expected from their counterpart. The respondents mentioned "expectations" in the interview as shown in Table 17.

Expectations
Mutual Respect
Honesty & Integrity
Transparent in nature
Excellent relationship with third parties
Governances and Procedures to follow
Rules and policies of two organisations
Understanding regulations
Clear commercial policy & procedures
Common goals and Expectations
Understanding of rules and responsibilities

Table 17: "Expectations" as a critical success factor

5.3.14 Potential Partners

Each partner brings valuable resources to an alliance. To rely solely on one single type of resource is not likely to prove effective in today's environment of intensified competition (Das and Teng 2000). Even though two of the respondents rated "potential partners" as their critical success factor, there was no explanation given during the interview.

This might be due to the fact that the critical success factor "potential partners" is one of the underlined criteria to form an alliance.

5.3.15 Strategy Formulation

In any alliance there should be involvement of strategy. This critical success factor deals with questions like how to go forward as an organisation, what could be the potential risk and how does the organisation try to mitigate this risk. Table 18 lists some of the strategy formulation areas discussed in the interview.

Strategy Formulation
Honesty, trustworthiness, reliability are key
Roles & Responsibilities
Delegation of Responsibilities
No Misunderstanding
Written agreement
By-Laws

Table 18: "Strategy Formulation" as a critical success factor

The above mentioned list was obtained from the literature review which was done for the purpose of this research. During the interview, the respondents gave answers which gave insight to another section. While doing the thematic / content analysis, these responses were classified into two new areas such as "Financial Aspects of Alliance" and "Geographic Significance" in strategic alliances.

5.3.16 Financial Aspects of Alliance

Looking from an operational level this critical success factor did not seem important to most of the respondents. But the “financial aspects of alliance” was given utmost importance from the senior management level. These sections include cost of employing and saving by forming an alliance. Cost efficiency was also mentioned in this section. Table 19 shows some of the response from the respondents mentioned in the interview.

Financial Aspects of Alliance
Cost of employing an alliance
Cost of Saving by forming an alliance
Saving cost by forming an alliance
Cost of alliance to the project
Cost Efficiency

Table 19: “Financial Aspects of Alliance” as a critical success factor

5.3.17 Geographic Location

Senior management also considered this critical success factor during their alliance selection. This was normally considered either when the organisation does not have a base where they wanted to execute a project, or when mobility of the alliance partner was required. Table 20 shows the response to “Geographic Significance” to the energy industry in South Africa.

Geographic Significance
Geographic location
Location

Table 20: “Geographical significance of Alliance” as a critical success factor

The classification of critical success factors from the respondents are mentioned in Table 23 (see Appendix C).

During the interview, the respondents were also prompted to provide other critical success factors which they might consider during the formation of an alliance (see Appendix A). The responses from the interview are mentioned below:

• Adaptability to changing circumstances. • Clear Communication. • Commitment to develop local skills. • Commitment. • Compatibility. • Corporate Culture. • Empowerment profile. • Flexibility. • Following the tendering Process. • Geographic location. • Give equitable chance to everyone to apply for the tender. • Good fit for roles and responsibilities. • Human Investment (Skills based).	• Knowledge of the partner. • Location, resources, special skills. • Long term relationship. • Partnership cooperation. • Price. • Professional relationship. • Profitability. • Reliability. • Same objectives and goals. • Strength & Weaknesses. • Technical ability, Broad-Based Black Economic Empowerment (BBBEE) profile. • Transparency. • Trust and Integrity. • Trust. • Trustworthiness. • Understanding.

5.3.18 Conclusion of Proposition 1

The analysis clearly shows that critical success factors were present in the successful strategic alliance between organisations. Hence this proposition can be accepted.

5.4 Discussion pertaining to Proposition 2

The second proposition states that strategic alliances are supported by senior management within the organisations. This proposition tries to identify the role of senior management in successful strategic alliances. The themes which were identified observed from the interview are shown in Table 4.

The literature review states that the role of senior management was critical and should be involved in all stages of the strategic alliance process (Devlin and Bleackley 1988). They also must recognize the importance of cooperation and should ensure participation is based on its own particular goals (Brouthers et al. 1995). Most of the alliances fail due to failure of management to critically assess its strategic logic before forging a relationship with another organisation (Rangan and Yoshino 1996).

Strategic alliances are often critical to the successful execution of business objectives. Organisations usually find it increasingly difficult to get the maximum value from their key alliances (Morgan 2007). The respondents were asked to comment on special incidents which occurred during the life of an alliance and the decision made by the management that significantly impacted business objectives or rules of engagement. Their responses are mentioned below in alphabetical order:

1) **Alignment of Technology:** Policies and procedures are critical during the life of an alliance. After the formation of an alliance, one organisation wanted to use technology which was adopted by their management. This was not acceptable to their counterpart. Finally the alliance partners

became disinterested in the project. Alignment of technology is important to organisations that consider policies and procedures as critical for an alliance to become successful – the alliance was not successful.

2) **Clear Expectations:** In an alliance between two organisations, the expectations of both alliance partners were different. Contractually it was not addressed well for both partners. In an alliance, there should be clear expectations for both parties – the alliance was not successful.

3) **Clear vision of management:** In an alliance, both organisations had common goals (i.e., change management). The job of the team was to motivate a project team and make them ready for a project. The consultants from both organisations did research as well as did their job. All the employees (participants) were motivated. Unfortunately the project was called off. The management did not have clear direction or vision in terms of this project – the alliance was successful, but the concept was not.

4) **Governance:** Mismanagement of governance procedures and processes could also create problems in an alliance. In an alliance, one organisation considered their counterpart's governance processes being too lengthy and too cumbersome. While their counterpart considers this as a requirement for a clean audit trial and also for King 2 reports for corporate governance – the alliance was successful, but there was no proper relationship between alliance partners.

5) **Lack of Trustworthiness:** There was an alliance with a South African organisation and an international organisation, in order to complete a project. After the formation of the alliance, the international organisation demanded a "bigger slice" of the profit. The South African organisation could not replace their counterpart as their client was in favour of the international organisation. In this alliance the South African organisation suffered the loss – the alliance was successful, but lack of trustworthiness caused tensions and loss of profitability in the alliance.

6) **Market Influences:** The market can spoil the nature of the alliance. In an alliance between two organisations, there was a fixed budget for a

project. The effect of the recession affected the cost of raw materials and changed the nature of the alliance. Market Influences have a huge implication on alliances especially relating to multiple projects. Trust is the only one solution for this – the alliance was successful, but extra funds had to be raised for the completion, resulting in a loss in profitability.

7) **Mitigating Internal Issues:** Internal issues can also cause negative effects in an alliance. The longer the issues exist internally, not only does it brings down the performance of the alliance, but it ultimately ends up affecting the end user, ending up with two unhappy entities. It is very important to deal with disagreement in an expedited manner. The management also has to maintain the human resource (Skills) – A successful alliance requires proper management of internal issues.

8) **Mutually agreeable solution:** There are often risks, miscommunication and debates in every alliance. In this situation both the parties in an alliance need to mutually agree on the best possible approach to a solution – the alliance was successful due to proper communication between alliance partners.

9) **Resource Management:** Optimising resources could lead to a successful alliance. In an alliance both organisations had to deliver a project on time. For reducing the risk one organisation brought extra staff on board. This was favourable for them due to their cost structure (i.e, the more staff they deploy for the project, the more profit they make). However their counterpart suffered the loss in profitability – the alliance was successful in terms of delivering the project, but resources were not managed efficiently.

The role of senior management was also considered in this study. During the interview, most of the respondents agreed upon the involvement of senior management. The respondents also agreed upon the fact that senior management needs to be approachable at all critical situations. The role of senior management was also important in selecting appropriate alliance partners. The response from the interview is mentioned below:

- Alliances are done through management level.
- Any successful manager or management team would always make themselves available. They could take a proactive role in solving a particular issue or provide advice to their team when their input is required.
- At the beginning the role of management is extremely important. I think they identify the business opportunity, and then agree on who the alliance members are going to be. Once the alliance gets to an execution mode, they lay down the parameters (like a map of how you are going to get to the end). Then they provide resources to execute it.
- Continuous meeting from senior management to check about how the alliance is going.
- Having a Clear path in an alliance.
- In the beginning management outlines the road map and the resources; thereafter the role of management is minimal. They have a very active role at the beginning. Then their job is to sit back and monitor the situation.
- It will be at various times (not all the time) i.e., at the entrance of the alliance, certain measurement periods and special occasions.
- Leadership and communication from the management.
- Management does not have necessary tools to evaluate the strategic alliance. They only measure the alliance by evaluating milestones or end product.
- Management have to come up with a good idea, make a good plan, commit to each other, and it has to flow from them down in the organisation. They have to be leaders to all the people.
- Management have to know what is to be accomplished, and the benefits of it.
- Management is more into an oversight role and are approachable when their support is needed.

- The role of senior management is a very important indicator for successful strategic alliances.
- Management needs to play an active role.
- Management needs to provide the resources.
- Management needs to understand what is going on in the alliance.
- Management should show their employees that they are committed to the alliance.
- Management supported all alliances. The engineering team takes care of the details for the project team.
- Management was very supportive and had good communication with their alliance partner to make this alliance successful.
- Management will only seek a strategic alliance when there is a deficiency in the business. If there are skills internally, they will not consider a strategic alliance.
- Management will support strategic alliances within boundaries. They will make sure that necessary rules and regulations are considered at the execution of strategic alliances.
- Managers put a lot of time and effort for negotiations.
- Proper communication from the management to both the teams is critical.
- Senior management definitely does have an important role to play.
- Senior management is the one who negotiate the alliance. They need to communicate in order to make the alliance successful.
- Senior management should be more than just business partners. They should respect each other and work well with each other.
- Senior management were very approachable, very negotiable.
- The alliance will be done on a senior management level. They handle all type of negotiations.
- The management has the final decision; however the work gets done by the technical staff. The management manages the alliance.

- The management of the company decides whether we go for the tender or not.
- The management team at the highest levels have to be committed to the alliance.
- The management was supportive.
- There has to be commitment from the Senior Management from both the parties.
- They were approachable whenever their support was required.
- You don't need management to do the work. The employees will take care of the work to be done.

During interviews the respondents mentioned the similar facts which were stated from the literature. All the respondents agreed on the role of senior management being critical during alliance formation and also at the execution of the alliance.

5.4.1 Conclusion of Proposition 2

The analysis clearly shows that successful strategic alliances were supported by senior management within the organisations. Hence this proposition can be accepted.

5.5 Conclusion

Intense competition in the marketplace is forcing organisations to examine different ways by which they could enhance or retain their competitive edge. Strategic alliance is one such option through which an organisation can leverage its resources (Rai 1996) to emerge as an effective competitor.

An attempt was done in this chapter to find the critical success factors used for successful strategic alliances in the energy industry in South Africa. This study was also aimed in utilising these success factors for the alliance in any industry (especially, when operations are their core business). During the interview the respondents agreed that there were critical success factors present in the alliances they participated in.

The respondents agreed that each alliance had challenges, problems and difficulties due to different philosophies (i.e., work, conducting business etc.) between organisations. As far as the objectives are met, and the client was satisfied the alliances were considered to be successful.

An attempt was also made to document the best practices that the organisations' followed during an alliance. The respondents admitted that currently there was no method or "tick list" of success factors that was used as a benchmark while participating in an alliance. The critical success factors used for an alliance were found to be trust, clear goals, partnership cooperation, alliance competence, goodwill, resources, experience, embedding of knowledge, partner compatibility, senior management, measuring performance, negotiation of alliance, expectations, potential partners, strategy formulation, financial aspects of alliance and geographic significance.

This study also focused on the rules of engagement considered during an alliance. The rules were in place to strengthen the alliance and also to obtain clear goals and objectives between the two organisations participating in an alliance. In this chapter, further discussions were done to identify critical success factors which they might consider during the formation of an alliance.

From the above discussion one can conclude that the two propositions were found to be acceptable. In the first sub-proposition, the research sets out to find whether there were critical success factors present in successful strategic alliances in the energy industry in South Africa. The research concludes that there were critical success factors present for any strategic alliances in the energy industry. Therefore Proposition 1 can be accepted.

The second sub-proposition states that strategic alliances are supported by senior management within the organisations. The research confirms that successful strategic alliances have senior management support within the organisation. Therefore Proposition 2 can be accepted.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This research report has identified the existence of critical success factors for strategic alliances in the energy industry in South Africa. It also analysed senior management's role in successful strategic alliances. This chapter concludes the finding in the study and affirms the propositions put forward based on the context in which the study was initiated. This is followed by the recommendations made to the various stakeholders identified for the research. Finally, suggestions for further research are identified and raised.

6.2 Conclusions of the study

The findings in this research confirm that critical success factors should be present in any successful strategic alliances (Whipple and Frankel 2000) in the energy sector in South Africa. While conducting the interviews, it was evident that the respondents currently did not have a critical success factors list to benchmark while forming the alliance. The respondents were using best practices and experiences along with their intuition to manage alliances.

The research also shows the importance of the involvement of senior management during the formation (Devlin and Bleackley 1988) of an alliance. From the interview's it was evident that successful strategic alliance requires proper leadership and constant monitoring to attain objectives of the alliance.

The results of this study therefore have enormous significance to any industry in South Africa, especially organisations dealing with operations as their primary business. This research can provide the organisations participating in an alliance, with a better understanding of their counterpart before entering into an alliance.

6.3 Recommendations

During the interview, it was found that currently the respondents did not have a list of critical success factors to benchmark, while forming an alliance. They always used best practices and intuition to select their alliance partners.

Literature reveals that once a potential alliance partner is identified by an organisation seeking to ally, the focus is only given to meet immediate requirements and not on a long term relationship (Werner H. Hoffmann and Roman Schlosser 2001). The due diligence often ignores critical success factors necessary for that alliance.

This study recommends that the respective people who are involved in alliances should follow a list of critical success factors according to the nature of the alliance.

6.3.1 Recommendation for Energy Industries in South Africa

- The senior management should compile a list of critical success factors which can be used to measure an organisation entering into an alliance.
- Clear goals must be set in order to clearly define the roles and objectives of both the organisations during the life of an alliance.
- Efficient communication is required for an alliance to be successful.
- Consideration must be given to both parties' opinions whilst conducting negotiations.
- Policies and Procedures should not be the only criteria in selecting partners. Other factors (i.e. trust, good fit for roles and responsibilities etc.) should also be considered in an alliance.

6.3.2 Recommendation for Alliance Organisations in South Africa

- Identify the alliance partners' business objectives.
- The organisation entering into an alliance should comply with the agreed policies and procedures.

- The utilisation of technologies and systems between both organisations needs to be agreeable to both parties prior to entering into an alliance.

- There should be clear communication and transparency during the life of the alliance.

- Internal risks within an alliance should be mitigated before it leads to misunderstanding. The performance of alliance depends upon the ability of senior management to mitigate the risk.

6.4 Suggestions for further research

The research cannot claim to have reviewed and evaluated all the literature available on strategic alliances. Although findings in this research have been informed by an extensive literature review, it is acknowledged that there are no actual figures (Koza and Lewin 2000) of successful strategic alliances recorded. The study of strategic alliances in the energy industry in South Africa is still in its initial stage.

The following are recommendations for further research in this area:

- One could further research the degree to which the identified critical success factors in the energy industry of South Africa are indeed associated with actual success.

- One could further research and provide recommendations to senior management about how to get more involved in strategic alliances to make them successful.

- The study can be broadened to find out whether the strategic plans of both organisations need to be aligned in order to have implementation of successful strategic alliances.

- One could further research on the factors of mutual agreement between organisations that can meet their performance expectations.

- One could further research on the application of critical success factors to international organisations who are preparing to participate in strategic alliances.

- The critical success factors from this research could be investigated further as part of the due diligence process. This could possibly translate into critical success factors for strategic alliances in any industry across South Africa.

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APPENDIX A

Actual Research Instrument: The Open Ended Questionnaire

This open ended questionnaire was prepared with the insight from the open questionnaire for strategic alliance used in Kauffman foundation (Kourilsky, Kauffman Center for Entrepreneurial and Foundation 1995). The questions for the purpose of this research are as follows:

Q1. How many strategic alliances (partnerships) has your company been involved during the last 5 years? Of those, how many are successful?

Q2. What were the critical success factors considered during the alliance?

Q3. Rate the critical success factors from Table 21 (1 being high and 5 being low)

Critical Success Factors	**Ranking 1 to 5** **1 being high and 5 being low**				
Alliance Competence	1	2	3	4	5
Clear Goals	1	2	3	4	5
Embedding of Knowledge	1	2	3	4	5
Expectations	1	2	3	4	5
Experience	1	2	3	4	5
Goodwill	1	2	3	4	5
Measuring Performance	1	2	3	4	5
Negotiation of Alliance	1	2	3	4	5

Partner Compatibility	1	2	3	4	5
Partnership Cooperation	1	2	3	4	5
Potential Partners	1	2	3	4	5
Resources	1	2	3	4	5
Senior Management	1	2	3	4	5
Strategy Formulation	1	2	3	4	5
Trust	1	2	3	4	5

Table 21: Critical Success Factors

Q4. Describe the rules of engagement of the strategic alliance and what was the average life span of alliances you participated in?

Q5. What are the most important 5 criteria used to select partners? Please be specific.

Q6. Do you recall special incidents in the life of this alliance that impacted significantly either the objectives or the rules of engagement?

Q7. What role did management take in order to make the alliance successful?

APPENDIX B

Consistency matrix

The Consistency Matrix is a mechanism for checking that one part of the Plan does not contradict another. It also works like a mileage chart as the same set of policies or destinations appear along the top of the matrix and down one side.

A consistency matrix is a powerful tool in assisting the researchers to align their sub-problems, the references that they use to investigate each sub-problem and the hypothesis or proposition or research question that resulted from the literature that they reviewed. It also lists the analysis method used to analyse the data. It also acts as a process model by carrying out each step of the research in the sequence shown in the consistency matrix shown in Table 22.

Table 22: Consistency matrix

The purpose of this research is to examine the success factors in strategic alliances, for the energy industry in South Africa.					
Sub-problem	**Literature Review**	**Propositions**	**Source of data**	**Type of data**	**Analysis**
The first sub-problem is to examine critical success factors in strategic alliances for the South African energy industry sector.	• (Allen 2007) • (Anderson and Bezuidenhoudt 1996) • (Bretherton 2003) • (Brouthers et al. 1995). • (Clark and Tracey 2004) • (Day 1995) • (Gadiesh et al. 2001) • (Iliev 2005) • (R. Gulati 1998) • (Whipple and Frankel 2000). • (Harrigan 2002) • (Zineldin and Dodourova 2005)	Critical success factors should be present in any organisations who participate in strategic alliances in order to perform successfully in their respective industry.	Actual interview with the decision makers in organisation for energy industry in South Africa.	The type of data will be mostly ordinal.	Content / thematic analysis was used for analysis.

The purpose of this research is to examine the success factors in strategic alliances, for the energy industry in South Africa.					
Sub-problem	**Literature Review**	**Propositions**	**Source of data**	**Type of data**	**Analysis**
The second sub-problem is to examine the role of senior management in order to sustain the alliances in the South African energy industry sector.	• (Cavusgil 1998) • (Das and Teng 1999) • (Inkpen and Ross 2001) • (Leech and Williams 2004). • (Leidecker and Bruno 1984) • (Monczka et al. 1998) • (Moore 1998) • (Park and Ungson 2001) • (Pekar 2003) • (Spekman et al. 1998) • (Whipple and Frankel 2000)	Strategic alliances are supported by senior management within the organisations.	Actual interview with the decision makers in organisation for energy industry in South Africa.	The type of data will be mostly ordinal.	Content / thematic analysis was used for analysis.

APPENDIX C

Classification of Critical Success Factors from the interview

Critical Success Factor Categories																	
Trust	**Clear Goals**	**Partnership Cooperation**	**Alliance Competence**	**Goodwill**	**Resources**	**Potential Partners**	**Experience**	**Embedding of Knowledge**	**Partner Compatibility**	**Senior Management**	**Measuring Performance**	**Negotiation of Alliance**	**Expectations**	**Strategy Formulation**	**Financial Aspects of Alliance**	**Geographic Significance**
Trust	Understanding of both parties	Organisation's ability for adaptation	Technical Ability	Market influences	Optimal Staffing for projects		Experience in the field	Expertise from strategic alliance	Commercial aspects recommended by Organisations	Senior Management Commitment	Accountability (performance measurement to evaluate the alliance)	Commitment to develop local skills	Mutual Respect	Honesty, trustworthiness, reliability are key	Cost of employing an alliance	Geographic location
	Open & Honest communication	Adhere to rules and regulations, procedures and policies	Empowerment Profile		Staffing / resources of project optimisation		Technical Ability	Internal knowledge base	Compliance to Eskom governance	Annual Meetings	Schedule deliverables	Professional Relationship	Honesty & Integrity	Roles & Responsibilities	Cost of Saving by forming an alliance	Location
	Way of handling disputes	Should not disrespect each other	Trustworthiness					Knowledge of the partner	Interest were aligned	Management Committee Meetings	Providing deliverables on time	Long term relationship	Transparent in nature	Delegation of Responsibilities	Saving cost by forming an alliance	
	Two organisations working as one	Leadership and communication	Communication					Embedment of Knowledge (Skills transfer)	Expectations established	Good experience & Skills	Schedule Compliance, integration and updating of status of	Technical Criteria	Excellent relationship with third parties	No Misunderstanding	Cost of alliance to the project	
	Common goals and Objectives	Having a clear path	BEE Profile					Exchange of skills		Identifying Strength & Weaknesses	Clear goal with respect to deliverables	Commercial Criteria	Governances and Procedures to follow	Written agreement	Cost Efficiency	
	Reliability	Good fit	Division of work							Corporate Culture	Profitability for both parties		Rules and policies of two organisations	By-Laws		
	Availability	Clearly defined roles	Legal Agreement							Same Objectives & Goals			Understanding regulations			
	Accessibility	Mature and well seasoned business practices	Team Structure							Commitment			Clear commercial policy & procedures			
	Levels of Performance	Relationship between alliance parthers, clients and end-users	Determination & Commitment of alliance partners							Integrity			Common goals and Expectations			
		Similar cultures between alliance and partners	Maintaining Respect & Relationship							Building up relationships			Understanding of rules and responsibilities			
			Following Tendering process							Getting to collaborate & cooperate to one another						
			Common Agreement													
			Trust & Support													
			Pricing Model													

Table 23 : Classification of Critical Success Factors from the interview