



# **The alignment of business and information technology strategy in the financial services sector in South Africa**

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**A research project submitted to the Gordon Institute of Business Science, University of Pretoria in partial fulfilment of the requirements for the degree**

**of**

**MASTERS OF BUSINESS ADMINISTRATION**

**13<sup>th</sup> of November 2008**

## **ABSTRACT**

Many studies have been done to determine the benefits that the alignment of business and IT strategies can achieve. This has become more prominent as IT has evolved. Previous studies have highlighted that this has been difficult to achieve. From these studies many factors have been identified that promote alignment. This study focuses on the people, process and organisational factors and has been done to determine which of these factors are the most important in promoting alignment between business and IT strategies and to determine the success that has been achieved through these factors. A survey of the financial services sector, both public and private sector was performed. The study highlighted that all of the factors are perceived as important and further highlighted the factors that should receive attention by those organisations to achieve alignment.

## DECLARATION

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

Andrew James Thackrah

Date:

## **ACKNOWLEDGMENTS**

I would like to acknowledge the input of my supervisor Dr. Peter Tobin whose valuable input has contributed significantly to this piece of work. To my colleague and friend Dave Evans, your experience and words of wisdom in the editing of this document have proved invaluable.

Finally, to my wife Anneke, and two boys, Andrew and Marcus, thanks for patience with my scarcity during the last six months.



## TABLE OF CONTENTS

|  |    |
|--|----|
| 1. Introduction to the Research Problem .....  | 2  |
| 1.1. Research Title .....  | 2  |
| 1.2. Problem Definition .....  | 2  |
| 1.2.1. Introduction .....  | 2  |
| 1.2.2. Research Motivation .....   | 4  |
| 1.2.3. Research Problem .....  | 6  |
| 2. Literature Review .....   | 7  |
| 2.1. Business Strategy .....   | 7  |
| 2.2. IT Strategy .....   | 8  |
| 2.3. Business – IT Alignment .....   | 10 |
| 2.4. Conclusion .....  | 13 |
| 3. Research Propositions .....   | 14 |
| 4. Research Methodology .....  | 16 |
| 4.1. Research Design .....   | 16 |
| 4.2. Population .....  | 17 |
| 4.3. Sample Size .....   | 18 |
| 4.4. Research Limitations .....  | 19 |
| 4.5. Timelines for the Research .....  | 19 |
| 5. Results .....   | 21 |
| 5.1. The Questionnaire .....   | 21 |
| 5.2. Participants in the Research .....  | 22 |
| 5.3. Response to the individual questions .....  | 22 |
| 5.4. Ranking of results .....  | 37 |
| 6. Discussion of Results .....   | 51 |
| 6.1. Organisational Background Information .....   | 51 |
| 6.2. Do leaders in financial institutions in South Africa consider alignment between their business strategy and their IT strategy important to their organisation meeting its objectives? ..... | 52 |
| 6.3. Do leaders in South African Financial Institutions consider the following factors as contributors to the successful alignment of business and IT strategies? .....                          | 59 |
| 6.3.1. People Factors .....  | 60 |
| 6.3.2. Process Factors .....   | 63 |
| 6.3.3. Organisational factors .....  | 67 |
| 6.3.4. Overall factor comparison .....   | 71 |
| 7. Conclusion .....  | 72 |
| 7.1. People, Process and Organisation Factors .....  | 75 |
| 7.2. Further Research .....  | 77 |
| 8. Reference List .....  | 79 |
| 9. Appendix 1 .....  | 83 |
| 10. Appendix 2 .....   | 90 |

## **1. Introduction to the Research Problem**

### **1.1. Research Title**

The Alignment of Business and Information Technology Strategy in the Financial Services Sector in South Africa.

### **1.2. Problem Definition**

#### **1.2.1. Introduction**

In today's organisations, IT is seen as a key strategic tool for the realisation of business objectives. There has, however, been much debate as to how the alignment of information technology strategy to business strategy plays a role in this. The issue of alignment between business strategy and information technology strategy has been the focus of debate for many years. The role of Information technology has been justified by many IT managers as an enabler of business strategy and thus enabling the business to meet its objectives. Various studies have been performed to try and determine whether an IT strategy that is aligned to the business strategy does actually generate business benefits and what are the most important factors that contribute towards alignment. Chan, Huff, Barclay and Copeland (1997, p. 125) remarked that "researchers and practitioners have long recognised the importance of IT-business alignment". Shupe and Behling (2006, p. 52) state that "there will be constant conflict if the IT strategy does not fit with the organisation's overall vision." The role of Chief Information Officers (CIO) has also come into question (Earl and Feeny. 1994) as Chief Executive Officers (CEO) are

questioning whether they are successfully leveraging adequate benefit from their IT investments.

When alignment does exist, however, executives will see tangible benefits (Chan *et al.* 1997).

Ives, Blake, Jarvenpaa and Mason (1993) also recognise alignment as being critical to the success of multinational firms in their competitive environment. The problem, however, has been the ability of organisations to successfully align their strategies. Baets (1992) argues that the following make the alignment / integration difficult.

1. Organisational structural deficiencies,
2. Communications problems between management, IT staff. Bashein and Markus (1997) confirm this with the finding that it is critical for IT Units not to isolate themselves from business,
3. Strategic management model deficiencies, and
4. The highly contingent nature of strategy.

The problem of strategy implementation has also hampered progress, with many organisations falling into the trap of thinking that once their strategy had been communicated that it was actually implemented (Beer and Eisenstat, 2000). If the organisations could successfully align these strategies there is potential to create much business value (Klein, 2006), competitive advantage being the main one.

Competitive advantage as defined by Wiseman and MacMillan (1984) has 5 attributes that result from business – IT strategy alignment;

1. Differentiation,
2. Cost,

3. Innovation,
4. Growth,
5. Alliance advantage.

Feeny and Wilcocks (1998) argue that to realise benefits from investment in IT, an organisation should concentrate on “IT capabilities that are core to the business’s future capacity to explore IT successfully.”

Recognising the problem of non alignment, Henderson and Venkatraman (1993) developed a strategic alignment model that addresses four “domains of strategic choice”; business strategy, information technology strategy, organisational infrastructure and processes which, when aligned successfully would produce business benefit. In support of this, Teo and King (1996, p. 309) find that alignment “ensures that the IT Function becomes an integral part of the organisation and not only an appendage”.

### **1.2.2. Research Motivation**

Most of the research referenced above took place in organisations in the USA. Gartlan and Shanks (2007) recognised this and performed research entitled ‘The Alignment of Business and Information Technology Strategy in Australia’. The aim was to determine the level of alignment in Australian organisations and to identify the factors that played a role in organisations realising alignment. The research was performed by Monash University in conjunction with Deloitte, Australia. The focus of the research was to build on previous work that ‘categorises the factors as either people, processes or organisations’ and then ‘use a cross industry survey of Australian organisations’ to determine the perceived benefits of alignment and the



perceived importance of each factor and how successful it was in promoting alignment'. The study defines the following factors that 'promote alignment between business and IT strategy';

1. Firm wide involvement – This is a bi-directional relationship between business and IT in the development of IT and business strategy.
2. Long term focus – Beyond 5 years. Both IT and business have to share the same focus.
3. Meeting of the minds – Business and IT must agree, at management level and reach consensus about organisation wide strategic objectives.
4. Clarity and consistency – The business goals of the organisations need to be supported by clear and consistent business and IT strategies.
5. Management skill and capability – The level of management skills and capability of the business and IT leaders in the organisation.
6. Alignment facilitating processes – The decision making processes need to be oriented in a manner that will facilitate alignment.
7. Organisational structure – The structures that are in place to support the alignment of IT and business strategies.
8. Organisational culture – The level to which the culture supports a collaborative process of strategy development within the organisation,
9. Communication – The level of communication between IT and business that will foster alignment.
10. IT as an organisational tool – The ideal that IT must strive to become an asset to the organisation rather than a cost.

Very few, if any studies have been performed in South Africa to determine the alignment of business and IT strategies. A scan of both the local and international environment confirmed this.

### **1.2.3. Research Problem**

The purpose of this research is to;

1. Determine whether South Africa financial organisations consider alignment between business and IT strategy important and benefits their organisation, and;
2. Determine which factors South African financial organisations should focus on to realise successful alignment.

## **2. Literature Review**

The literature study that is contained below defines and describes the concept of business and strategy, information technology strategy and business-IT strategy alignment. On the conclusion of each area a definition, for the purposes of this research project, is proposed.

### **2.1. Business Strategy**

Over the years there have been many attempts at defining business strategy. King (1978) states that strategic planning begins with the definition of the mission of the organisation. Once this has been defined the objectives of the organisation should be set, and King (1978, p. 30) summarises it as being “the general direction in which an organisation chooses to move”. Luftman & Brier (1999) define it as having three components. The first, where an organisation competes in markets with its products and services against competitors, is known as the business scope. Secondly, the organisation’s distinctive competencies should be identified. Lastly, the relationships and roles of management and shareholders/stakeholders are defined as business governance. Together these components make up the business strategy. Mintzberg (1978, p. 934) defines strategy as “a pattern in a stream of decisions” meaning that when a string of consistent decisions are made around a particular subject matter, this can be considered a strategy. Croteau and Bergeron (2001, p. 78) define it as “the outcome of decisions made to guide an organisation with respect to the environment, structure and processes that influence it’s organisational performance.

Competitive strategy according to Porter (1996), are things that an organisation chooses to do that differentiates it from its competitors. He goes on to define three “strategic positions” based on customer needs, customer accessibility and the variety of product. Together these positions determine the niche and therefore the strategy that an organisation will define to be successful. Similarly Henderson and Venkatraman (1993) argue that strategy involves both formulation and implementation based on where (market) and with what (product) to operate and secondly what skills and structure they will need to succeed.

Cragg, King and Hussin (2002) distinguish between large and small firms in their definition of business strategy with the main difference being that small firms have multiple business strategies versus the single strategy of the large firm.

For the purposes of this research the following definition, based on a synthesis of the definitions above, will be used;

*A business strategy is the setting of a future direction for the business, whilst considering the market it operates in, the competition and the resources it applies.*

## **2.2. IT Strategy**

Luftman and Brier (1999) define an IT strategy as having three components. Firstly, the technology standards that are adopted and integrated to form the technology architecture. Secondly, systemic competencies, which are those

capabilities that distinguish the IT services. Finally, the IT governance framework determines how risk and legislative compliance are handled.

Sabherwal and Chan (2001) differ slightly and define IT strategy as having the following three components;

1. IS (Information System) Strategy – Focus on business applications and how they align to business needs,
2. IT (Information Technology) Strategy – Focus on technology policies to ensure standards,
3. Information Management Strategy – Focus on structures and roles for the management of IT and IS.

Broadbent and Weill (1997) define an IT Strategy as a means to make IT investments that balance short term investment with future flexibility that support the business's objectives. Gadiesh and Gilbert (2001) introduce the concept of a strategic principle, to communicate, across the organisation, the focus of IT investments that support the flow of information that enable business processes. Huang and Hu (2007) argue that an IT strategy should support the day to day activities of the organisation, not from a technology perspective but from a business one. Kearns and Sabherwal (2007, p. 131) summarise IT strategy as IT projects. They go on to define IT projects as “mediating the relationship between business-IT strategic alignment and business effects of IT” and thus “translate into software and understanding of management's business changes” (Haekel and Nolan 1993, p. 125).

For the purposes of this research the following definition, based on a synthesis of the definitions above, will be used;

*An IT strategy is defined as the use of information technology resources to facilitate the flow of information to the right place at the right time to enable a business to deliver on its objectives.*

### **2.3. Business – IT Alignment**

Business – IT alignment has been the topic of many research efforts over the last 10 years or so. As IT has moved from a supporting role to an enabler, the subject of how IT can align to the business model has moved onto executives' desks. Business – IT alignment has been looked at in three ways previously (Kearns and Sabherwal 2007);

1. What was the outcome of the alignment?
2. What behaviours were supportive of the alignment? Huang and Hu (2007) defined four behaviours that were supportive of alignment: integrated planning, effective communication, active relationship management and institutionalised culture of management.
3. What were the enablers of the alignment? Luftman and Brier (1999) defined six enablers of alignment; senior executive support for IT, IT involvement in strategy development, IT understanding of the business, business/IT partnership, well prioritised IT projects and IT demonstrating leadership.

“The alignment of the strategies enables IS to support more effectively” (Teo and King, 1996 p. 185) and they go on to identify evolutionary steps that lead to full IT alignment as:

1. Administrative integration – little or no effort to use IT in the support of business initiatives,
2. Sequential integration – the business plan provides general directions for the IS plan,
3. Reciprocal integration – there is a interdependent relationship between the business plan and the IS plan,
4. Full integration – the business planning and IS planning processes are developed concurrently.

Chan *et al.* (1997) describe business – IT alignment as “the fit between business strategic orientation and information systems strategic orientation.”

Choe (2000, p. 258) describes business – IT alignment as “a way to exploit information systems” and as a “collaborative process among business strategy”.

Kearns and Lederer (2000) state that there are two types of IS alignment. Firstly, the alignment of the IS plan with the business plan. In the IS plan there should be direct reference to the stated mission, objectives and goals of the organisation. This is the traditional approach where business strategy drives IS strategy. Secondly, the alignment of the business plan with the IS plan is where the business strategy directly references the IS strategy giving clear recognition to the role that IS plays in the organisations objectives.

In a later study by Kearns and Lederer (2003) a resource-based approach to strategic IT alignment is introduced and they summarise by questioning the weak role the CEO plays, according to their study, in promoting alignment through strategic conversation.

Cragg et al. (2002) viewed IT alignment as a fit between business strategy and IT strategy. They went on to propose two definitions of fit;

1. Matching fit was defined using the differences between the business and IT strategies and,
2. Moderate fit was defined using the interaction between the two strategies.

Luftman (2003) proposes that the way to improve alignment is to build the right relationships between business and IT and ensure that each area has a good understanding of the other's area through appropriate training. Luftman (2003) goes on to propose six IT – business alignment criteria;

1. Communications maturity,
2. Competency / value measurements maturity,
3. Governance maturity,
4. Partnership maturity,
5. Technology scope maturity,
6. Skills maturity.

For the purposes of this research the following definition, based on a synthesis of the definitions above, will be used;



*IT alignment is the process of developing an information technology strategy that enables the business strategy and allows bidirectional collaboration between the two strategies.*

## **2.4. Conclusion**

It is clear that in all three areas, business strategy, IT strategy and the alignment of those strategies, there has been a large amount of research. This research has gone a long way to clearly define each area. However there is a shortage of research into the practical benefits of IT alignment and this study will add to the body of knowledge in this area.

### **3. Research Propositions**

This research will investigate how leaders in both IT and business;

1. Value the importance of business and IT strategy alignment,
2. Perceive the benefits of IT alignment.

These will be answered through the following two questions;

Research Question 1:

Do leaders in Financial Institutions in South Africa consider alignment between their business strategy and their IT strategy important to their organisation meeting their objectives?

Research Question 2:

Do leaders in South African Financial Institutions consider the following factors as contributors to the successful alignment of business and IT strategies?

1. Firm-wide involvement,
2. Long term focus,
3. Meeting of the minds,
4. Clarity and consistency,
5. Management skill and capability,
6. Alignment facilitating processes,
7. Organisational structure,
8. Organisational culture,
9. Communication, and

10. IT as an organisational tool.

## **4. Research Methodology**

### **4.1. Research Design**

Zikmund (2003, p. 6) defines business research as “the systematic and objective process of gathering, recording and analysing data for aid in making business decisions”. In the case of this research project, the aim was to delve into the financial services sector to gather data to determine whether there is evidence to support answers to the stated research questions.

To do this a number of research methods were available. The most appropriate, however for this research, was to follow a descriptive approach. Descriptive research as defined by Zikmund (2003, p. 55) is to “describe the characteristics of a population or phenomenon”.

As this is a replica research study, which was also descriptive in nature, a questionnaire (Appendix 1) modified from the one used in the research by Gartlan, J & Shanks, G (2007) was used to gather the required data. The study was initiated in Australia in an attempt to determine whether there was a difference between Australian and U.S organisations. The aim of this study was to look at it in the South African context. The study in South Africa was limited to the financial services sector due mainly to the time available to complete the research. By virtue of using a questionnaire to collect data on the subject the research used a quantitative approach.

A quantitative approach was decided upon for a number of reasons;

1. A survey was required to collect the relevant data from the identified organisations,
2. The data collected required quantifying through statistical analysis,
3. There are a large number of financial institutions in South Africa and to generalise the results to the population, an extensive survey of a representative sample was required,
4. The research completed in Australia was done in this manner.

The questionnaire (Appendix 1) was completed by performing structured telephonic interviews with business and IT leaders of institutions in the financial services sector in South Africa.

## **4.2. Population**

The population of relevance to this research was all the organisations that are in the financial services sector in South Africa. This is a large population as it contains traditional private and public sector banks, short and long term insurance companies and investment companies. To determine which organisations to include in the research the top 200 companies as defined by the Financial Mail's Top 200 SA Giants (Appendix 2) was used as a basis. This source was used due to it being recognised as one of the most credible rankings of organisations in South Africa and it listed all the major successful organisations. In addition to this, public sector finance organisations were also identified and included in the research, due to them also being major players in the sector.

### **4.3. Sample Size**

To determine the method of taking a sample Zikmund defines two alternate ways of taking a sample. The first option of probability sampling is defined by Zikmund (2003, p. 379)) as a “sampling technique in which every member of the population has a known, non-zero probability of selection”. In the case of the financial services sector in South Africa it was very difficult to identify all of the possible organisations and there was a distinct possibility that there would have been organisations that had a zero probability of selection.

A non probability sample, on the other hand, is defined by Zikmund (2003, p. 380) as a “sampling technique in which units of the sample are selected on the basis of personal judgement or convenience”. The aim of research was to interview business and IT leaders from the identified organisations. In many cases this would prove to be problematic due to the availability of these people. It was therefore decided that a non-probability convenience sample was to be used. A convenience sample is a technique where members of the sample are selected on personal choice or convenience (Zikmund, 2003, p. 380). The sample was drawn from the Financial Mail’s Top 200 SA Giants (Appendix 2). A total of 30 questionnaires were completed by interviewing business and IT leaders in the identified organisations. It was intended that Chief Executive Officers and Chief Information Officers were to be interviewed but in many cases they delegated the completion of the questionnaire to other senior colleagues in their organisations. In the case of all 30 respondents there were no errors or omissions in the data collected.

#### **4.4. Research Limitations**

Research limitations are factors that need to be recognised that could influence the outcome of a research project. The aim is to ensure that they are highlighted and communicated so that the results are communicated with them in mind. The following are possible limitations of this research;

1. The study only covers the financial sector and not a cross industry survey as in the case of the Australian research.
2. A number of financial organisations chose not to participate in the study.
3. An equal number of respondents from each organisation could not be achieved and the results of the research could be biased towards certain organisations.

#### **4.5. Timelines for the Research**

The timeline for this research was limited to approximately 5 and a half months, the time available after the research proposal was completed and assessed. A total of 15 organisations were identified each with a business and IT leader to respond to a questionnaire. Early into setting up the telephonic meetings it became apparent that a number of the organisations were not willing to participate for various reasons such as time, unwillingness to share the information and not being available in the time period required.

The respondents that were willing to participate were contacted and meetings scheduled. The interviews happened over a 2 month period, September and October 2008. The data collected was analysed at the beginning of October 2008

and the write up of the research started mid October 2008 and was completed in mid November 2008.



## **5. Results**

### **5.1. The Questionnaire**

The questionnaire was split up into four sections;

1. Background – This section was designed to get basic demographic information on the respondent to ensure that he/she fitted the profile of the intended respondents and that the organisation they were representing was in the financial services sector. Secondly, this section determined what their role was with regards to IT and business strategy development within their organisations. Thirdly, it got a view on what their thoughts were on alignment between IT and business strategy by asking a number of questions around what they thought the outcome of alignment was.
2. Business Strategy – To get their view on how well their business strategy was formulated and at what level the business strategy was operating.
3. IT Strategy – Similar to the previous section, to determine how well they thought the IT strategy was formulated.
4. Factors promoting alignment – Three sets of factors are introduced, people, process and organisational. Each of these factors were interrogated to see how important they were to alignment and then how successful the respondents felt their organisations had been in achieving them.

## 5.2. Participants in the Research

Table 1 shows the participating companies in the research and the number of participants and their role in each of those companies.

**Table1: Participant organisations in the research**

| Company                                | Number of business representatives | Number of IT representatives | Total     |
|--|------------------------------------|------------------------------|-----------|
| Standard Bank                          | 4                                  | 1                            | 5         |
| ABSA                                   | 2                                  | 3                            | 5         |
| Development Bank of Southern Africa    | 4                                  | 3                            | 7         |
| The Land Bank                          | 0                                  | 1                            | 1         |
| The Industrial Development Corporation | 2                                  | 1                            | 3         |
| African Bank                           | 0                                  | 1                            | 1         |
| Alexander Forbes                       | 0                                  | 2                            | 2         |
| Rand Merchant Bank                     | 0                                  | 1                            | 1         |
| First National Bank                    | 1                                  | 0                            | 1         |
| Investec                               | 0                                  | 1                            | 1         |
| Nedbank                                | 1                                  | 2                            | 3         |
|  | <b>14</b>                          | <b>16</b>                    | <b>30</b> |

## 5.3. Response to the individual questions

The following indicate the responses received from the respondents. In each case the possible responses have been coded to determine the mean of the responses.

In each case this will represent the average answer per question of all the respondents.

Questions 1, 2 and 3 collected biographical information and are discussed later in the report.

Q4. How important is IT to your organisation's operations?

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 6             | 24                 |

Mean = 4.80 therefore **Very Important**

Q6a. To what extent are you involved in business strategy formation within your organisation?

| Very uninvolved (1) | Uninvolved (2) | Neutral (3) | Involved(4) | Very involved (5) |
|---------------------|----------------|-------------|-------------|-------------------|
| 1                   | 3              | 1           | 13          | 12                |

Mean = 4.07 therefore **Involved**

Q6b. To what extent are you involved in information technology strategy formation within your organisation?

| Very uninvolved (1) | Uninvolved (2) | Neutral (3) | Involved(4) | Very involved (5) |
|---------------------|----------------|-------------|-------------|-------------------|
| 1                   | 3              | 4           | 6           | 16                |

Mean = 4.10 therefore **Involved**

Q7. How important do you think it is to achieve alignment between business and information technology strategy within your organisation?

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 7             | 23                 |

Mean = 4.77 therefore **Very Important**

Q8. Do you think alignment between business and information technology strategy achieves the following within your organisation?

a. Improved relationship between business and IT decision makers

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 0            | 1           | 15       | 14                 |

Mean = 4.43 therefore **Agree**

b. Improved communications between business and IT decision makers.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 0           | 17       | 12                 |

Mean = 4.33 therefore **Agree**

c. Improved perception of the IT function within the organisation.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 3           | 14       | 12                 |

Mean = 4.23 therefore **Agree**

d. Improved use of IT within organisation.

| <b>Strongly disagree (1)</b> | <b>Disagree (2)</b> | <b>Neutral (3)</b> | <b>Agree(4)</b> | <b>Strongly agree (5)</b> |
|------------------------------|---------------------|--------------------|-----------------|---------------------------|
| 0                            | 1                   | 3                  | 14              | 12                        |

Mean = 4.10 therefore **Agree**

e. Improved utilisation of IT resources to achieve organisational goals.

| <b>Strongly disagree (1)</b> | <b>Disagree (2)</b> | <b>Neutral (3)</b> | <b>Agree(4)</b> | <b>Strongly agree (5)</b> |
|------------------------------|---------------------|--------------------|-----------------|---------------------------|
| 0                            | 0                   | 4                  | 16              | 10                        |

Mean = 4.20 therefore **Agree**

f. Improved revenue.

| <b>Strongly disagree (1)</b> | <b>Disagree (2)</b> | <b>Neutral (3)</b> | <b>Agree(4)</b> | <b>Strongly agree (5)</b> |
|------------------------------|---------------------|--------------------|-----------------|---------------------------|
| 0                            | 3                   | 7                  | 16              | 4                         |

Mean = 3.70 therefore **Agree**

g. Reduction in IT costs.

| <b>Strongly disagree (1)</b> | <b>Disagree (2)</b> | <b>Neutral (3)</b> | <b>Agree(4)</b> | <b>Strongly agree (5)</b> |
|------------------------------|---------------------|--------------------|-----------------|---------------------------|
| 0                            | 4                   | 5                  | 16              | 5                         |

Mean = 3.73 therefore **Agree**

h. Reduction in overall costs.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 4           | 22       | 3                  |

Mean = 3.90 therefore **Agree**

i. Better IT returns on investment.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 5           | 17       | 7                  |

Mean = 4.00 therefore **Agree**

j. Better overall returns on investment.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 5           | 17       | 7                  |

Mean = 3.87 therefore **Agree**

k. Perceived improved use of IT innovation by the marketplace.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 8           | 12       | 9                  |

Mean = 3.97 therefore **Agree**

l. Positive effect on organisational brand.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 10          | 16       | 4                  |

Mean = 3.80 therefore **Agree**

m. Increased competitive advantage in the marketplace.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 4           | 20       | 5                  |

Mean = 3.97 therefore **Agree**

Q9. My organisation has a well formulated business strategy.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 0                     | 1            | 2           | 18       | 9                  |

Mean = 4.17 therefore **Agree**

Q11. My organisation's business strategy encapsulates the information technology strategy.

| Strongly disagree (1) | Disagree (2) | Neutral (3) | Agree(4) | Strongly agree (5) |
|-----------------------|--------------|-------------|----------|--------------------|
| 1                     | 2            | 3           | 16       | 8                  |

Mean = 3.93 therefore **Agree**

Q12. My organisation has a well formulated information technology strategy.

| <b>Strongly disagree (1)</b> | <b>Disagree (2)</b> | <b>Neutral (3)</b> | <b>Agree(4)</b> | <b>Strongly agree (5)</b> |
|------------------------------|---------------------|--------------------|-----------------|---------------------------|
| 0                            | 2                   | 3                  | 17              | 8                         |

Mean = 4.03 therefore **Agree**

Q14. How well aligned is the business and information technology strategy within your organisation?

| <b>Not well at all (1)</b> | <b>Not well (2)</b> | <b>Neutral (3)</b> | <b>Well(4)</b> | <b>Extremely well (5)</b> |
|----------------------------|---------------------|--------------------|----------------|---------------------------|
| 0                          | 5                   | 2                  | 23             | 0                         |

Mean = 3.60 therefore **Well**

Q15. How important are the following *people* factors in achieving the alignment between business strategy & information technology strategy within your organisation?

a. Meeting of the minds between business and IT decision makers.

| <b>Not important at all (1)</b> | <b>Not important (2)</b> | <b>Neutral (3)</b> | <b>Important (4)</b> | <b>Very important (5)</b> |
|---------------------------------|--------------------------|--------------------|----------------------|---------------------------|
| 0                               | 0                        | 0                  | 7                    | 23                        |

Mean = 4.77 therefore **Very Important**

b. Management skill & capability of business decision makers.

| <b>Not important at all (1)</b> | <b>Not important (2)</b> | <b>Neutral (3)</b> | <b>Important (4)</b> | <b>Very important (5)</b> |
|---------------------------------|--------------------------|--------------------|----------------------|---------------------------|
| 0                               | 0                        | 0                  | 14                   | 16                        |

Mean = 4.53 therefore **Very Important**



c. Management skill & capability of IT decision makers.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 12            | 18                 |

Mean = 4.60 therefore **Very Important**

d. Communication between business and IT decision makers.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 1           | 10            | 19                 |

Mean = 4.60 therefore **Very Important**

e. Firm wide active involvement in business and IT strategy formulation.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 1                 | 2           | 15            | 12                 |

Mean = 4.27 therefore **Important**

f. Involvement of business decision makers in IT strategy formulation.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 2           | 16            | 12                 |

Mean = 4.33 therefore **Important**

g. Involvement of IT decision makers in business strategy formulation.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 2                 | 0           | 19            | 9                  |

Mean = 4.17 therefore **Important**

Q16. How successful is your organisation in performing against each of these *people* alignment factors?

a. Meeting of the minds between business and IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 1                     | 4                | 7           | 14             | 4                   |

Mean = 3.53 therefore **Successful**

b. Management skill & capability of business decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 1                | 4           | 22             | 3                   |

Mean = 3.90 therefore **Successful**

c. Management skill & capability of IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 2                | 9           | 16             | 3                   |

Mean = 3.67 therefore **Successful**

d. Communication between business and IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 7                | 8           | 14             | 1                   |

Mean = 3.30 therefore **Neutral**

e. Firm wide active involvement in business and IT strategy formulation.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 8                | 11          | 10             | 1                   |

Mean = 3.13 therefore **Neutral**

f. Involvement of business decision makers in IT strategy formulation.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 9                | 14          | 6              | 1                   |

Mean = 2.97 therefore **Neutral**

g. Involvement of IT decision makers in business strategy formulation.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 10               | 8           | 11             | 1                   |

Mean = 3.10 therefore **Neutral**

Q17. How important are the following **process** factors in achieving the alignment between business strategy & information technology strategy within your organisation?

a. A process which promotes clarity and consistency.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 13            | 17                 |

Mean = 4.57 therefore **Very Important**

b. A process that ensures IT strategy goals are linked with business goals.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 11            | 19                 |

Mean = 4.63 therefore **Very Important**

c. A process that ensures business goals are linked to IT strategy goals.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 1                 | 2           | 15            | 12                 |

Mean = 4.27 therefore **Important**

d. The availability of a formal process which facilitates alignment.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 1           | 12            | 17                 |

Mean = 4.53 therefore **Very Important**

e. Formal communication processes in place between business and IT decision makers.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 14            | 16                 |

Mean = 4.53 therefore **Very Important**

f. A formal process that ensures business strategy has a long term (5 years +) focus.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 1           | 13            | 16                 |

Mean = 4.50 therefore **Very Important**

g. A formal process that ensures IT strategy has a long term (5 years +) focus.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 1           | 14            | 15                 |

Mean = 4.47 therefore **Important**

Q18. How successful is your organisation in performing against each of these **process** alignment factors?

a. A process which promotes clarity and consistency.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 6                | 7           | 14             | 3                   |

Mean = 3.47 therefore **Neutral**

b. A process that ensures IT strategy goals are linked with business goals.

| <b>Very unsuccessful (1)</b> | <b>Unsuccessful (2)</b> | <b>Neutral (3)</b> | <b>Successful (4)</b> | <b>Very successful (5)</b> |
|------------------------------|-------------------------|--------------------|-----------------------|----------------------------|
| 0                            | 3                       | 8                  | 15                    | 4                          |

Mean = 3.67 therefore **Successful**

c. A process that ensures business goals are linked to IT strategy goals.

| <b>Very unsuccessful (1)</b> | <b>Unsuccessful (2)</b> | <b>Neutral (3)</b> | <b>Successful (4)</b> | <b>Very successful (5)</b> |
|------------------------------|-------------------------|--------------------|-----------------------|----------------------------|
| 0                            | 8                       | 7                  | 15                    | 0                          |

Mean = 3.23 therefore **Neutral**

d. The availability of a formal process which facilitates alignment.

| <b>Very unsuccessful (1)</b> | <b>Unsuccessful (2)</b> | <b>Neutral (3)</b> | <b>Successful (4)</b> | <b>Very successful (5)</b> |
|------------------------------|-------------------------|--------------------|-----------------------|----------------------------|
| 0                            | 6                       | 9                  | 13                    | 2                          |

Mean = 3.37 therefore **Neutral**

e. Formal communication processes in place between business and IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 6                | 3           | 19             | 2                   |

Mean = 3.57 therefore **Successful**

f. A formal process that ensures business strategy has a long term (5 years +) focus.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 6                | 1           | 20             | 3                   |

Mean = 3.67 therefore **Successful**

g. A formal process that ensures IT strategy has a long term (5 years +) focus.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 8                | 5           | 11             | 6                   |

Mean = 3.50 therefore **Successful**

Q19. How important are the following **organisational** factors in achieving the alignment between business strategy & information technology strategy within your organisation?

a. An organisational structure which facilitates alignment of business and IT decision makers.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 1                 | 1           | 11            | 17                 |

Mean = 4.47 therefore **Important**

b. An organisational culture which facilitates alignment between business and IT decision makers.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 9             | 21                 |

Mean = 4.70 therefore **Very Important**

c. The view that IT is an innovative organisational tool as opposed to a cost centre.

| Not important at all (1) | Not important (2) | Neutral (3) | Important (4) | Very important (5) |
|--------------------------|-------------------|-------------|---------------|--------------------|
| 0                        | 0                 | 0           | 13            | 17                 |

Mean = 4.57 therefore **Very Important**

Q20. How successful is your organisation in performing against each of these **organisational** alignment factors?

a. An organisational structure which facilitates alignment of business and IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 1                     | 6                | 4           | 17             | 2                   |

Mean = 3.43 therefore **Neutral**



b. An organisational culture which facilitates alignment between business and IT decision makers.

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 0                     | 11               | 4           | 14             | 1                   |

Mean = 3.17 therefore **Neutral**

c. The view that IT is an innovative organisational tool as opposed to a cost centre

| Very unsuccessful (1) | Unsuccessful (2) | Neutral (3) | Successful (4) | Very successful (5) |
|-----------------------|------------------|-------------|----------------|---------------------|
| 1                     | 13               | 6           | 8              | 2                   |

Mean = 2.90 therefore **Neutral**

#### 5.4. Ranking of results

Table 2 represents the ranking from high to low of questions where there are multiple components.

Question 8 identifies factors that the respondents see as being achieved by the alignment of business and IT strategy.

**Table 2: Ranking of importance perceived outcome of alignment**

|  |      |
|--|------|
| a. Improved relationship between business and IT decision makers   | 4.43 |
| b. Improved communications between business and IT decision makers | 4.33 |
| c. Improved perception of the IT function within the organisation  | 4.23 |

|   |      |
|---|------|
| e. Improved utilisation of IT resources to achieve organisational goals | 4.20 |
| d. Improved use of IT within organisation                               | 4.10 |
| i. Better IT returns on investment                                      | 4.00 |
| k. Perceived improved use of IT innovation by the marketplace           | 3.97 |
| m. Increased competitive advantage in the marketplace                   | 3.97 |
| h. Reduction in overall costs   | 3.90 |
| j. Better overall returns on investment                                 | 3.87 |
| l. Positive effect on organisational brand                              | 3.80 |
| g. Reduction in IT costs  | 3.73 |
| f. Improved revenue   | 3.70 |

Question 15 identifies which **people** factors are important in achieving the alignment between business and IT strategy. Table 3 shows the ranking in order of importance that the respondents feel are appropriate to their organisations.

**Table 3: Ranking of importance of people factors**

|   |      |
|---|------|
| a. Meeting of the minds between business and IT decision makers         | 4.77 |
| c. Management skill & capability of IT decision makers                  | 4.60 |
| d. Communication between business and IT decision makers                | 4.60 |
| b. Management skill & capability of business decision makers            | 4.53 |
| f. Involvement of business decision makers in IT strategy formulation   | 4.33 |
| e. Firm wide active involvement in business and IT strategy formulation | 4.27 |

|   |      |
|---|------|
| g. Involvement of IT decision makers in business strategy formulation | 4.17 |
|---|------|

Question 16 identifies which of these **people** factors the respondents consider their organisations have achieved most successfully. Table 4 ranks the success of these people factors.

**Table 4: Ranking of success of people factors**

|   |      |
|---|------|
| b. Management skill & capability of business decision makers            | 3.90 |
| c. Management skill & capability of IT decision makers                  | 3.67 |
| a. Meeting of the minds between business and IT decision makers         | 3.53 |
| d. Communication between business and IT decision makers                | 3.30 |
| e. Firm wide active involvement in business and IT strategy formulation | 3.13 |
| g. Involvement of IT decision makers in business strategy formulation   | 3.10 |
| f. Involvement of business decision makers in IT strategy formulation   | 2.97 |

Question 17 identifies which **process** factors are important in achieving the alignment between business and IT strategy. In table 5 they are ranked to show the most important.

**Table 5: Ranking of importance of process factors**

|  |      |
|--|------|
| b. A process that ensures IT strategy goals are linked with business goals | 4.63 |
| a. A process which promotes clarity & consistency                          | 4.57 |
| d. The availability of a formal process which facilitates alignment        | 4.53 |

|  |      |
|--|------|
| e. Formal communication processes in place between business and IT decision makers   | 4.53 |
| f. A formal process that ensures business strategy has a long term (5 years +) focus | 4.50 |
| g. A formal process that ensures IT strategy has a long term (5 years +) focus       | 4.47 |
| c. A process that ensures business goals are linked to IT strategy goals             | 4.27 |

Question 18 shows which of these **process** factors the respondents consider their organisations have achieved most successfully. Table 6 ranks the success of these process factors.

**Table 6: Ranking of success of process factors**

|  |      |
|--|------|
| b. A process that ensures IT strategy goals are linked with business goals           | 3.67 |
| f. A formal process that ensures business strategy has a long term (5 years +) focus | 3.67 |
| e. Formal communication processes in place between business and IT decision makers   | 3.57 |
| g. A formal process that ensures IT strategy has a long term (5 years +) focus       | 3.50 |
| a. A process which promotes clarity & consistency                                    | 3.47 |
| d. The availability of a formal process which facilitates alignment                  | 3.37 |
| c. A process that ensures business goals are linked to IT strategy goals             | 3.23 |

Question 19 identifies which **organisational** factors are important in achieving the alignment between business and IT strategy. In table 7 they are ranked to show the most important.

**Table 7: Ranking of importance of organisational factors**

|  |      |
|--|------|
| b. An organisational culture which facilitates alignment between business and IT decision makers | 4.70 |
| c. The view that IT is an innovative organisational tool as opposed to a cost centre             | 4.57 |
| a. An organisational structure which facilitates alignment of business and IT decision makers    | 4.47 |

Question 20 shows which of these **organisational** factors the respondents consider their organisations have successfully achieved. Table 8 ranks the success of these organisational factors.

**Table 8: Ranking of success of organisational factors**

|  |      |
|--|------|
| a. An organisational structure which facilitates alignment of business and IT decision makers    | 3.43 |
| b. An organisational culture which facilitates alignment between business and IT decision makers | 3.17 |
| c. The view that IT is an innovative organisational tool as opposed to a cost centre             | 2.90 |

Table 9 groups the **people, process and organisational** factors together and ranks them in order of importance.

**Table 9: Overall ranking of importance of all 3 factors**

|  |      |
|--|------|
| 15a. Meeting of the minds between business and IT decision makers                                  | 4.77 |
| 19b. An organisational culture which facilitates alignment between business and IT decision makers | 4.70 |
| 17b. A process that ensures IT strategy goals are linked with business goals                       | 4.63 |
| 15c. Management skill & capability of IT decision makers   | 4.60 |
| 15d. Communication between business and IT decision makers   | 4.60 |
| 17a. A process which promotes clarity & consistency  | 4.57 |
| 19c. The view that IT is an innovative organisational tool as opposed to a cost centre             | 4.57 |
| 15b. Management skill & capability of business decision makers                                     | 4.53 |
| 17d. The availability of a formal process which facilitates alignment                              | 4.53 |
| 17e. Formal communication processes in place between business and IT decision makers               | 4.53 |
| 17f. A formal process that ensures business strategy has a long term (5 years +) focus             | 4.50 |
| 17g. A formal process that ensures IT strategy has a long term (5 years +) focus                   | 4.47 |
| 19a. An organisational structure which facilitates alignment of business and IT decision makers    | 4.47 |
| 15f. Involvement of business decision makers in IT strategy formulation                            | 4.33 |
| 15e. Firm wide active involvement in business and IT strategy formulation                          | 4.27 |
| 17c. A process that ensures business goals are linked to IT strategy goals                         | 4.27 |
| 15g. Involvement of IT decision makers in business strategy formulation                            | 4.17 |

Table 10 shows the ranking of the responses to the perceived success of each of the people, process and organisational factors.

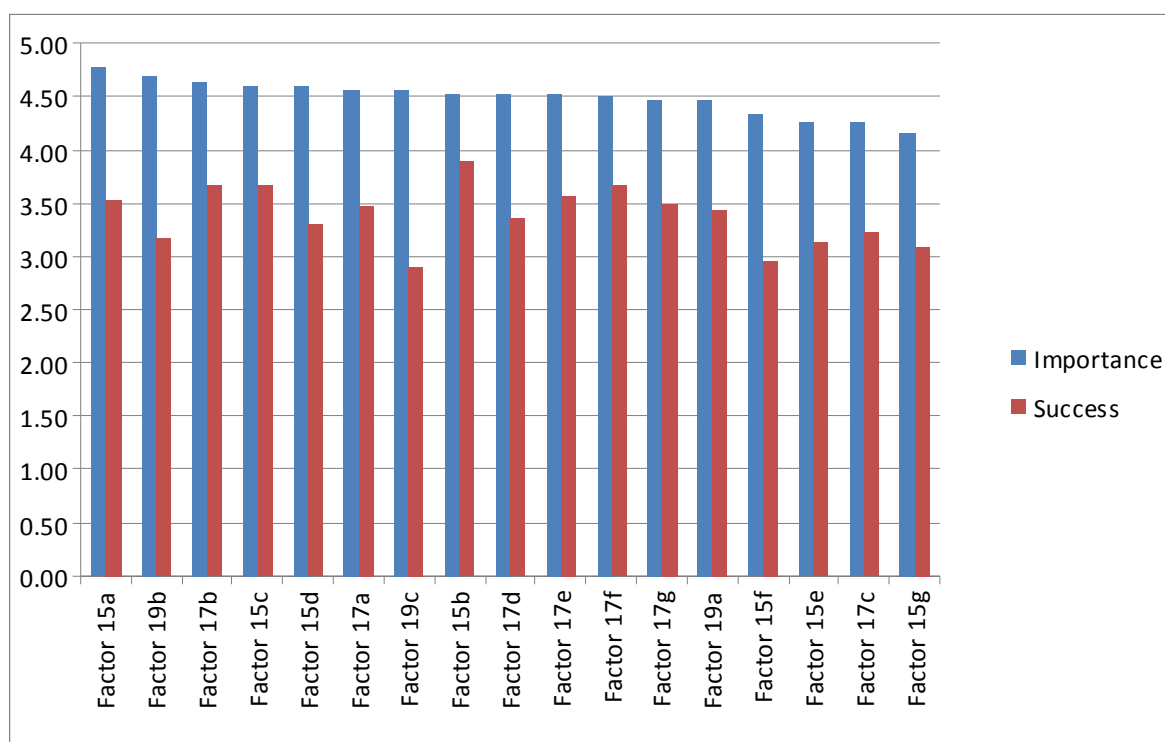
**Table 10: Overall ranking of success of all 3 factors**

|  |      |
|--|------|
| 16b. Management skill & capability of business decision makers                                     | 3.90 |
| 16c. Management skill & capability of IT decision makers   | 3.67 |
| 18b. A process that ensures IT strategy goals are linked with business goals                       | 3.67 |
| 18f. A formal process that ensures business strategy has a long term (5 years +) focus             | 3.67 |
| 18e. Formal communication processes in place between business and IT decision makers               | 3.57 |
| 16a. Meeting of the minds between business and IT decision makers                                  | 3.53 |
| 18g. A formal process that ensures IT strategy has a long term (5 years +) focus                   | 3.50 |
| 18a. A process which promotes clarity & consistency  | 3.47 |
| 20a. An organisational structure which facilitates alignment of business and IT decision makers    | 3.43 |
| 18d. The availability of a formal process which facilitates alignment                              | 3.37 |
| 16d. Communication between business and IT decision makers   | 3.30 |
| 18c. A process that ensures business goals are linked to IT strategy goals                         | 3.23 |
| 20b. An organisational culture which facilitates alignment between business and IT decision makers | 3.17 |
| 16e. Firm wide active involvement in business and IT strategy formulation                          | 3.13 |
| 16g. Involvement of IT decision makers in business strategy formulation                            | 3.10 |

|  |      |
|--|------|
| 16f. Involvement of business decision makers in IT strategy formulation                | 2.97 |
| 20c. The view that IT is an innovative organisational tool as opposed to a cost centre | 2.90 |

A summary of the above ranking is contained in figure 1.

**Figure 1: Summary of rankings of all 3 factors**



Cross tabulations were done to determine which paired outcomes occurred more frequently. The cross tabulations were done to identify if there were any pairings (Important/successful, Important/Unsuccessful, Unimportant/Successful and Unimportant/Unsuccessful) that were dominant. These were further segmented between business and IT leaders to determine whether there was any difference of opinion between them. The results are represented in Table 11 – 16.



**Table 11: Cross tabulation of business leaders response to people factors**

|  | Business      |            |              |            |
|--|---------------|------------|--------------|------------|
|  | Not important |            | Important    |            |
|  | Unsuccessful  | Successful | Unsuccessful | Successful |
| Meeting of the minds between business and IT                       |               |            | 3            | 7          |
| Management skill and capability of business decision makers        |               |            | 1            | 12         |
| Management skill and capability of IT decision makers              |               |            | 1            | 8          |
| Communication between business and IT decision makers              |               |            | 5            | 5          |
| Firm wide involvement in business and IT strategy formulation      |               |            | 4            | 6          |
| Involvement of business decision makers in IT strategy formulation |               |            | 6            | 5          |
| Involvement of IT decision makers in business strategy formulation | 1             | 1          | 6            | 5          |
|  | 1             | 1          | 26           | 48         |

**Table 12: Cross tabulation of business leaders response to process factors**

|   | Business      |            |              |            |
|---|---------------|------------|--------------|------------|
|   | Not important |            | Important    |            |
|   | Unsuccessful  | Successful | Unsuccessful | Successful |
| A process that provides clarity and consistency                                 |               |            | 5            | 8          |
| A process that ensures IT strategy goals are linked with business goals         |               |            | 3            | 8          |
| A process that ensures business goals are linked to IT strategy goals           |               |            | 5            | 7          |
| The availability of a formal process which facilitates alignment                |               |            | 3            | 5          |
| Formal communication processes in place between business and IT decision makers |               |            | 3            | 11         |
| A formal process that ensures business strategy has a long term focus           |               |            | 2            | 12         |
| A formal process that ensures IT strategy has a long term focus                 |               |            | 3            | 9          |
|   | 0             | 0          | 24           | 60         |

**Table 13: Cross tabulation of business leaders response to organisational factors**

|   | Business      |            |              |            |
|---|---------------|------------|--------------|------------|
|   | Not important |            | Important    |            |
|   | Unsuccessful  | Successful | Unsuccessful | Successful |
| An organisational structure which facilitates alignment between business and IT decision makers |               |            | 3            | 9          |
| An organisational culture which facilitates alignment between business and IT decision makers   |               |            | 5            | 6          |
| The view that IT is an innovative organisational tool as opposed to a cost center               |               |            | 5            | 6          |
|   | 0             | 0          | 13           | 21         |

**Table 14: Cross tabulation of IT leaders response to people factors**

|  | IT            |            |              |            |
|--|---------------|------------|--------------|------------|
|  | Not important |            | Important    |            |
|  | Unsuccessful  | Successful | Unsuccessful | Successful |
| Meeting of the minds between business and IT                       |               |            | 1            | 9          |
| Management skill and capability of business decision makers        |               |            |              | 10         |
| Management skill and capability of IT decision makers              |               |            | 1            | 7          |
| Communication between business and IT decision makers              |               |            | 2            | 7          |
| Firm wide involvement in business and IT strategy formulation      |               |            | 3            | 5          |
| Involvement of business decision makers in IT strategy formulation |               |            | 4            | 3          |
| Involvement of IT decision makers in business strategy formulation |               |            | 4            | 3          |
|  | 0             | 0          | 15           | 44         |

**Table 15: Cross tabulation of IT leaders response to process factors**

|   | IT            |            |              |            |
|---|---------------|------------|--------------|------------|
|   | Not important |            | Important    |            |
|   | Unsuccessful  | Successful | Unsuccessful | Successful |
| A process that provides clarity and consistency                                 |               |            | 2            | 7          |
| A process that ensures IT strategy goals are linked with business goals         |               |            | 1            | 9          |
| A process that ensures business goals are linked to IT strategy goals           |               |            | 2            | 8          |
| The availability of a formal process which facilitates alignment                |               |            | 3            | 8          |
| Formal communication processes in place between business and IT decision makers |               |            | 3            | 8          |
| A formal process that ensures business strategy has a long term focus           |               |            | 3            | 9          |
| A formal process that ensures IT strategy has a long term focus                 |               |            | 5            | 7          |
|   | 0             | 0          | 19           | 56         |

**Table 16: Cross tabulation of IT leaders response to organisational factors**

|   | IT            |            |              |            |
|---|---------------|------------|--------------|------------|
|   | Not important |            | Important    |            |
|   | Unsuccessful  | Successful | Unsuccessful | Successful |
| An organisational structure which facilitates alignment between business and IT decision makers |               | 1          | 3            | 7          |
| An organisational culture which facilitates alignment between business and IT decision makers   |               |            | 6            | 7          |
| The view that IT is an innovative organisational tool as opposed to a cost center               |               |            | 8            | 3          |
|   | 0             | 1          | 17           | 17         |

## 6. Discussion of Results

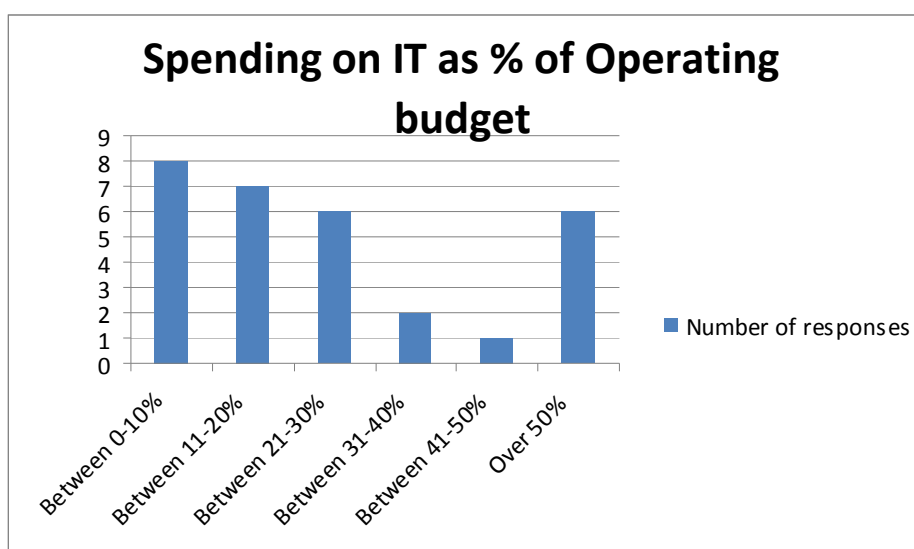
This chapter will discuss the findings from the research that was carried out. Each of the research propositions will be interrogated to determine whether there is sufficient evidence to support it. The questions raised in the research questionnaire will be used to find support for the evidence.

### 6.1. Organisational Background Information

The first section of the questionnaire collected information about the respondent's perception of alignment between business and IT strategy. There were 30 respondents to the questionnaire of which 47% indicated they were business leaders and 53% IT leaders. Respondents were all from the financial services sector in South Africa. All the respondents indicated that the organisations they represented primarily had the majority of their business in South Africa.

Figure 2 shows IT spending patterns, expressed as a percentage of operating budget.

**Figure 2: IT spend in financial institutions**



The results don't identify a clear trend within these organisations. The low percentages in the 31 to 50% ranges, and the lack of any trend, are surprising, given how extensively IT is used in the financial services sector to gain competitive advantage.

## **6.2. Do leaders in financial institutions in South Africa consider alignment between their business strategy and their IT strategy important to their organisation meeting its objectives?**

The following questions were posed to the respondents to determine whether leaders in financial institutions in South Africa consider alignment between their business strategy and their IT strategy important to their organisation in meeting its objectives.

Question 4. How important is IT to your organisations operations?

When converting the scale of not important at all, not important, neutral, important and very important to a Likert scale, an average of 4.80 resulted. 24 respondents answered very important and 6 important. There were no responses in the bottom three categories.

This clearly indicates that all the respondents from the participating financial institutions identified IT as key to the success of their operations. This is to be expected as most financial institutions, not only in South Africa, but globally, leverage technology for competitive advantage. This supports the view of Broadbent & Weill (1997), who define "an IT strategy as a means to make IT



investments that balance short term investment with future flexibility that support business's objectives.”

Question 7. How important do you think it is to achieve alignment between business and information technology strategy within your organisation?

An average of 4.77 resulted here, again indicating that both business and IT leaders understand the importance of alignment to achieve business objectives. It is possible that the phrasing of the question led the respondents to answer in a positive manner because most financial institutions invest heavily in IT and therefore would automatically think that alignment is important.

Kearns & Sabeherwal (2007) defined three ways of looking at IT alignment;

1. What is the outcome of alignment? – Question 8 looks at a number of outcomes of alignment between business and IT strategy. Two of the outcomes are externally focussed and can be linked to whether an organisation is meeting its business objectives.
  - a. Positive effect on organisational brand – Although this scored a 3.80 which indicated that leaders agree that it is achieved through alignment, when looking at the overall ranking, it is the third lowest. This would indicate that it is not seen as one of the most important outcomes. This could be attributed to the fact that leaders do not see the link between investment in IT and an improving brand image.
  - b. Increased competitive advantage in the market place – This outcome ranks 8<sup>th</sup> out of 13. It scored 3.97 which highlights that they agree

that it is an outcome of alignment but not as strongly as other internal outcomes.

2. What behaviours are supportive of alignment? The four behaviours defined by Huang & Hu (2007) will be discussed;

- a. Integrated planning – This highlights the level of collaboration between business and IT to achieve alignment. Question 15 looks at a number of people factors that promote alignment. Some of these factors are linked to integrated planning. Meeting of the minds between business and IT decision makers ranks as the most important people factor to achieve alignment. This can be interpreted as business and IT sitting together to develop their strategies in an integrated manner. Firm-wide active involvement in business and IT strategy formulation ranked as the 6th most important people factor, being seen as very important. This talks to the importance of collaboration that is required when the strategies are developed. The inference made from this is that the business and IT strategies cannot be developed in isolation as they are so intertwined in financial institutions. The involvement of IT decision makers in business strategy formulation and that of business decision makers in IT strategy formulation also came out as very important. It is clear that to develop a coherent and aligned IT strategy, business leaders need to play an active role. They will be able to provide insight into the business objectives whilst the IT leaders will contribute their

knowledge of technology and applications to enable the business objectives to be met.

- b. Effective communication – Also in question 15, one of the people factors was the communication between business and IT decision makers. This factor rated the 3<sup>rd</sup> most important people factor that helps achieve alignment. In question 17, process factors were evaluated for the importance in helping to achieve alignment. Formal communication processes in place between business and IT decision makers ranked 3<sup>rd</sup> as very important amongst all the process factors. This indicates that communication is a key component to the alignment.
- c. Active relationship management – This is the process of maintaining and enhancing relationships once they have been built. It links very closely to effective communication and questions 15 and 17 and their results apply. The trust between business and IT can only be realised if both parties demonstrate commitment over time. The relationship will thus improve.
- d. Institutionalised culture of management – Question 19 concentrated on the organisational factors that promote alignment. Organisational culture was found to be the most important factor as it ranked first in the questionnaire results. The culture required is one of collaboration, as there needs to be a constant conversation occurring at the leadership level. The second factor was the view that IT be seen as an innovative tool rather than a cost centre. This tends to happen in

many organisations especially when IT reports to the Chief Financial Officer and results in the management of cost rather than value. IT strives to move out of this mould but business's view is often very difficult to change. The third factor, organisational culture, is also seen as important to alignment but less important than the first two. This could be due to the fact that the first two factors are tangible: the structure and costs can clearly be seen as they are reported on at many levels including the annual financial statements. Culture, on the other hand is intangible, and even though the respondents say it is very important, it will be difficult to determine what components of culture will improve alignment.

3. What were the enablers of alignment? Luftman & Brier (1999) defined six enablers of alignment;
  - a. Senior executive support for IT – To be able to support IT and its initiatives, senior executives need to have an adequate understanding of IT. Question 15b interrogates the management skill and capability of business decision makers. The responses indicate that it is very important as it ranked 4<sup>th</sup> of the people factors.
  - b. IT involvement in strategy development – Questions 15g determines whether IT involvement in business strategy development is important. The result obtained from the questionnaire indicates that it is seen as very important, although, when ranked against the other process factors it ranks last. This could be due to IT leaders feeling they only have to understand the business strategy, rather than

partake in its development. IT leaders do, however, need to play a role. As there is a huge dependency on technology in Banks, it is advisable for IT leaders to play a role. This would ensure that whatever business is planning can be enabled through the use of technology and systems.

- c. IT understanding of business – As mentioned in the previous paragraph this has to go beyond a simple understanding of business. In an organisation where IT is not a driver/enabler of business, such as the automotive sales industry, an understanding would probably suffice. Question 15f looks at the importance of business leaders participating in the development of IT strategy. The findings support that it is also seen as very important. IT can be a silo with the aim to manage its cost to a minimum. This mindset needs to be changed and relationships built.
- d. Business/IT partnership – To determine how important it is to achieve alignment four questions were posed. Question 15a was to find out how important a meeting of the minds between business and IT decision makers was. On the ranking of the people factors, this came out at number one, being very important. This implies more than just occasional discussions between the two parties but more of an integrated strategic discussion where the one has input into the other's strategic plans. Question 15e focussed on the firm-wide involvement in business and IT strategy formulation. The idea here is that the strategic discussion be opened up beyond just IT and

business leaders, also involving other areas of the business. This ranked 6th, as very important. Questions 15f and 15g looked at the involvement of business decision makers in IT strategy formulation and vice versa. Again both came out as very important.

- e. Well prioritised IT projects – IT has, over the years, got a bad name due to large projects going over budget and time. In many cases, business has become frustrated with this and has the attitude that IT should just be seen as a necessary evil and treated as a cost centre. The result of question 19c, (very important), show that IT needs to move out of that mould to be seen as an innovate tool to support business rather than as a cost centre. To ensure that this can be achieved the IT strategy should be as long term as realistic. This is highlighted by the response to question 17g, which asks how important it is to have a formal process that ensures IT strategy has a long term focus. Again this comes out as very important, although only 2<sup>nd</sup> lowest on the importance list of process factors, but nonetheless very important.
- f. IT demonstrating leadership – To demonstrate leadership, IT leaders must have the appropriate management skills and capabilities. Question 15c asks how important this is. The result, very important, ranks 2<sup>nd</sup> on the list of people factors. This supports current thinking in organisations that IT needs to be represented as high up the organisation as possible. This explains why so many organisations have appointed Chief Information Officers and Chief Technology

Officers over the last few years. They now have the voice at executive level that is required to sustain the strategic discussion between IT and the business.

When answering the research question posed: “Do leaders in financial institutions in South Africa consider alignment between their business strategy and their IT strategy important to their organisation meeting its objectives?”, the data that has been gathered supports the finding that, yes, they do find it important. Without exception, in all questions the response is important. The challenge is to convert that will into action and ensure that IT enables the business through collaboration, communication and involvement by both business and IT in strategy development.

### **6.3. Do leaders in South African Financial Institutions consider the following factors as contributors to the successful alignment of business and IT strategies?**

The fourth section of the questionnaire addressed these factors. The factors as listed below were grouped in to three broad categories; people, process and organisation. Questions were asked from two angles. Firstly, how important they were seen to be in achieving alignment between IT and business strategy, and secondly how successful were their organisations at each of these factors. The responses were converted to a Likert scale and then ranked to determine the most important and most successful respectively.

### **6.3.1. People Factors**

The questionnaire asked respondents to rate the importance and success of the following people factors;

- a. Meeting of the minds between business and IT decision makers,
- b. Management skill and capability of business decision makers,
- c. Management skill and capability of IT decision makers,
- d. Communication between business and IT decision makers,
- e. Firm wide active involvement in business and IT strategy formulation,
- f. Involvement of business decision makers in IT strategy formulation,
- g. Involvement of IT decision makers in business strategy formulation.

On the Likert scale all seven people factors had a score of between 4 and 5, clearly indicating that these people factors are important in achieving alignment. Of the seven people factors the top three were: meeting of the minds between business and IT decision makers: communication between business and IT decision makers: and firm-wide active involvement in business and IT strategy formulation.

From a success perspective six of the seven people factors had average Likert scale ratings of between 3 and 4 indicating that they were successful. The only one rating below 3 was the success of the involvement of business decision makers in IT strategy formulation. The top three most successful factors were management skill and capability of decision makers, management skill and capability of IT decision makers and meeting of the minds between business and IT decision makers.



The following graph for the people factors shows the difference between how important the leaders perceive these factors and the success they have achieved.

**Figure 3: Difference between importance and success of people factors**

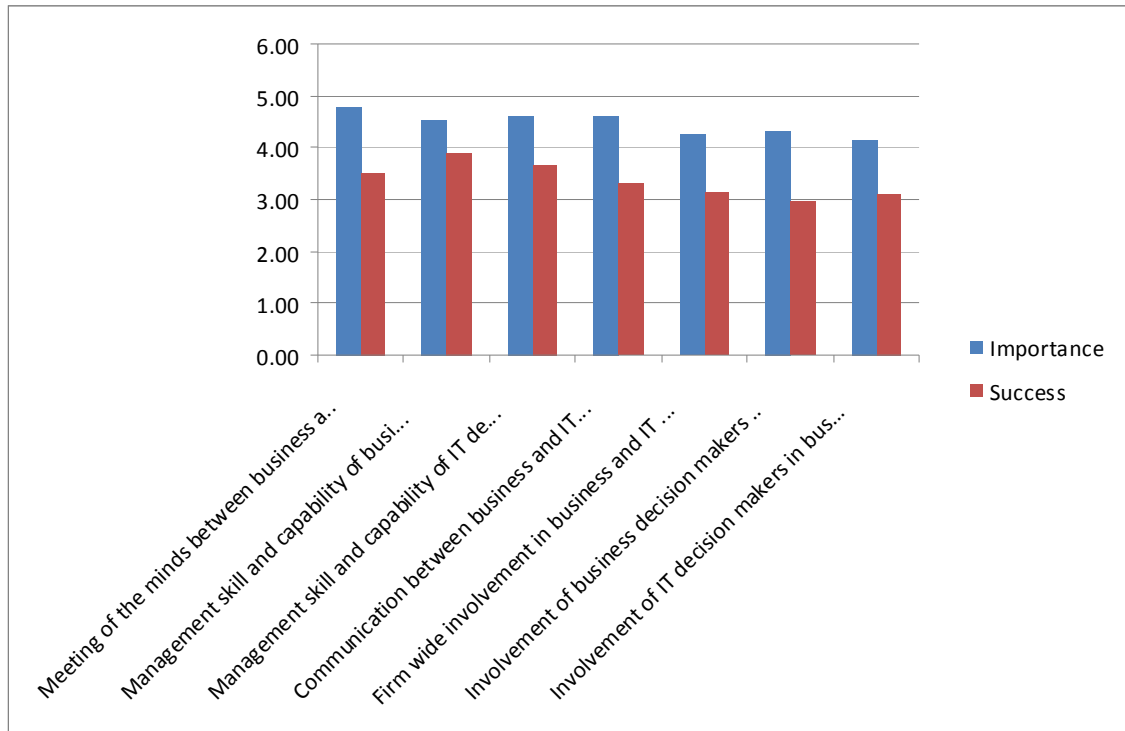


Figure 4 displays the cross tabulation for people factors. 68% (92 respondents) perceived the people factors to be important and successful in their organisations. However, 30% (41 respondents) stated that their organisations saw the people factors as important but unsuccessful. The remaining 2% (2 respondents) perceived them not to be important.

**Figure 4: People factors cross tabulation**

|                      |                     |                   |
|----------------------|---------------------|-------------------|
| <b>Important</b>     | <b>41</b>           | <b>92</b>         |
|                      | <b>1</b>            | <b>1</b>          |
| <b>Not Important</b> |                     |                   |
|                      | <b>Unsuccessful</b> | <b>Successful</b> |

When analysing the data further it was found that IT leaders (100%) found people factors more important than business leaders (97%). This indicates that IT leaders and business leaders place the same emphasis on people factors.

The second cross tabulation, figure 5, indicates that all the people factors are seen by both business and IT leaders to promote alignment. This is evidenced by the findings as they are all seen to be important and successful in the respondent's organisations.

**Figure 5: People factors that promote alignment**

|                  |                      |  |
|------------------|----------------------|--|
| <b>Important</b> |                      | Meeting of the minds<br>Business decision makers skill<br>IT decision makers skill<br>Communication between decision makers<br>Involve business decision makers in IT strategy<br>Involve IT decision maker in business strategy<br>Firm wide active involvement |
|                  | <b>Not Important</b> |  |
|                  | <b>Unsuccessful</b>  | <b>Successful</b>  |

### 6.3.2. Process Factors

The questionnaire asked respondents to rate the importance and success of the following process factors;

- a. A process which promotes clarity and consistency,
- b. A process that ensures IT strategy goals are lined with business goals,
- c. A process that ensures business goals are linked to IT strategy goals,
- d. The availability of a formal process which facilitates alignment,

- e. Formal communication processes in place between business and IT decision makers,
- f. A formal process that ensures business strategy has a long term focus,
- g. A formal process that ensures IT strategy has a long term focus.

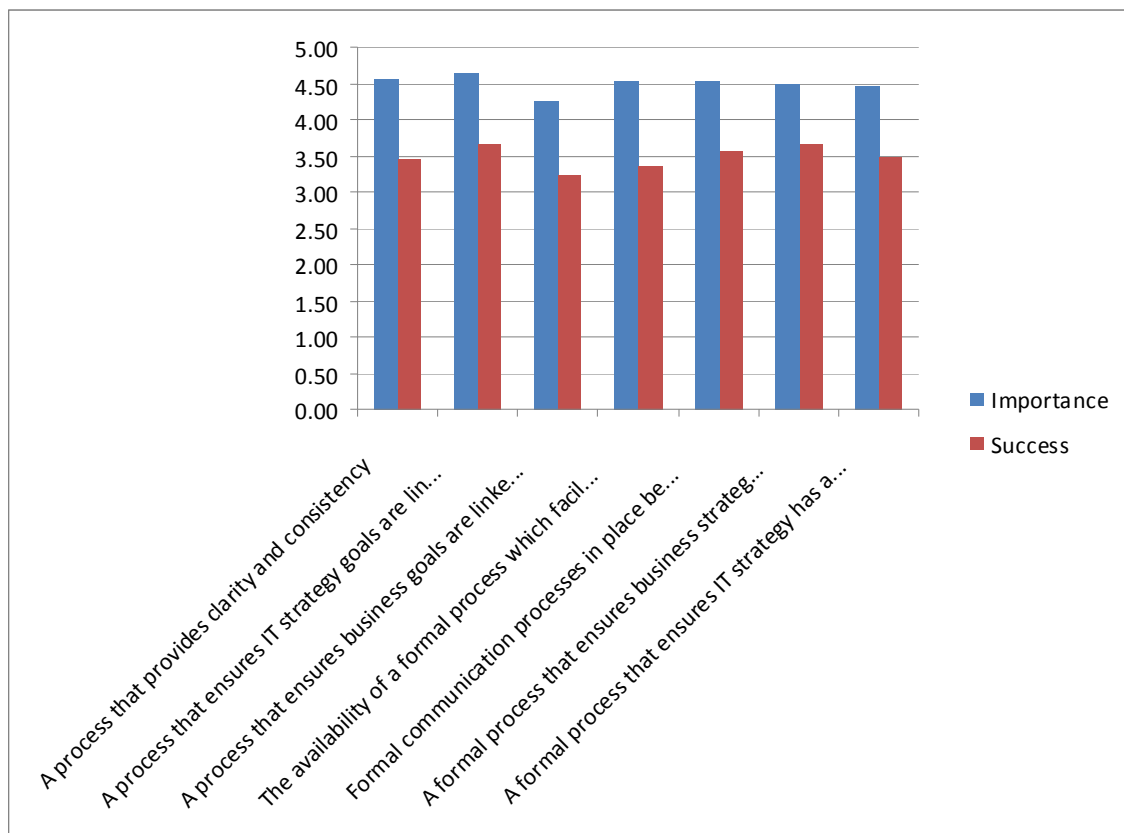
On the Likert scale all seven process factors had a score of between 4 and 5, clearly indicating that these process factors are important in achieving alignment.

Of the seven process factors, the top three were: a process that ensures IT strategy goals are linked with business goals: a process that provides clarity and consistency: and the availability of a formal process which facilitates alignment.

From a success perspective all seven process factors had average Likert scale ratings of between 3 and 4, indicating that they were successful. The top three most successful factors were: a process that ensures IT strategy goals are linked with business goals: a formal process that ensures business strategy has a long term focus: and formal communication processes in place between business and IT decision makers.

Figure 6 shows the difference between how important the leaders perceive process factors and the success they have achieved.

**Figure 6: Difference between importance and success of process factors**



The cross tabulation shown in Figure 7 shows that the majority of respondents (73% - 116 responses) perceive process factors to be important and successful in their organisations. The remaining 27% (43 responses) perceive the process factors to be important but unsuccessful. There were no responses that found the process factors to be unimportant.

**Figure 7: Process factors cross tabulation**

|                      |                     |                   |
|----------------------|---------------------|-------------------|
| <b>Important</b>     | <b>43</b>           | <b>116</b>        |
|                      | <b>0</b>            | <b>0</b>          |
| <b>Not Important</b> | <b>0</b>            | <b>0</b>          |
|                      | <b>Unsuccessful</b> | <b>Successful</b> |

After further analysis it was found that business leaders and IT leaders both found the process factors to be important with 100% of both groupings responding that they were important.

In figure 8, a cross tabulation of the process factors that promote alignment, it is clear that all the process factors that have been identified are seen by both IT and business leaders to promote alignment.

**Figure 8: Process factors that promote alignment**

|                  |                      |   |
|------------------|----------------------|---|
| <b>Important</b> |                      | <p>A process that provides clarity and consistency</p> <p>A process that ensures IT strategy goals are linked with business goals</p> <p>A process that ensures business goals are linked to IT strategy goals</p> <p>The availability of a formal process which facilitates alignment</p> <p>Formal communication processes in place between business and IT decision makers</p> <p>A formal process that ensures business strategy has a long term focus</p> <p>A formal process that ensures IT strategy has a long term focus</p> |
|                  | <b>Not Important</b> |   |
|                  | <b>Unsuccessful</b>  | <b>Successful</b>   |

### 6.3.3. Organisational factors

The questionnaire asked respondents to rate the importance and success of the following organisational factors;

- a. An organisational structure which facilitates alignment of business and IT decision makers

- b. An organisational culture which facilitates alignment between business and IT decision makers,
- c. The view that IT is an innovative organisational tool as opposed to a cost centre.

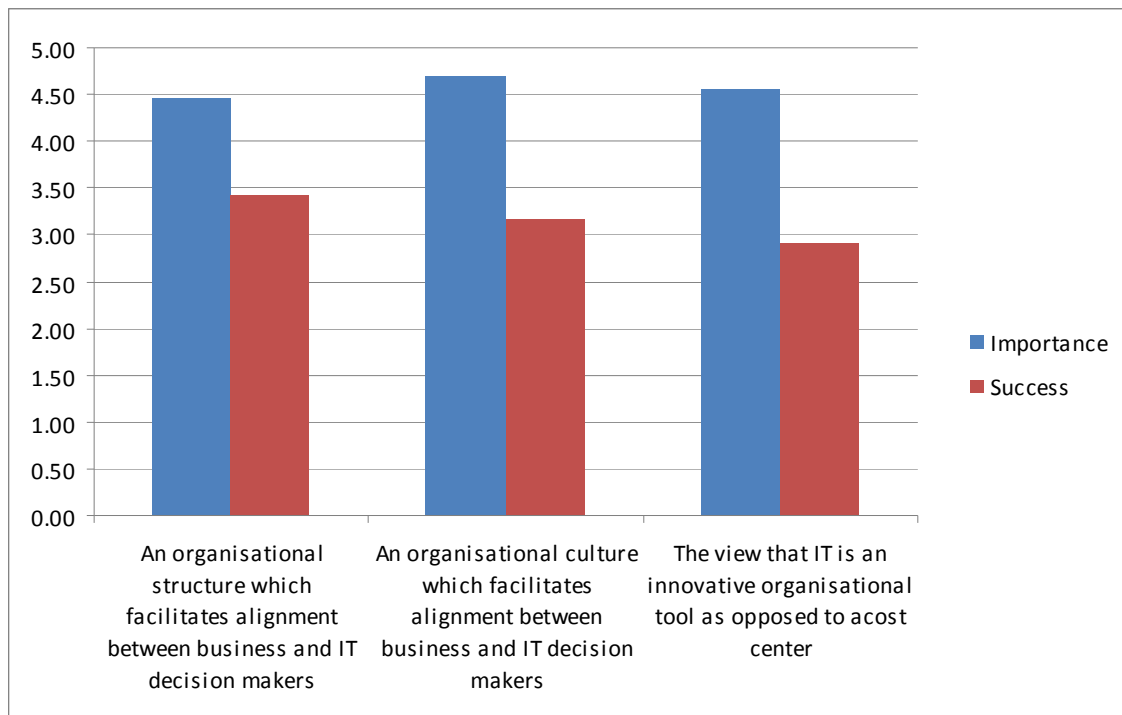
On the Likert scale all three organisational factors had a score of between 4 and 5, clearly indicating that these organisational factors are important in achieving alignment. The three organisational factors ranked as follows: an organisational culture which facilitates alignment between business and IT decision makers, followed by the view that IT is an innovative organisational tool as opposed to a cost centre and finally, an organisational structure which facilitates alignment between business and IT decision makers

From a success perspective two of the three organisational factors had average Likert scale ratings of between 3 and 4, indicating that they were successful with one indicating neutral. The ranking of the three factors from a success perspective was as follows: an organisational structure which facilitates alignment between business and IT decision makers: an organisational culture which facilitates alignment between business and IT decision makers: and the view that IT is an innovative organisational tool as opposed to a cost centre.

Figure 9 shows the comparison between how important the leaders perceive organisational factors and the success they have achieved.



**Figure 9: Difference between importance and success of organisational factors**



The cross tabulation shown in figure 10 shows that only just more than half of the responses (55% - 38 responses) perceive organisational factors to be important and successful in their organisations. A further 43% (30 responses) see organisational factors as important but unsuccessful in their organisations. The remaining 2% (1 response) perceive the organisational factors as unimportant but successful in their organisations. These results are entirely consistent with the study done by Gartlan and Shanks (2007).

**Figure 10: Organisational factors cross tabulation**

|                      |                     |                   |
|----------------------|---------------------|-------------------|
| <b>Important</b>     | <b>30</b>           | <b>38</b>         |
|                      | <b>0</b>            | <b>1</b>          |
| <b>Not Important</b> |                     |                   |
|                      | <b>Unsuccessful</b> | <b>Successful</b> |

After further analysis it was found that 100% of business leaders perceived organisational factors to be important to the alignment of business and IT strategies while 97% of IT leaders found that they promoted alignment.

In figure 11, a cross tabulation of the organisational factors that promote alignment, only 2 of the 3 factors were perceived to be important and successful to the alignment of business and IT strategies. The one factor that was not seen as successful was the view that IT is an innovative organisational tool as opposed to a cost centre. Again this is entirely consistent with the study done by Gartlan and Shanks (2007).

**Figure 11: Organisational factors that promote alignment**

|                  |                      |  |   |
|------------------|----------------------|--|---|
| <b>Important</b> |                      | <p>The view that IT is an innovative organisational tool as opposed to a cost center</p> | <p>An organisational structure which facilitates alignment between business and IT decision makers</p> <p>An organisational culture which facilitates alignment between business and IT decision makers</p> |
|                  | <b>Not Important</b> |  |   |
|                  | <b>Unsuccessful</b>  |  | <b>Successful</b>   |

#### **6.3.4. Overall factor comparison**

The findings from the respondents indicated that the process factors were the most important overall and the most successful. The organisational factors were found to be important but the least successful.

## 7. Conclusion

To conclude this research a number of important findings need to be raised. Both business and IT leaders agree or strongly agree that alignment of business and IT strategies achieve all of the following outcomes in the following order of the importance;

1. Improved relationship between business and IT decision makers – Organisations need to pursue this factor as it is seen as important in achieving alignment. The development of both business and IT strategies need to be completed with the participation of both areas of the business. They must create forums that senior leaders from both areas can formulate both business and IT strategies that recognise and integrate with the objectives of both.
2. Improved communications between business and IT decision makers – Often IT leaders are accused of not speaking in business terms but rather in ‘IT speak’. To break down this communication barrier it is necessary for business people to hold senior positions in the IT business and vice versa. The role of a CIO is crucial and must not come from IT but should rather be a business leader who understands the role IT can play in enabling business to leverage technology to meet their business objectives,
3. Improved utilisation of IT resources to achieve organisational goals – This should automatically follow if the relationship and communication between IT and business works. This will enable the business to see the value that IT can add rather than what IT costs the organisation. IT resources need to be deployed in all strategic conversations across the organisation. IT often gets

itself in trouble by having their own agenda, normally to just keep adding technology solutions to an already complex environment. A high level IT steering committee is one way to address this. The aligned business and IT strategies should be the terms of reference for this committee and each technology investment should be tested for alignment to the business objectives. If the investment adds minimal value to the business then it should not be done,

4. Improved use of IT within organisations – A number of initiatives can be put in place to ensure that this occurs. Firstly training of staff should receive priority. Often there is apathy, due to lack of knowledge, towards new technologies which result in either minimal acceptance or sometimes even complete abandonment of the project. Change management also plays a significant role also and this should be a joint effort from business and IT. The organisation needs to be made to understand why a particular solution is being implemented and that should come equally from business and IT.
5. Improved perception of the IT function within the organisation – By doing what is discussed above the perception will change.
6. Better IT returns on investment – If all IT investments are qualified for alignment through a high level body such as an IT steering committee, the returns on investment will improve. It is critical, however, to develop standard measures for all investments. The standard financial measures such as return on investment and cost benefit analyses should be included but more complex measures have to be developed to measure efficiency and productivity gains and they should be applied consistently to all

- investments. Often IT are guilty of preparing very well thought through business cases to motivate procurement but monitoring after the implementation very rarely happens. A monitoring framework should be developed, applied and reported on back to the senior executive team.
7. Reduction in overall costs – This is more long term, 2 to 3 years, but with a consistent approach to alignment of the strategies this can be realised.
  8. Better overall returns on investment – By building relationships and more effective communication existing IT investments can be leveraged further. If business understand what a particular IT solution is possible of, it can be leveraged further to enable other areas of the business,
  9. Increased competitive advantage in the market place – Even though this ranked lower on the outcomes of alignment there was nonetheless agreement that it was a desired outcome. This is what all organisations strive for and by having a synchronisation of business and IT strategy development this can be achieved.
  10. Perceived improved use of IT innovation by the market place – By leveraging their existing and future investments in IT further, opportunities for product innovation will appear. This will enable them to come to market with new products quicker and thus improve the perception by the market place.
  11. Positive effect on organisational brand – If all the above are in place then the organisational brand can only but improve. The financial sector is all about customer service and if their brand equity improves then this will attract new and retain existing customers.

12. Reduction in IT costs – This is also a longer term measure. As mentioned previously though, alignment will enable business to understand the capabilities of technology better and thus enable more functionality to be used in existing systems rather than having to continually implement new technologies.
13. Improved revenue – This should all result in improved revenue through the growth of their business.

### **7.1. People, Process and Organisation Factors**

Process factors were perceived to be the most important and successfully performed in South African financial institutions followed by people factors. Organisational factors were found to be the most difficult to achieve success in.

1. People factors were perceived to be of importance and successfully performed but slightly less than process factors. Although business leaders saw the need for IT leaders to participate in business strategy development, this was the only factor where there was a small number (20%) where it was not seen as important to participate. On the other hand all IT leaders thought all of the people factors were important and where success had been achieved in their organisations. The most important people factor was the meeting of the minds between business and IT decision makers. This indicates that reaching consensus between IT and business leaders is the most important people factor that contributes to alignment and success was being achieved in this factor. To ensure that this happens though, organisations should take a number of steps;

- a. Implement performance measures for business and IT leaders so that they are encouraged to build relationships with one another. This could take the form of objectives on their individual performance plans.
- b. Create forums or even communities of practice that make time for these strategic discussions to take place.
- c. Ensure that project teams for IT projects are resourced with an equal proportion of business and IT staff.

The least important people factor was the involvement of IT decision makers in business strategy formulation. Business must remember that IT can't develop their strategy if they don't understand the overall business strategy. Organisations should ensure that senior IT resources take part in the business strategy formulation and this should be driven from the CEO's office.

2. Process factors were perceived to be the most important and successfully performed factors. From the cross tabulations all the process factors are seen to be important, with the majority being successful. None of the factors were perceived to be unimportant. The most important process factor was perceived to be one that ensures that business goals are linked to IT strategy goals. This indicates that both business and IT leaders see the importance of the IT strategy being aligned to the business strategy. They also saw it as being successful. This momentum needs to be maintained and indicates that organisations should continue and improve the initiatives they currently have in place. Strangely, though, this process that ensures



business goals are linked to IT strategy goals, although important, gets the lowest ranking amongst the other process factors. This would seem to indicate that IT strategy is seen to enable the business strategy but the IT strategy does not drive the business strategy.

3. Organisational factors were also seen to be important but the success was mixed. The most important organisational factor was perceived to be an organisational culture which facilitates alignment of business and IT decision makers and it was also seen to be successful. IT plays a strong role in culture in an organisation and as new IT solutions are implemented the culture changes. Organisations must measure the culture within their organisations continually. Often though, questions such as “is this a good place to work?” are asked. In these culture climate surveys questions need to be included around how IT enables their area of responsibility and they need to be asked periodically to ensure improvement. The view that IT is an innovative organisational tool as opposed to a cost centre was ranked as the second most important but was the only factor to be seen as unsuccessful. This would indicate that IT is still seen as a cost rather than an enabler in these organisations. By improving the alignment IT will break out of this mould and be seen as a value add rather than a cost.

## **7.2. Further Research**

South Africa and the larger African continent are unique and therefore it is often pointless to compare it with other areas of the world. Further research, therefore, could be conducted in the following areas;

1. Sectors – This study has only looked at the financial services sector in South Africa. It could be extended to other sectors such as manufacturing, mining, agriculture, automotive and others. This would then give a true comparison of the state of business and IT alignment in the country.
2. Developing economies – South Africa is a developing economy and further studies could be conducted to compare our financial services sector with that of other developing economies such as Brazil and Russia.
3. Public sector – The perceived lack of service delivery across the three spheres of government in South Africa is currently of grave concern. Technology should be a key driver of service delivery. Projects such as E-Natis and the new smartcard system for the Department of Home Affairs for instance have proven to be problematic. This research if applied to the public sector could assist in unblocking those service delivery problems by helping to identify which of the three groups of factors need the most attention to ensure that IT solutions can successfully drive the business objectives. In the two projects mentioned it is evident that the business has a goal to improve service delivery but are let down by the technology.

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## 9. Appendix 1

### ALIGNMENT OF BUSINESS AND INFORMATION TECHNOLOGY STRATEGY QUESTIONNAIRE

#### *Alignment of business & information technology strategy*

##### **Part 1: Background**

This series of questions aims to collect background information which will be used in the formation of industry clusters and subsequent data analysis.

1. What is your current title within the organisation? (please specify)

\_\_\_\_\_

2. Is your position in IT or Business?

\_\_\_\_\_

3. How are your organisation's operations geographically segmented?

|  |
|--|
| 100% of operations in South Africa   |
| Between 76% and 99% of operations in South Africa and the remainder overseas |
| Between 51% and 75% of operations in South Africa and the remainder overseas |
| Between 26% and 50% of operations in South Africa and the remainder overseas |
| Less than 25% operations within South Africa                                 |

4. How important is IT to your organisation's operations?

|                      |               |         |           |                |
|----------------------|---------------|---------|-----------|----------------|
| Not important at all | Not important | Neutral | Important | Very Important |
|----------------------|---------------|---------|-----------|----------------|

5. What percentage of your organisation's total capital expenditure is spent on IT per annum?

|               |                |                |                |                |          |
|---------------|----------------|----------------|----------------|----------------|----------|
| Between 0-10% | Between 11-20% | Between 21-30% | Between 31-40% | Between 41-50% | Over 50% |
|---------------|----------------|----------------|----------------|----------------|----------|

6. Please answer the following two statements

a) To what extent are you involved in business strategy formation within your organisation?

|                 |            |         |          |               |
|-----------------|------------|---------|----------|---------------|
| Very uninvolved | Uninvolved | Neutral | Involved | Very involved |
|-----------------|------------|---------|----------|---------------|

b) To what extent are you involved in information technology strategy formation within your organisation?

|                 |            |         |          |               |
|-----------------|------------|---------|----------|---------------|
| Very uninvolved | Uninvolved | Neutral | Involved | Very involved |
|-----------------|------------|---------|----------|---------------|

7. How important do you think it is to achieve alignment between business and information technology strategy within your organisation?

|                      |               |         |           |                |
|----------------------|---------------|---------|-----------|----------------|
| Not important at all | Not important | Neutral | Important | Very Important |
|----------------------|---------------|---------|-----------|----------------|

8. Do you think alignment between business and information technology strategy achieves the following within your organisation?

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-------------------|----------|---------|-------|----------------|
| Improved relationship between business and IT decision makers        |                   |          |         |       |                |
| Improved communications between business and IT decision makers      |                   |          |         |       |                |
| Improved perception of the IT function within the organisation       |                   |          |         |       |                |
| Improved use of IT within organisation                               |                   |          |         |       |                |
| Improved utilisation of IT resources to achieve organisational goals |                   |          |         |       |                |
| Improved revenue   |                   |          |         |       |                |
| Reduction in IT costs  |                   |          |         |       |                |
| Reduction in overall costs   |                   |          |         |       |                |
| Better IT returns on investment                                      |                   |          |         |       |                |
| Better overall returns on investment                                 |                   |          |         |       |                |
| Perceived improved use of IT innovation by the marketplace           |                   |          |         |       |                |
| Positive effect on organisational brand                              |                   |          |         |       |                |
| Increased competitive advantage in the marketplace                   |                   |          |         |       |                |

**Part 2: Business Strategy**

Business strategy in this questionnaire is defined as the strategy adopted for the entire organisation.



9. My organisation has a well formulated business strategy.

|                   |          |         |       |                |
|-------------------|----------|---------|-------|----------------|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|

10. The highest level of business strategy within my organisation is:

|                     |
|---------------------|
| Country based       |
| Organisation based  |
| Business unit based |
| Divisionally based  |

11. My organisation's business strategy encapsulates the information technology strategy.

|                   |          |         |       |                |
|-------------------|----------|---------|-------|----------------|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|

### **Part 3: Information Technology Strategy**

For the purpose of this questionnaire Information technology strategy refers to the strategy adopted by the entire organisation in planning its use of information technology resources.

12. My organisation has a well formulated information technology strategy.

|                   |          |         |       |                |
|-------------------|----------|---------|-------|----------------|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|

13. The highest level of information technology strategy within my organisation is:

|                     |
|---------------------|
| Country based       |
| Organisation based  |
| Business unit based |
| Divisionally based  |

### **Part 4: Factors that promote the alignment between business and information technology strategy**

Previous studies have identified that there are several factors which promote alignment between business and information technology strategy. Studies have noted that when these factors are present there is a greater chance of successful alignment.

14. How well aligned is the business and information technology strategy within your organisation?

|                 |          |         |      |                |
|-----------------|----------|---------|------|----------------|
| Not well at all | Not well | Neutral | Well | Extremely well |
|-----------------|----------|---------|------|----------------|

15. How important are the following *people* factors in achieving the alignment between business strategy & information technology strategy within your organisation?

|  | Very Unimportant | Unimportant | Neutral | Important | Very Important |
|--|------------------|-------------|---------|-----------|----------------|
| Meeting of the minds between business and IT decision makers         |                  |             |         |           |                |
| Management skill & capability of business decision makers            |                  |             |         |           |                |
| Management skill & capability of IT decision makers                  |                  |             |         |           |                |
| Communication between business and IT decision makers                |                  |             |         |           |                |
| Firm wide active involvement in business and IT strategy formulation |                  |             |         |           |                |
| Involvement of business decision makers in IT strategy formulation   |                  |             |         |           |                |
| Involvement of IT decision makers in business strategy formulation   |                  |             |         |           |                |
| Meeting of the minds between business and IT decision makers         |                  |             |         |           |                |

16. How successful is your organisation in performing against each of these *people* alignment factors?

|  | Very unsuccessful | Unsuccessful | Neutral | Successful | Very Successful |
|--|-------------------|--------------|---------|------------|-----------------|
| Meeting of the minds between business and IT decision makers         |                   |              |         |            |                 |
| Management skill & capability of business decision makers            |                   |              |         |            |                 |
| Management skill & capability of IT decision makers                  |                   |              |         |            |                 |
| Communication between business and IT decision makers                |                   |              |         |            |                 |
| Firm wide active involvement in business and IT strategy formulation |                   |              |         |            |                 |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Involvement of business decision makers in IT strategy formulation |  |  |  |  |  |
| Involvement of IT decision makers in business strategy formulation |  |  |  |  |  |
| Meeting of the minds between business and IT decision makers       |  |  |  |  |  |

17. How important are the following *process* factors in achieving the alignment between business strategy & information technology strategy within your organisation?

|   | Very Unimportant | Unimportant | Neutral | Important | Very Important |
|---|------------------|-------------|---------|-----------|----------------|
| A process which promotes clarity & consistency                                    |                  |             |         |           |                |
| A process that ensures IT strategy goals are linked with business goals           |                  |             |         |           |                |
| A process that ensures business goals are linked to IT strategy goals             |                  |             |         |           |                |
| The availability of a formal process which facilitates alignment                  |                  |             |         |           |                |
| Formal communication processes in place between business and IT decision makers   |                  |             |         |           |                |
| A formal process that ensures business strategy has a long term (5 years +) focus |                  |             |         |           |                |
| A formal process that ensures IT strategy has a long term (5 years +) focus       |                  |             |         |           |                |

18. How successful is your organisation in performing against each of these *process* alignment factors?

|  | Very Unsuccessful | Unsuccessful | Neutral | Successful | Very Successful |
|--|-------------------|--------------|---------|------------|-----------------|
| A process which provides clarity & consistency |                   |              |         |            |                 |

|   |  |  |  |  |  |
|---|--|--|--|--|--|
| A process that ensures IT strategy goals are linked with business goals           |  |  |  |  |  |
| A process that ensures business goals are linked to IT strategy goals             |  |  |  |  |  |
| The availability of a formal process which facilitates alignment                  |  |  |  |  |  |
| Formal communication processes in place between business and IT decision makers   |  |  |  |  |  |
| A formal process that ensures business strategy has a long term (5 years +) focus |  |  |  |  |  |
| A formal process that ensures IT strategy has a long term (5 years +) focus       |  |  |  |  |  |

19. How important are the following *organisational* factors in achieving the alignment between business strategy & information technology strategy within your organisation?

|   | Very Unimportant | Unimportant | Neutral | Important | Very Important |
|---|------------------|-------------|---------|-----------|----------------|
| An organisational structure which facilitates alignment of business and IT decision makers    |                  |             |         |           |                |
| An organisational culture which facilitates alignment between business and IT decision makers |                  |             |         |           |                |
| The view that IT is an innovative organisational tool as opposed to a cost centre             |                  |             |         |           |                |

20. How successful is your organisation in performing against each of these *organisational* alignment factors?

|   | Very Unsuccessful | Unsuccessful | Neutral | Successful | Very Successful |
|---|-------------------|--------------|---------|------------|-----------------|
| An organisational structure which facilitates alignment of business and IT decision makers    |                   |              |         |            |                 |
| An organisational culture which facilitates alignment between business and IT decision makers |                   |              |         |            |                 |
| The view that IT is an innovative organisational tool as opposed to a cost centre             |                   |              |         |            |                 |



## 10. Appendix 2

| SA GIANTS |                            |              |                |              |              |             |           |
|-----------|----------------------------|--------------|----------------|--------------|--------------|-------------|-----------|
| Ranked by |                            | Turnover     | Total assets   | Market       | Equity funds | Net profit  | Financial |
| turnover  | Company                    | Rm           | Rm             | cap Rm       | Rm           | Rm          | year end  |
| 1         | <b>BHP Billiton Plc</b>    | 278<br>154,9 | 385 514,1      | 533<br>260,3 | 178 119,7    | 94<br>331,0 | Jun 2007  |
| 1         |                            | 206<br>109,0 | 294 897,4      | 400<br>950,5 | 142 230,8    | 56<br>173,1 | Jun 2006  |
| 2         | <b>Anglo American Plc</b>  | 232<br>901,4 | 306 845,1      | 645<br>270,0 | 170 176,1    | 39<br>654,9 | Dec 2006  |
| 2         |                            | 186<br>291,1 | 308 670,9      | 571<br>985,4 | 155 253,2    | 21<br>120,3 | Dec 2005  |
| 3         | <b>SABMiller Plc</b>       | 135<br>912,4 | 84 562,0       | 266<br>480,9 | -13 036,5    | 13<br>591,2 | Mar 2007  |
| 3         |                            | 95 074,5     | 65 316,8       | 238<br>998,1 | -13 745,3    | 9 689,4     | Mar 2006  |
| 4         | <b>Sasol</b>               | 98 127,0     | 117 010,0      | 245<br>293,0 | 64 251,0     | 17<br>665,0 | Jun 2007  |
| 5         |                            | 82 395,0     | 101 462,0      | 151<br>404,8 | 54 387,0     | 10<br>895,0 | Jun 2006  |
| 5         | <b>The Bidvest Group</b>   | 95 655,5     | 28 657,6       | 37 044,4     | 5 953,3      | 2 842,0     | Jun 2007  |
| 6         |                            | 77 276,5     | 24 161,0       | 45 502,1     | 5 298,4      | 2 433,8     | Jun 2006  |
| 6         | <b>Sanlam</b>              | 83 686,0     | 331 793,0      | 43 998,9     | 25 581,0     | 4 069,0     | Dec 2006  |
| 4         |                            | 84 654,0     | 274 166,0      | 46 072,2     | 22 604,0     | 11<br>079,0 | Dec 2005  |
| 7         | <b>Standard Bank Group</b> | 69 262,0     | 965 038,0      | 134<br>589,0 | 43 791,0     | 10<br>621,0 | Dec 2006  |
| 7         |                            | 54 665,0     | 752 507,0      | 144<br>708,0 | 33 002,0     | 7 765,0     | Dec 2005  |
| 8         | <b>Imperial Holdings</b>   | 66 214,0     | 43 775,0       | 16 811,3     | 11 205,0     | 2 480,0     | Jun 2007  |
| 8         |                            | 54 105,0     | 36 081,0       | 31 757,1     | 9 063,0      | 2 345,0     | Jun 2006  |
| 9         | <b>Old Mutual Plc</b>      | 65 458,3     | 1 703<br>291,7 | 97 366,5     | 25 500,0     | 16<br>597,2 | Dec 2006  |
| 9         |                            | 49 153,8     | 862 824,2      | 128<br>445,9 | 29 076,9     | 7 549,5     | Dec 2005  |
| 10        | <b>FirstRand</b>           | 63 021,0     | 720 814,0      | 90 192,3     | 42 416,0     | 12<br>676,0 | Jun 2007  |
| 11        |                            | 44 483,0     | 582 566,0      | 138<br>619,8 | 38 193,0     | 9 694,0     | Jun 2006  |
| 11        | <b>Telkom</b>              | 51 619,0     | 52 922,0       | 68 910,0     | 21 875,0     | 9 675,0     | Mar 2007  |
| 10        |                            | 47 625,0     | 53 153,0       | 88 498,8     | 20 937,0     | 9 819,0     | Mar 2006  |
| 12        | <b>MTN Group</b>           | 51 595,0     | 54 147,0       | 229<br>379,6 | -2 910,0     | 11<br>217,0 | Dec 2006  |
| 21        |                            | 32 117,7     | 36 714,0       | 163<br>918,5 | 11 394,0     | 7 208,0     | Dec 2005  |
| 13        | <b>Barloworld</b>          | 50 259,0     | 27 920,0       | 22 051,4     | 8 639,0      | 2 292,0     | Sep 2007  |



|    |   |          |           |           |           |          |          |
|----|---|----------|-----------|-----------|-----------|----------|----------|
| 12 |   | 44 468,0 | 31 559,0  | 41 213,9  | 9 557,0   | 2 007,0  | Sep 2006 |
| 14 | <b>Absa Group</b>                       | 49 819,0 | 494 743,0 | 68 894,0  | 31 990,0  | 8 071,0  | Dec 2006 |
| 14 |   | 37 728,0 | 409 555,0 | 93 744,5  | 29 567,0  | 6 788,0  | Dec 2005 |
| 15 | <b>Anglo American Platinum Corp</b>     | 46 961,0 | 54 047,0  | 281 704,4 | 31 848,0  | 14 547,0 | Dec 2007 |
| 13 |   | 39 355,7 | 48 455,6  | 269 466,3 | 37 491,4  | 12 384,6 | Dec 2006 |
| 16 | <b>Richemont Securities AG</b>          | 46 864,1 | 370 485,4 | 235 683,0 | 345 669,9 | 12 932,0 | Mar 2007 |
| 20 |   | 32 149,3 | 96 134,3  | 210 366,0 | 78 231,3  | 7 903,0  | Mar 2006 |
| 17 | <b>Pick n Pay Stores</b>                | 39 337,1 | 6 737,5   | 14 424,8  | -545,6    | 875,5    | Feb 2007 |
| 15 |   | 35 078,4 | 5 757,4   | 16 713,3  | -547,1    | 656,2    | Feb 2006 |
| 18 | <b>Pick n Pay Holdings</b>              | 39 337,1 | 15 193,7  | 6 501,0   | 7 573,3   | 557,5    | Feb 2007 |
| 16 |   | 35 078,4 | 13 545,7  | 7 618,7   | 6 956,5   | 325,3    | Feb 2006 |
| 19 | <b>Shoprite Holdings</b>                | 38 949,8 | 11 332,9  | 20 543,5  | 2 782,5   | 1 039,7  | Jun 2007 |
| 18 |   | 33 589,8 | 9 456,9   | 15 081,6  | 2 354,4   | 740,0    | Jun 2006 |
| 20 | <b>Nedbank</b>                          | 37 206,0 | 419 785,0 | 53 936,3  | 20 642,0  | 6 037,0  | Dec 2006 |
| 22 |   | 30 769,0 | 346 830,0 | 65 005,4  | 17 268,0  | 3 683,0  | Dec 2005 |
| 21 | <b>Steinhoff International Holdings</b> | 36 649,7 | 26 519,7  | 24 429,9  | 5 422,1   | 1 507,1  | Jun 2007 |
| 19 |   | 32 238,3 | 23 587,1  | 28 602,0  | 3 693,9   | 1 899,5  | Jun 2006 |
| 22 | <b>Sappi</b>                            | 35 042,6 | 38 546,1  | 21 973,1  | 11 148,9  | -14,2    | Sep 2006 |
| 17 |   | 31 961,8 | 35 853,5  | 26 297,9  | 13 662,4  | -178,3   | Sep 2005 |
| 23 | <b>Massmart Holdings</b>                | 34 807,6 | 8 687,9   | 13 438,6  | 197,7     | 1 144,6  | Jun 2007 |
| 23 |   | 29 963,6 | 8 143,0   | 16 959,9  | 130,0     | 801,7    | Jun 2006 |
| 24 | <b>Impala Platinum Holdings</b>         | 31 481,5 | 48 938,0  | 197 684,2 | 32 767,3  | 6 464,4  | Jun 2007 |
| 29 |   | 17 500,2 | 23 304,6  | 143 851,3 | 15 249,7  | 4 277,7  | Jun 2006 |
| 25 | <b>Liberty Holdings</b>                 | 27 901,0 | 199 059,0 | 9 327,2   | 6 807,0   | 842,0    | Dec 2006 |
| 27 |   | 18 979,0 | 162 422,0 | 10 112,7  | 5 169,0   | 1 141,0  | Dec 2005 |
| 26 | <b>Liberty Group</b>                    | 27 901,0 | 199 625,0 | 21 212,3  | 11 914,0  | 2 333,0  | Dec 2006 |
| 24 |   | 27 291,0 | 162 915,0 | 22 878,2  | 9 643,4   | 1 864,0  | Dec 2005 |
| 27 | <b>Dimension Data Hold</b>              | 26 021,8 | 13 601,7  | 12 140,2  | 2 828,7   | 433,6    | Sep 2007 |
| 26 |   | 23 775,9 | 12 034,8  | 11 201,5  | 2 660,5   | 205,2    | Sep 2006 |
| 28 | <b>Investec</b>                         | 25 871,4 | 373 327,9 | 13 456,5  | 14 529,2  | 4 043,8  | Mar 2007 |
| 47 |   | 10 429,0 | 173 656,0 | 4 105,2   | 4 297,0   | 2 457,0  | Mar 2006 |
| 29 | <b>Investec Plc</b>                     | 25 871,4 | 373 327,9 | 22 863,5  | 14 529,2  | 4 043,8  | Mar 2007 |
| 63 |   | 6 292,7  | 82 881,1  | 35 867,8  | 5 879,1   | 933,6    | Mar 2006 |
| 30 | <b>ArcelorMittal SA</b>                 | 25 363,0 | 30 627,0  | 87 813,2  | 24 414,7  | 4 504,0  | Dec 2006 |
| -  |   | 24 032,0 | 25 855,0  | 52 594,3  | 21 016,9  | 5 180,0  | Dec 2005 |
| 31 | <b>Datatec</b>                          | 22 954,9 | 8 590,7   | 4 636,4   | 2 389,3   | 447,5    | Feb 2007 |
| 28 |   | 18 255,4 | 6 037,5   | 6 090,1   | 1 823,7   | 248,4    | Feb 2006 |



|    |                                      |          |          |          |          |             |          |
|----|--------------------------------------|----------|----------|----------|----------|-------------|----------|
| 32 | <b>Aveng</b>                         | 22 093,3 | 18 252,7 | 25 186,5 | 9 541,2  | 1 357,4     | Jun 2007 |
| 34 |                                      | 16 053,7 | 8 977,4  | 18 222,7 | 2 256,5  | 536,6       | Jun 2006 |
| 33 | <b>The Spar Group</b>                | 21 704,0 | 4 797,4  | 8 241,3  | 662,4    | 526,8       | Sep 2007 |
| 31 |                                      | 17 009,6 | 3 291,0  | 8 479,2  | 525,4    | 421,0       | Sep 2006 |
| 34 | <b>AngloGold Ashanti</b>             | 20 886,0 | 59 143,0 | 75 540,6 | 27 006,0 | 3 407,0     | Dec 2006 |
| 30 |                                      | 17 233,0 | 49 722,0 | 89 909,8 | 24 387,0 | -154,0      | Dec 2005 |
| 35 | <b>Gold Fields</b>                   | 19 693,1 | 50 956,0 | 75 041,9 | 34 830,2 | 2 244,5     | Jun 2007 |
| 37 |                                      | 14 604,7 | 30 493,5 | 66 189,4 | 20 851,6 | 1 226,0     | Jun 2006 |
| 36 | <b>Naspers</b>                       | 19 508,1 | 43 707,1 | 55 218,6 | 32 209,3 | 2 789,6     | Mar 2007 |
| 35 |                                      | 15 706,4 | 20 763,7 | 64 353,9 | 10 531,8 | 2 405,6     | Mar 2006 |
| 37 | <b>Network Healthcare Holdings</b>   | 18 607,0 | 33 751,0 | 15 880,1 | -6 801,0 | 321,0       | Sep 2007 |
| 45 |                                      | 11 615,9 | 33 308,4 | 25 388,2 | -8 556,6 | 859,9       | Sep 2006 |
| 38 | <b>Murray &amp; Roberts Holdings</b> | 18 588,8 | 11 148,2 | 31 695,7 | 3 694,3  | 859,6       | Jun 2007 |
| 42 |                                      | 11 965,5 | 8 929,6  | 18 572,7 | 2 772,0  | 540,2       | Jun 2006 |
| 39 | <b>Woolworths Holdings</b>           | 17 376,9 | 10 063,1 | 10 889,2 | 2 578,0  | 932,1       | Jun 2007 |
| 38 |                                      | 14 208,0 | 8 484,9  | 19 586,7 | 2 094,6  | 773,0       | Jun 2006 |
| 40 | <b>Allied Electronics Corp</b>       | 17 126,0 | 7 433,0  | 13 134,5 | 2 211,0  | 513,0       | Feb 2007 |
| 39 |                                      | 13 969,0 | 6 655,0  | 13 442,0 | 1 850,0  | 349,0       | Feb 2006 |
| 41 | <b>Nampak</b>                        | 17 014,4 | 11 876,7 | 10 775,2 | 5 174,6  | 1 236,8     | Sep 2007 |
| 36 |                                      | 15 261,9 | 11 268,5 | 14 549,3 | 4 758,5  | 1 008,3     | Sep 2006 |
| 42 | <b>Tiger Brands</b>                  | 16 209,9 | 9 883,6  | 23 016,2 | 3 157,3  | 2 105,4     | Sep 2007 |
| 32 |                                      | 16 513,9 | 8 519,2  | 30 034,2 | 2 231,6  | 1 645,2     | Sep 2006 |
| 43 | <b>Exxaro Resources</b>              | 13 746,0 | 12 648,0 | 38 978,5 | 8 441,0  | 19<br>411,0 | Dec 2006 |
| 43 |                                      | 11 962,0 | 14 419,0 | 20 540,4 | 7 530,0  | 1 637,0     | Dec 2005 |
| 44 | <b>Lonmin Plc</b>                    | 13 386,2 | 25 627,6 | 77 100,0 | 15 448,3 | 3 682,8     | Sep 2007 |
| 41 |                                      | 13 156,0 | 16 290,8 | 67 798,8 | 6 120,6  | 2 964,5     | Sep 2006 |
| 45 | <b>Kumba Iron Ore</b>                | 13 026,0 | 6 869,0  | 98 143,5 | 1 073,0  | 2 874,0     | Dec 2006 |
| -  |                                      | -        | -        | 46,821,9 | -        | -           | -        |
| 46 | <b>JD Group</b>                      | 12 907,0 | 9 067,0  | 6 571,8  | 5 710,0  | 1 096,0     | Aug 2007 |
| 44 |                                      | 11 939,0 | 9 378,0  | 15 895,4 | 5 289,0  | 1 555,0     | Aug 2006 |
| 47 | <b>Santam</b>                        | 12 736,0 | 16 727,0 | 10 036,3 | 6 562,0  | 1 825,0     | Dec 2006 |
| 46 |                                      | 11 355,0 | 14 856,0 | 12 056,3 | 5 717,1  | 1 880,0     | Dec 2005 |
| 48 | <b>Grindrod</b>                      | 12 504,0 | 6 834,8  | 10 523,9 | 2 249,0  | 753,0       | Dec 2006 |
| 57 |                                      | 7 449,1  | 4 790,0  | 7 835,5  | 1 621,8  | 673,3       | Dec 2005 |
| 49 | <b>Oando</b>                         | 11 604,5 | 4 380,0  | 7 917,7  | 400,3    | 251,5       | Dec 2006 |
| 52 |                                      | 8 741,8  | 3 340,1  | 1 722,6  | 352,4    | 100,3       | Dec 2005 |
| 50 | <b>Super Group</b>                   | 11 575,0 | 7 603,9  | 2 955,4  | 604,5    | 481,8       | Jun 2007 |
| 49 |                                      | 9 890,5  | 6 639,1  | 5 384,4  | 507,3    | 413,3       | Jun 2006 |
| 51 | <b>New Clicks Holdings</b>           | 11 204,9 | 3 487,2  | 4 609,0  | 762,2    | 357,7       | Aug 2007 |
| 48 |                                      | 10 000,6 | 3 161,1  | 4 502,9  | 1 057,4  | 300,5       | Aug 2006 |





|    |                                    |          |           |          |           |         |          |
|----|------------------------------------|----------|-----------|----------|-----------|---------|----------|
| 52 | <b>AECI</b>                        | 10 212,0 | 6 632,0   | 7 727,5  | 2 309,0   | 1 092,0 | Dec 2006 |
| 51 |                                    | 8 768,0  | 5 376,0   | 8 814,2  | 1 512,4   | 566,0   | Dec 2005 |
| 53 | <b>Reunert</b>                     | 9 445,4  | 8 419,8   | 11 087,9 | 5 589,2   | 1 188,2 | Sep 2007 |
| 53 |                                    | 8 236,4  | 5 645,6   | 15 745,4 | 1 818,0   | 827,9   | Sep 2006 |
| 54 | <b>Harmony Gold Mining Co</b>      | 9 148,0  | 32 201,0  | 39 174,1 | 25 066,0  | -319,0  | Jun 2007 |
| 54 |                                    | 8 039,0  | 29 873,0  | 40 499,4 | 24 073,0  | -638,0  | Jun 2006 |
| 55 | <b>Combined Motor Holdings</b>     | 9 085,6  | 2 184,3   | 1 160,0  | 46,8      | 177,8   | Feb 2007 |
| 60 |                                    | 6 757,0  | 1 586,0   | 2 150,9  | 252,0     | 155,3   | Feb 2006 |
| 56 | <b>Mutual &amp; Federal</b>        | 8 549,0  | 8 355,0   | 6 409,7  | 2 971,0   | 827,0   | Dec 2006 |
| 55 |                                    | 8 005,0  | 9 645,0   | 7 953,1  | 4 603,9   | 1 629,0 | Dec 2005 |
| 57 | <b>Wilson Bayly Holmes-Ovcon</b>   | 8 127,8  | 4 121,8   | 8 646,0  | 796,3     | 209,6   | Jun 2007 |
| 67 |                                    | 5 795,1  | 2 932,1   | 5 794,1  | 615,6     | 143,8   | Jun 2006 |
| 58 | <b>Remgro</b>                      | 7 877,0  | 108 117,0 | 87 973,3 | 103 786,0 | 6 774,0 | Mar 2007 |
| 50 |                                    | 9 802,0  | 79 541,0  | 81 233,2 | 73 515,0  | 4 998,0 | Mar 2006 |
| 59 | <b>Tongaat Hulett Group</b>        | 7 848,0  | 9 021,0   | 9 189,1  | 5 604,0   | 872,0   | Dec 2006 |
| 59 |                                    | 6 926,0  | 7 895,0   | 13 113,8 | 5 225,0   | 581,0   | Dec 2005 |
| 60 | <b>Liberty International Plc</b>   | 7 816,7  | 121 530,6 | 56 164,5 | 65 301,4  | 1 820,8 | Dec 2006 |
| 76 |                                    | 4 720,7  | 79 230,4  | 64 301,5 | 40 632,6  | -343,5  | Dec 2005 |
| 61 | <b>Group Five</b>                  | 7 689,2  | 6 701,3   | 6 160,3  | 1 392,2   | 194,9   | Jun 2007 |
| 66 |                                    | 5 864,7  | 4 695,9   | 6 697,5  | 446,2     | 67,3    | Jun 2006 |
| 62 | <b>Metropolitan Holdings</b>       | 7 423,0  | 65 986,0  | 7 507,4  | 5 896,0   | 1 663,0 | Dec 2006 |
| 61 |                                    | 6 656,0  | 52 983,0  | 8 864,6  | 5 965,9   | 1 660,0 | Dec 2005 |
| 63 | <b>Foschini</b>                    | 7 230,0  | 6 573,1   | 9 261,6  | 3 350,6   | 1 060,2 | Mar 2007 |
| 62 |                                    | 6 432,1  | 5 671,4   | 16 618,4 | 2 699,3   | 986,0   | Mar 2006 |
| 64 | <b>Sun International</b>           | 6 937,0  | 7 736,0   | 12 015,9 | 2 131,0   | 839,0   | Jun 2007 |
| 65 |                                    | 5 949,0  | 7 119,2   | 16 062,2 | 2 915,9   | 317,3   | Jun 2006 |
| 65 | <b>Hiveld Steel &amp; Vanadium</b> | 6 901,0  | 4 569,0   | 16 557,1 | 1 687,0   | 1 212,0 | Dec 2006 |
| 58 |                                    | 7 155,0  | 3 899,0   | 7 832,7  | 1 092,0   | 1 733,0 | Dec 2005 |
| 66 | <b>Allied Technologies</b>         | 6 780,0  | 2 500,0   | 5 843,2  | 1 164,0   | 387,0   | Feb 2007 |
| 64 |                                    | 6 041,0  | 2 605,0   | 7 091,1  | 1 115,0   | 354,0   | Feb 2006 |
| 67 | <b>Afgri</b>                       | 6 530,1  | 6 799,1   | 2 803,5  | 1 045,1   | 189,2   | Feb 2007 |
| 69 |                                    | 5 431,2  | 3 618,1   | 2 377,8  | 988,3     | 115,7   | Feb 2006 |
| 68 | <b>AVI</b>                         | 6 332,4  | 3 631,8   | 5 413,7  | 1 516,1   | 510,3   | Jun 2007 |
| 70 |                                    | 5 420,5  | 3 265,4   | 6 890,5  | 1 224,2   | 261,7   | Jun 2006 |
| 69 | <b>Astral Foods</b>                | 6 329,3  | 2 707,7   | 4 076,8  | 1 229,8   | 617,6   | Sep 2007 |
| 73 |                                    | 5 183,7  | 2 029,3   | 5 072,1  | 989,8     | 538,4   | Sep 2006 |
| 70 | <b>Illovo Sugar</b>                | 6 263,6  | 5 413,6   | 10 366,2 | 2 154,3   | 695,8   | Mar 2007 |
| 68 |                                    | 5 468,8  | 4 595,1   | 6 626,2  | 1 733,2   | 612,4   | Mar 2006 |
| 71 | <b>Distell Group</b>               | 6 231,2  | 5 749,5   | 10 233,7 | 3 635,7   | 875,1   | Jun 2007 |



|     |  |         |          |          |          |         |          |
|-----|--|---------|----------|----------|----------|---------|----------|
| 71  |  | 5 247,6 | 5 403,4  | 10 274,4 | 3 172,0  | 537,4   | Jun 2006 |
| 72  | <b>Mr Price Group</b>                  | 6 155,0 | 2 485,5  | 4 498,2  | 1 241,6  | 423,6   | Mar 2007 |
| 72  |  | 5 219,5 | 2 016,1  | 6 823,5  | 1 045,4  | 352,4   | Mar 2006 |
| 73  | <b>African Rainbow Minerals</b>        | 6 152,0 | 17 927,0 | 47 516,4 | 11 756,0 | 1 511,0 | Jun 2007 |
| 79  |  | 4 622,0 | 14 586,0 | 21 074,5 | 11 226,0 | 483,0   | Jun 2006 |
| 74  | <b>Pretoria Portland Cement</b>        | 5 566,0 | 4 862,0  | 21 531,4 | 1 265,0  | 1 415,0 | Sep 2007 |
| 77  |  | 4 686,4 | 4 339,9  | 25 375,3 | 1 357,8  | 1 216,1 | Sep 2006 |
| 75  | <b>Omnia Holdings</b>                  | 5 537,1 | 2 683,6  | 3 207,6  | 852,3    | 253,2   | Mar 2007 |
| 81  |  | 4 331,3 | 2 039,9  | 2 981,7  | 609,8    | 174,2   | Mar 2006 |
| 76  | <b>Medi-Clinic Corporation</b>         | 5 364,0 | 4 950,0  | 11 682,4 | 1 386,0  | 568,0   | Mar 2007 |
| 75  |  | 4 723,0 | 3 426,0  | 9 897,9  | 1 331,0  | 367,0   | Mar 2006 |
| 77  | <b>Element1</b>                        | 5 359,0 | 6 198,0  | 1 816,9  | 3 888,4  | 620,0   | Mar 2007 |
| -   |  | 4 651,0 | 4 967,0  | 9 324,9  | 3 003,2  | 447,0   | Mar 2006 |
| 78  | <b>Discovery Holdings</b>              | 5 166,0 | 8 450,0  | 14 384,5 | 5 862,0  | 1 340,0 | Jun 2007 |
| 80  |  | 4 479,0 | 6 685,0  | 17 048,3 | 4 479,0  | 872,0   | Jun 2006 |
| 79  | <b>Aquarius Platinum</b>               | 4 859,2 | 6 656,2  | 30 927,8 | 3 759,6  | 1 396,6 | Jun 2007 |
| 99  |  | 2 981,6 | 4 880,0  | 19 861,3 | 2 476,4  | 689,0   | Jun 2006 |
| 80  | <b>Truworths International</b>         | 4 858,0 | 3 192,0  | 11 533,8 | 1 989,0  | 1 049,0 | Jun 2007 |
| 84  |  | 3 816,0 | 2 561,0  | 15 914,2 | 1 651,0  | 811,0   | Jun 2006 |
| 81  | <b>Rainbow Chicken</b>                 | 4 730,4 | 2 790,6  | 4 234,1  | 1 662,1  | 480,4   | Mar 2007 |
| 82  |  | 4 101,5 | 2 456,4  | 4 693,1  | 1 364,9  | 367,5   | Mar 2006 |
| 82  | <b>Hosken Cons Investments</b>         | 4 382,9 | 13 704,0 | 9 807,4  | 517,9    | 684,2   | Mar 2007 |
| 111 |  | 2 112,0 | 11 332,8 | 7 616,7  | 2 603,7  | 178,2   | Mar 2006 |
| 83  | <b>Assore</b>                          | 4 293,0 | 5 320,2  | 17 276,0 | 3 794,0  | 289,2   | Jun 2007 |
| 91  |  | 3 382,6 | 3 905,5  | 5 768,0  | 2 974,7  | 311,8   | Jun 2006 |
| 84  | <b>Aspen Pharmacare Holdings</b>       | 4 025,9 | 6 376,8  | 12 476,8 | 885,5    | 854,8   | Jun 2007 |
| 90  |  | 3 449,3 | 3 149,5  | 14 234,5 | 538,2    | 814,2   | Jun 2006 |
| 85  | <b>Caxton CTP Pub &amp; Print</b>      | 4 006,4 | 4 852,6  | 7 186,8  | 4 038,3  | 584,8   | Jun 2007 |
| 89  |  | 3 468,5 | 4 339,6  | 7 572,6  | 3 239,4  | 526,2   | Jun 2006 |
| 86  | <b>Palamin</b>                         | 3 981,9 | 4 368,0  | 5 631,3  | -785,0   | 822,5   | Dec 2006 |
| 107 |  | 2 364,6 | 3 459,3  | 2 562,4  | -528,1   | 18,1    | Dec 2005 |
| 87  | <b>African Oxygen</b>                  | 3 914,0 | 3 829,0  | 9 377,0  | 2 007,0  | 619,0   | Sep 2006 |
| 83  |  | 5 852,6 | 3 191,9  | 10 199,9 | 1 688,4  | 463,8   | Sep 2005 |
| 88  | <b>Zurich SA</b>                       | 3 910,6 | 4 654,6  | 2 460,3  | 1 869,7  | 341,7   | Dec 2006 |
| -   |  | 3 509,7 | 3 723,0  | 2 131,4  | 1 317,6  | 406,1   | Dec 2005 |
| 89  | <b>Searidel Investment Corporation</b> | 3 793,4 | 3 007,5  | 123,0    | 1 669,2  | 45,2    | Jun 2007 |
| 85  |  | 3 686,3 | 2 673,1  | 690,6    | 1 490,3  | 72,5    | Jun 2006 |
| 90  | <b>Northam Platinum</b>                | 3 739,8 | 3 334,0  | 16 963,5 | 2 093,4  | 1 347,7 | Jun 2007 |



|     |                             |         |          |          |         |          |          |
|-----|-----------------------------|---------|----------|----------|---------|----------|----------|
| 106 |                             | 2 386,3 | 2 736,0  | 12 213,1 | 1 977,2 | 726,5    | Jun 2006 |
| 91  | Tradehold                   | 3 725,2 | 2 175,6  | 468,9    | 709,5   | -82,2    | Feb 2007 |
| 97  |                             | 3 083,3 | 1 751,3  | 791,9    | 682,0   | 11,0     | Feb 2006 |
| 92  | Business Connexion Group    | 3 551,1 | 2 050,1  | 1 365,7  | 1 046,7 | 55,3     | May 2007 |
| 94  |                             | 3 207,7 | 2 148,1  | 1 812,2  | 954,0   | 131,0    | May 2006 |
| 93  | Bell Equipment              | 3 533,2 | 2 011,1  | 4 373,0  | 901,7   | 237,8    | Dec 2006 |
| 93  |                             | 3 209,2 | 1 634,1  | 3 129,5  | 691,8   | 8,4      | Dec 2005 |
| 94  | KAP International           | 3 494,8 | 2 265,4  | 1 006,0  | 1 058,2 | 172,0    | Jun 2007 |
| 98  |                             | 2 997,9 | 1 658,0  | 1 629,6  | 917,5   | 222,5    | Dec 2005 |
| 95  | Mvelaphanda                 | 3 461,6 | 7 149,5  | 3 938,3  | 5 379,1 | 49,7     | Jun 2007 |
| 96  |                             | 3 102,4 | 5 512,0  | 4 957,2  | 4 156,9 | 769,8    | Jun 2006 |
| 96  | Iliad Africa                | 3 368,4 | 1 201,9  | 1 606,4  | 294,4   | 197,3    | Dec 2006 |
| 102 |                             | 2 683,4 | 1 016,8  | 2 584,3  | 369,1   | 155,8    | Dec 2005 |
| 97  | Mustek                      | 3 354,7 | 1 777,7  | 474,9    | 417,2   | 81,7     | Jun 2007 |
| 95  |                             | 3 200,2 | 1 840,5  | 1 023,8  | 428,0   | 88,4     | Jun 2006 |
| 98  | Lewis Group                 | 3 323,5 | 3 297,0  | 4 154,7  | 2 313,1 | 571,4    | Mar 2007 |
| 100 |                             | 2 874,5 | 2 890,3  | 6 850,0  | 2 106,4 | 406,0    | Mar 2006 |
| 99  | African Bank Investments    | 3 268,0 | 11 596,0 | 21 123,4 | 1 669,0 | 1 339,0  | Sep 2007 |
| 86  |                             | 3 533,0 | 8 013,0  | 15 100,5 | 1 437,0 | 1 094,0  | Sep 2006 |
| 100 | Distr & Warehousing Network | 3 002,5 | 1 728,8  | 2 774,3  | 233,7   | 189,9    | Jun 2007 |
| 120 |                             | 1 740,9 | 1 003,3  | 2 705,9  | 215,7   | 119,9    | Jun 2006 |
| 101 | Cashbuild                   | 2 710,4 | 883,2    | 1 290,0  | 232,3   | 89,2     | Jun 2006 |
| 101 |                             | 2 208,9 | 756,4    | 1 548,3  | 174,6   | 77,9     | Jun 2005 |
| 102 | Adcorp Holdings             | 2 700,2 | 543,7    | 1 524,9  | 157,7   | 107,0    | Dec 2006 |
| 108 |                             | 2 359,7 | 468,8    | 1 572,5  | 125,8   | 83,1     | Dec 2005 |
| 103 | Invicta Holdings            | 2 663,4 | 2 758,3  | 1 930,2  | 605,3   | 188,4    | Mar 2007 |
| 115 |                             | 1 913,2 | 2 274,1  | 2 081,6  | 462,5   | 135,3    | Mar 2006 |
| 104 | Metair                      | 2 641,9 | 1 618,6  | 1 828,9  | 1 150,0 | 215,3    | Dec 2006 |
| 109 |                             | 2 151,0 | 1 429,9  | 2 043,9  | 1 011,5 | 146,6    | Dec 2005 |
| 105 | Oceana Group                | 2 608,9 | 1 436,4  | 2 242,0  | 750,9   | 164,5    | Sep 2007 |
| 103 |                             | 2 544,6 | 1 262,8  | 1 882,7  | 690,1   | 129,5    | Sep 2006 |
| 106 | Growthpoint Properties      | 2 362,0 | 22 957,0 | 17 510,3 | 54,0    | -2 007,0 | Jun 2007 |
| 124 |                             | 1 380,2 | 15 544,1 | 15 845,5 | 38,9    | -1 525,7 | Jun 2006 |
| 107 | Phumelela Gaming & Leisure  | 2 296,6 | 422,0    | 1 249,5  | 265,9   | 89,2     | Jul 2007 |
| 112 |                             | 2 051,8 | 312,4    | 1 129,6  | 183,7   | 79,8     | Jul 2006 |
| 108 | Metorex                     | 2 286,5 | 3 464,9  | 7 527,7  | 2 336,7 | 410,9    | Jun 2007 |
| 123 |                             | 1 454,1 | 1 705,1  | 6 635,3  | 932,5   | 189,4    | Jun 2006 |
| 109 | Hudaco Industries           | 2 226,9 | 3 514,7  | 2 318,3  | 668,8   | 239,4    | Nov 2007 |



|     |                                   |         |          |          |         |        |          |
|-----|-----------------------------------|---------|----------|----------|---------|--------|----------|
| 118 |                                   | 1 837,8 | 1 161,8  | 2 421,3  | 627,9   | 146,9  | Nov 2006 |
| 110 | <b>Astrapak</b>                   | 2 223,1 | 1 647,6  | 972,9    | 612,8   | 134,0  | Feb 2007 |
| 116 |                                   | 1 874,0 | 1 313,9  | 1 822,9  | 562,3   | 153,8  | Feb 2006 |
| 111 | <b>Comair</b>                     | 2 211,7 | 1 144,3  | 966,0    | 401,8   | 68,5   | Jun 2007 |
| 113 |                                   | 1 973,2 | 1 059,6  | 1 554,0  | 345,2   | 65,5   | Jun 2006 |
| 112 | <b>DRDGold</b>                    | 2 209,7 | 1 946,9  | 3 105,6  | 553,6   | 34,5   | Jun 2007 |
| 122 |                                   | 1 600,0 | 3 004,8  | 1 483,3  | 1 220,4 | -139,8 | Jun 2006 |
| 113 | <b>Trencor</b>                    | 2 041,4 | 11 334,9 | 4 811,6  | 2 366,8 | 190,6  | Dec 2006 |
| 119 |                                   | 1 827,5 | 9 170,2  | 5 380,5  | 2 043,1 | 437,1  | Dec 2005 |
| 114 | <b>GijimaAST</b>                  | 2 017,4 | 752,0    | 1 109,4  | 12,8    | 19,5   | Jun 2007 |
| 114 |                                   | 1 951,0 | 690,2    | 877,8    | 27,5    | 32,5   | Jun 2006 |
| 115 | <b>The Kelly Group</b>            | 1 994,0 | 394,5    | 770,0    | -6,0    | 74,6   | Sep 2007 |
| -   |                                   | -       | -        | -        | -       | -      | -        |
| 116 | <b>Amalgamated Appliance Hold</b> | 1 979,7 | 869,2    | 392,6    | 513,0   | 103,4  | Jun 2007 |
| 110 |                                   | 2 150,8 | 932,0    | 1 167,0  | 465,7   | 108,0  | Jun 2006 |
| 117 | <b>Nu-World Holdings</b>          | 1 865,8 | 702,5    | 339,7    | 508,4   | 40,5   | Aug 2007 |
| 121 |                                   | 1 638,7 | 729,8    | 826,6    | 451,4   | 67,1   | Aug 2006 |
| 118 | <b>Pinnacle Technology</b>        | 1 715,8 | 617,8    | 841,8    | 154,1   | 66,6   | Jun 2007 |
| 133 |                                   | 1 060,8 | 544,9    | 710,2    | 94,3    | 37,1   | Jun 2006 |
| 119 | <b>Tourism Investment Corp</b>    | 1 639,4 | 1 065,7  | 1 577,7  | 120,4   | 121,6  | Jun 2007 |
| 126 |                                   | 1 315,0 | 775,1    | 2 009,4  | 163,8   | 95,6   | Jun 2006 |
| 120 | <b>Gold Reef Casino Resorts</b>   | 1 517,1 | 1 675,0  | 6 978,6  | 709,4   | 191,1  | Dec 2006 |
| 129 |                                   | 1 165,4 | 1 255,0  | 5 834,9  | 840,0   | 202,8  | Dec 2005 |
| 121 | <b>Italtile</b>                   | 1 477,0 | 1 337,0  | 2 365,5  | 888,0   | 270,0  | Jun 2007 |
| 127 |                                   | 1 285,0 | 1 113,0  | 4 930,8  | 708,0   | 236,0  | Jun 2006 |
| 122 | <b>Ceramic Industries</b>         | 1 375,4 | 1 372,8  | 1 707,6  | 1 020,6 | 211,3  | Jul 2007 |
| 132 |                                   | 1 085,2 | 1 151,6  | 2 867,7  | 852,7   | 182,9  | Jul 2006 |
| 123 | <b>Sentula Mining</b>             | 1 368,8 | 2 040,3  | 4 169,5  | 816,9   | 186,8  | Mar 2007 |
| -   |                                   | 616,5   | 886,4    | 3 389,9  | 442,0   | 129,2  | Mar 2006 |
| 124 | <b>PSG</b>                        | 1 343,7 | 5 074,6  | 3 336,6  | 2 048,8 | 760,9  | Feb 2007 |
| 117 |                                   | 1 863,2 | 1 950,1  | 4 824,7  | 807,0   | 430,3  | Feb 2006 |
| 125 | <b>Country Foods</b>              | 1 309,2 | 644,6    | 92,4     | 261,4   | 86,8   | Jun 2007 |
| -   |                                   | -       | -        | -        | -       | -      | -        |
| 126 | <b>Argent Industrial</b>          | 1 296,3 | 1 112,4  | 1 596,9  | 646,5   | 135,2  | Mar 2007 |
| 136 |                                   | 1 000,0 | 846,2    | 1 349,1  | 507,0   | 116,5  | Mar 2006 |
| 127 | <b>Santova Logistics</b>          | 1 244,5 | 304,9    | 136,7    | 8,0     | 3,5    | Feb 2007 |
| -   |                                   | 31,0    | 148,2    | 202,1    | 28,1    | 1,9    | Dec 2005 |
| 128 | <b>ApexHi A Properties</b>        | 1 210,1 | 9 748,1  | 10 091,5 | 3 694,3 | 42,4   | Jun 2007 |
| 135 |                                   | 1 016,7 | 7 078,4  | 7 561,4  | 1 576,3 | 67,1   | Jun 2006 |
| 129 | <b>Datacentrix Holdings</b>       | 1 201,9 | 426,3    | 821,1    | 190,3   | 79,6   | Feb 2007 |



|     |                                 |         |          |         |         |        |          |
|-----|---------------------------------|---------|----------|---------|---------|--------|----------|
| 134 |                                 | 1 034,4 | 420,4    | 831,3   | 153,0   | 53,4   | Feb 2006 |
| 130 | <b>Raubex Group</b>             | 1 190,9 | 717,5    | 6 211,0 | 337,1   | 102,6  | Feb 2007 |
| -   |                                 | -       | -        | -       | -       | -      | -        |
| 131 | <b>Basil Read Holdings</b>      | 1 162,2 | 592,0    | 2 230,6 | 137,1   | 47,5   | Dec 2006 |
| 148 |                                 | 617,3   | 244,0    | 1 426,2 | 12,1    | 28,8   | Dec 2005 |
| 132 | <b>AG Industries</b>            | 1 151,1 | 869,9    | 364,0   | 272,7   | -14,0  | Jun 2007 |
| 131 |                                 | 1 086,1 | 662,6    | 1 083,7 | 220,4   | 81,7   | Jun 2006 |
| 133 | <b>Capitec Bank Holdings</b>    | 1 138,1 | 2 135,2  | 2 990,4 | 857,2   | 173,6  | Feb 2007 |
| 140 |                                 | 828,2   | 1 196,9  | 2 949,4 | 477,1   | 169,9  | Feb 2006 |
| 134 | <b>UCS Group</b>                | 1 070,5 | 510,6    | 870,2   | 32,4    | 96,6   | Sep 2007 |
| 189 |                                 | 306,2   | 267,6    | 1 247,6 | 65,0    | 10,4   | Sep 2006 |
| 135 | <b>House of Busby</b>           | 1 062,3 | 522,4    | 1 223,8 | 268,3   | 60,6   | Jun 2007 |
| 143 |                                 | 693,4   | 356,3    | 829,2   | 212,4   | 41,0   | Jun 2006 |
| 136 | <b>Conduit Capital</b>          | 1 044,3 | 1 104,0  | 202,8   | 94,9    | 9,6    | Aug 2007 |
| -   |                                 | 0,4     | 18,3     | 154,2   | -21,8   | -2,0   | Feb 2006 |
| 137 | <b>Trans Hex Group</b>          | 1 035,8 | 1 464,6  | 1 113,5 | 1 044,7 | 49,9   | Mar 2007 |
| 130 |                                 | 1 087,9 | 1 311,2  | 1 304,3 | 955,5   | -194,2 | Mar 2006 |
| 138 | <b>Value Group</b>              | 1 034,0 | 837,9    | 359,8   | 432,8   | 31,1   | Feb 2007 |
| 138 |                                 | 885,9   | 746,2    | 579,8   | 413,0   | 81,8   | Feb 2006 |
| 139 | <b>Merafe Resources</b>         | 1 030,5 | 2 078,6  | 7 764,6 | 1 077,2 | 140,0  | Dec 2006 |
| 150 |                                 | 614,6   | 2 023,3  | 3 077,2 | 904,9   | 41,3   | Dec 2005 |
| 140 | <b>Voxtelecom</b>               | 990,1   | 493,7    | 2 286,8 | 8,8     | 55,5   | Aug 2007 |
| -   |                                 | 196,4   | 83,1     | 1 411,6 | 15,7    | 15,9   | Aug 2006 |
| 141 | <b>ELB Group</b>                | 983,4   | 543,7    | 524,8   | 180,9   | 34,9   | Jun 2007 |
| 146 |                                 | 665,0   | 516,1    | 436,8   | 151,2   | 8,5    | Jun 2006 |
| 142 | <b>Dorbyl</b>                   | 962,1   | 743,4    | 272,6   | 473,5   | -1,8   | Mar 2007 |
| 125 |                                 | 1 369,7 | 789,6    | 511,1   | 466,9   | -66,7  | Mar 2006 |
| 143 | <b>Coronation Fund Managers</b> | 962,0   | 18 879,2 | 2 021,1 | -194,0  | 294,8  | Sep 2007 |
| 142 |                                 | 706,2   | 16 303,4 | 2 758,2 | 16,1    | 212,8  | Sep 2006 |
| 144 | <b>Winhold</b>                  | 917,2   | 619,4    | 148,9   | 182,9   | 28,3   | Sep 2007 |
| 139 |                                 | 873,2   | 558,1    | 237,3   | 164,1   | 7,9    | Sep 2006 |
| 145 | <b>Enviroserv Holdings</b>      | 873,8   | 841,3    | 1 567,4 | 306,7   | 89,2   | Jun 2007 |
| 141 |                                 | 741,7   | 671,3    | 1 212,2 | 273,7   | 67,0   | Jun 2006 |
| 146 | <b>Famous Brands</b>            | 872,2   | 450,9    | 1 393,1 | 73,0    | 97,9   | Feb 2007 |
| 144 |                                 | 669,2   | 304,7    | 1 389,2 | 30,7    | 76,8   | Feb 2006 |
| 147 | <b>Workforce</b>                | 860,5   | 281,8    | 276,0   | 121,4   | 20,6   | Dec 2006 |
| -   |                                 | -       | -        | 360,0   | -       | -      | -        |
| 148 | <b>Faritec Holdings</b>         | 858,3   | 240,1    | 232,0   | 19,3    | 19,2   | Jun 2007 |
| 157 |                                 | 530,1   | 263,1    | 248,4   | 29,4    | 9,6    | Jun 2006 |
| 149 | <b>ADvTech</b>                  | 830,5   | 486,4    | 1 555,0 | 255,0   | 89,3   | Dec 2006 |
| 145 |                                 | 667,9   | 438,5    | 1 582,5 | 218,2   | 60,5   | Dec 2005 |



|     |  |       |          |          |         |       |          |
|-----|--|-------|----------|----------|---------|-------|----------|
| 150 | <b>Paracon Holdings</b>                | 792,3 | 208,7    | 783,9    | 102,6   | 66,3  | Sep 2007 |
| 147 |  | 635,4 | 190,5    | 801,7    | 96,1    | 44,2  | Sep 2006 |
| 151 | <b>Enaleni</b>                         | 789,5 | 457,1    | 1 480,5  | -411,1  | 114,2 | Dec 2006 |
| 198 |  | 245,1 | 317,3    | 1 754,9  | -287,7  | 14,0  | Dec 2005 |
| 152 | <b>Peregrine Holdings</b>              | 778,9 | 10 952,4 | 3 421,9  | 728,0   | 402,6 | Mar 2007 |
| 156 |  | 538,0 | 6 146,1  | 3 376,3  | 423,6   | 224,6 | Mar 2006 |
| 153 | <b>Control Instruments Group</b>       | 772,2 | 630,2    | 207,8    | 145,3   | 23,6  | Dec 2006 |
| 174 |  | 395,1 | 306,6    | 612,8    | 113,9   | 26,6  | Dec 2005 |
| 154 | <b>Kagiso Media</b>                    | 738,3 | 398,2    | 1 628,8  | -102,5  | 145,9 | Jun 2007 |
| 151 |  | 604,8 | 329,5    | 2 083,6  | -45,0   | 128,4 | Jun 2006 |
| 155 | <b>Eastern Platinum</b>                | 712,7 | 7 103,4  | 16 813,5 | 6 679,8 | -73,1 | Jun 2007 |
| -   |  | -     | -        | -        | -       | -     | -        |
| 156 | <b>Mercantile Lisbon Bank</b>          | 708,9 | 4 682,2  | 1 142,3  | 816,3   | 169,0 | Dec 2007 |
| 162 |  | 485,5 | 4 437,6  | 1 299,8  | 655,9   | 95,2  | Dec 2006 |
| 157 | <b>Enterprise Outsourcing Holdings</b> | 703,7 | 310,4    | 586,0    | 80,6    | 45,4  | Jul 2007 |
| 160 |  | 503,3 | 224,7    | 541,6    | 56,8    | 34,6  | Jul 2006 |
| 158 | <b>Emira Property Fund</b>             | 631,0 | 7 410,5  | 4 854,3  | 5 866,4 | 374,2 | Jun 2007 |
| 165 |  | 452,0 | 3 104,6  | 3 908,3  | 2 483,3 | 245,7 | Jun 2006 |
| 159 | <b>Hyprop Investments</b>              | 630,3 | 7 890,6  | 6 686,1  | 3 949,4 | 52,0  | Dec 2006 |
| 153 |  | 571,5 | 6 180,1  | 6 453,3  | 2 464,7 | -71,6 | Dec 2005 |
| 160 | <b>Monteagle Soci t  Anonyme</b>       | 623,8 | 788,7    | 330,7    | 445,9   | 4,7   | Sep 2007 |
| 152 |  | 602,0 | 531,2    | 241,9    | 308,7   | 11,4  | Sep 2006 |
| 161 | <b>Clientele Life Assurance</b>        | 623,5 | 1 270,3  | 2 618,7  | 80,5    | 110,7 | Jun 2007 |
| 164 |  | 453,4 | 1 036,1  | 2 534,0  | 120,5   | 88,4  | Jun 2006 |
| 162 | <b>Fountainhead Prop Trust</b>         | 606,5 | 7 097,9  | 6 026,1  | 6 315,1 | 434,8 | Sep 2007 |
| -   |  | 545,2 | 5 770,8  | 6 822,9  | 5 198,1 | 382,7 | Sep 2006 |
| 163 | <b>Pangbourne Properties</b>           | 605,7 | 6 217,9  | 4 168,8  | 2 164,6 | 433,7 | Jun 2007 |
| 170 |  | 412,4 | 4 327,1  | 3 915,1  | 1 556,1 | 344,3 | Jun 2006 |
| 164 | <b>Simmer &amp; Jack Mines</b>         | 602,9 | 2 027,8  | 5 522,6  | 1 300,1 | -81,5 | Mar 2007 |
| -   |  | 200,3 | 538,6    | 6 281,2  | 357,9   | -69,3 | Mar 2006 |
| 165 | <b>Sasfin Holdings</b>                 | 596,0 | 2 535,6  | 1 230,8  | 494,6   | 137,4 | Jun 2007 |
| 163 |  | 485,3 | 2 450,4  | 1 175,1  | 408,9   | 142,6 | Jun 2006 |
| 166 | <b>Alert</b>                           | 566,0 | 206,0    | 203,5    | 97,2    | 23,2  | Jun 2007 |
| -   |  | -     | -        | 429,4    | -       | -     | -        |
| 167 | <b>Celcom Group</b>                    | 555,2 | 92,5     | 119,7    | 13,0    | 5,2   | Jun 2007 |
| -   |  | -     | -        | 266,0    | -       | -     | -        |
| 168 | <b>Vukile Property Fund</b>            | 553,5 | 4 151,1  | 2 973,2  | 1 168,2 | -3,5  | Mar 2007 |
| 154 |  | 567,7 | 3 768,4  | 3 183,1  | 669,7   | -7,5  | Mar 2006 |
| 169 | <b>Transpaco</b>                       | 541,7 | 357,6    | 197,4    | 115,8   | 21,3  | Jun 2007 |



|     |   |       |         |         |         |        |          |
|-----|---|-------|---------|---------|---------|--------|----------|
| 179 |   | 340,6 | 225,0   | 233,6   | 101,6   | 15,6   | Jun 2006 |
| 170 | <b>Glenrand MIB</b>                       | 516,5 | 6 030,3 | 335,9   | 60,0    | 102,2  | Jun 2007 |
| 161 |   | 494,5 | 5 787,5 | 435,3   | -14,5   | -126,4 | Jun 2006 |
| 171 | <b>Howden Africa Holdings</b>             | 510,9 | 274,2   | 821,6   | -28,5   | 12,8   | Dec 2006 |
| 158 |   | 497,5 | 291,9   | 341,8   | 113,7   | 25,9   | Dec 2005 |
| 172 | <b>City Lodge Hotels</b>                  | 509,7 | 746,2   | 3 190,1 | 595,8   | 184,6  | Jun 2007 |
| 166 |   | 442,1 | 646,2   | 3 334,0 | 499,8   | 148,8  | Jun 2006 |
| 173 | <b>Excellerate Holdings</b>               | 494,8 | 245,1   | 243,6   | 82,9    | 16,2   | Jun 2007 |
| 159 |   | 508,7 | 206,6   | 221,7   | 52,6    | 3,7    | Jun 2006 |
| 174 | <b>Redefine Income Fund</b>               | 488,8 | 9 834,5 | 6 113,5 | 4 912,0 | 979,8  | Aug 2007 |
| 185 |   | 320,8 | 6 102,8 | 6 101,8 | 2 505,1 | 371,7  | Aug 2006 |
| 175 | <b>Delta Electrical Indus</b>             | 486,1 | 898,8   | 565,4   | 678,2   | -32,3  | Dec 2007 |
| 167 |   | 438,2 | 994,6   | 885,5   | 859,0   | -121,2 | Dec 2006 |
| 176 | <b>Sovereign Food Investments</b>         | 458,7 | 479,6   | 346,5   | 286,4   | 65,4   | Feb 2007 |
| 173 |   | 398,6 | 411,9   | 392,7   | 240,0   | 75,3   | Feb 2006 |
| 177 | <b>Sekunjalo Investments</b>              | 449,5 | 809,6   | 317,1   | 525,6   | -75,2  | Aug 2007 |
| 168 |   | 425,1 | 601,4   | 310,7   | 303,4   | -7,0   | Aug 2006 |
| 178 | <b>Simeka BG</b>                          | 447,0 | 155,5   | 380,2   | -0,5    | 45,9   | May 2007 |
| 181 |   | 326,1 | 115,6   | 196,9   | -46,1   | 25,1   | May 2006 |
| 179 | <b>Digicore Holdings</b>                  | 440,7 | 317,8   | 1 796,5 | 128,7   | 87,1   | Jun 2007 |
| 183 |   | 323,2 | 223,4   | 1 143,3 | 114,2   | 59,2   | Jun 2006 |
| 180 | <b>Masonite (Africa)</b>                  | 432,0 | 344,7   | 270,3   | 266,7   | 21,7   | Dec 2006 |
| 171 |   | 402,8 | 310,5   | 246,0   | 247,5   | 12,1   | Dec 2005 |
| 181 | <b>Bowler Metcalf</b>                     | 427,2 | 356,4   | 367,0   | 246,5   | 46,6   | Jun 2007 |
| 169 |   | 417,8 | 312,0   | 596,9   | 204,2   | 48,1   | Jun 2006 |
| 182 | <b>Cargo Carriers</b>                     | 426,4 | 447,1   | 220,0   | 276,4   | 19,2   | Feb 2007 |
| 177 |   | 355,3 | 351,9   | 240,0   | 233,4   | 23,3   | Feb 2006 |
| 183 | <b>Setpoint Technology Holdings</b>       | 407,5 | 185,7   | 332,5   | 64,5    | 11,8   | Aug 2007 |
| 188 |   | 315,7 | 237,2   | 203,0   | 54,8    | 10,0   | Aug 2006 |
| 184 | <b>Jasco Electronics Holdings</b>         | 400,7 | 175,9   | 191,6   | 75,0    | 28,9   | Feb 2007 |
| 180 |   | 332,2 | 129,2   | 194,4   | 55,4    | 19,7   | Feb 2006 |
| 185 | <b>York Timber Organisation</b>           | 394,0 | 229,2   | 1 766,5 | 113,3   | 40,7   | Dec 2006 |
| 191 |   | 284,0 | 163,3   | 163,4   | 77,1    | -4,7   | Dec 2005 |
| 186 | <b>African &amp; Overseas Enterprises</b> | 390,6 | 189,1   | 79,7    | 76,7    | 13,0   | Jun 2007 |
| 186 |   | 317,6 | 173,5   | 77,1    | 70,9    | 3,4    | Jun 2006 |
| 187 | <b>Rex Trueform Clothing</b>              | 390,6 | 188,8   | 195,8   | 146,1   | 20,5   | Jun 2007 |
| 187 |   | 317,6 | 173,5   | 138,5   | 135,0   | 9,1    | Jun 2006 |
| 188 | <b>Petra Mining</b>                       | 382,3 | 670,4   | 2 166,7 | 506,4   | 24,9   | Jun 2007 |



|     |                                      |       |         |         |         |         |          |
|-----|--------------------------------------|-------|---------|---------|---------|---------|----------|
| -   |                                      | 176,7 | 514,9   | 686,2   | 408,2   | 24,8    | Jun 2006 |
| 189 | <b>Sanyati Holdings</b>              | 379,6 | 200,8   | 703,4   | 71,7    | 27,6    | Feb 2007 |
| -   |                                      | -     | -       | 658,4   | -       | -       | -        |
| 190 | <b>Barnard Jacobs Mellet</b>         | 371,4 | 6 370,8 | 446,7   | 299,2   | 111,7   | Mar 2007 |
| 178 |                                      | 342,3 | 4 141,1 | 607,2   | 288,8   | 81,1    | Mar 2006 |
| 191 | <b>Cullinan Holdings</b>             | 353,7 | 320,3   | 337,6   | 35,6    | 25,5    | Sep 2007 |
| 193 |                                      | 269,1 | 262,4   | 438,2   | 20,8    | 21,8    | Sep 2006 |
| 192 | <b>Wearne</b>                        | 352,5 | 349,5   | 495,0   | 150,1   | 32,3    | Feb 2007 |
| -   |                                      | 196,6 | 126,7   | 892,5   | 63,1    | 17,6    | Feb 2006 |
| 193 | <b>iFour Properties</b>              | 352,1 | 2 938,8 | 1 703,6 | 912,6   | 16,7    | Jun 2007 |
| 182 |                                      | 324,5 | 2 507,5 | 1 854,4 | 432,9   | 48,2    | Jun 2006 |
| 194 | <b>Afrimat</b>                       | 349,0 | 400,8   | 889,5   | 297,1   | 55,7    | Feb 2007 |
| -   |                                      | -     | -       | 1 192,0 | -       | -       | -        |
| 195 | <b>Brimstone Investment Corp</b>     | 345,4 | 2 755,2 | 1 503,0 | 1 731,2 | 1 292,6 | Dec 2006 |
| -   |                                      | 179,6 | 881,2   | 1 923,9 | 486,8   | 171,0   | Dec 2005 |
| 196 | <b>Primeserv Group</b>               | 345,4 | 77,8    | 110,9   | 32,2    | 3,9     | Dec 2006 |
| 176 |                                      | 374,6 | 55,7    | 77,9    | 28,7    | -0,7    | Jun 2005 |
| 197 | <b>Micromega</b>                     | 318,4 | 157,0   | 159,2   | 88,0    | 34,2    | Dec 2006 |
| -   |                                      | 159,3 | 124,0   | 323,2   | 52,3    | 16,5    | Dec 2005 |
| 198 | <b>Rare Holdings</b>                 | 317,8 | 155,6   | 310,6   | 81,6    | 12,3    | Jun 2007 |
| -   |                                      | -     | -       | 235,2   | -       | -       | -        |
| 199 | <b>Metrofile Holdings</b>            | 299,7 | 285,2   | 334,9   | -81,8   | 25,2    | Jun 2007 |
| 192 |                                      | 276,2 | 235,3   | 99,3    | -270,7  | 8,5     | Jun 2006 |
| 200 | <b>B&amp;W Instrument &amp; Elec</b> | 294,0 | 132,8   | 438,6   | 66,1    | 27,4    | Aug 2007 |
| -   | -                                    | -     | -       | -       | -       | -       | -        |

Source: BFA



