

CHAPTER EIGHT: RESULTS AND ANALYSIS OF RESEARCH FINDINGS

Discovery consists of seeing what everybody has seen and thinking what nobody has thought.

(Albert von Szent-Gyorgyi, in Hofstee, 2006:219).

8.1 INTRODUCTION

This chapter reports on the outcome of the data collection undertaken as primary research in the study. The primary research was conducted by means of the structured survey questionnaire shown in Appendix A. This chapter discusses the survey results and the quantitative analysis of the research findings in detail. These results and the details of the analysis are critical inputs for the redesigning of the Balanced Scorecard model to accommodate African perspectives.

In Section A of the questionnaire, participants were asked to fill in details about their organisations – the country in which the participating organisation operates, the industry, the size of the organisation in terms of the number of employees, and the selection of stakeholders who deal with the organisation. The participants were also asked to indicate whether or not they used the Balanced Scorecard model in their corporate planning and performance measurement systems. If they used the Balanced Scorecard model, they were further asked to rate the usefulness of the model for their operations and overall corporate performance. Details about all the above organisational demographics are reported in this chapter.

The chapter also reports on the participants' ratings of the 52 statements that were formulated during the study. They used Likert scale rankings. The statements covered all six strategic themes of the conceptual framework, namely the relationships and culture, stakeholder, business processes and practices,

intellectual capital, value creation, and corporate conscience themes. The univariate analysis of each statement has been reported on in the form of frequency tables and graphs. **Please note that in some cases the sum of individual percentages as indicated in frequency tables may not be exactly 100%, due to some rounding off errors.**

The study also aimed to establish the relationships among variables within the strategic themes. Such relationships have been assessed through bivariate analysis, the findings of which are also reported in this chapter. Through the bivariate analysis, the chapter further reports on findings on the strength of the relationships among the six strategic themes of the conceptual framework.

Finally, the chapter reports on the results of the multivariate analysis of the 52 variables, where their factorability was assessed by means of exploratory factor analysis technique. The 52 variables were subjected to principal component analysis to rearrange them into their main reduced components.

8.2 DEMOGRAPHICS OF THE PARTICIPANTS

This section reports on the demographics of the participating organisations, commenting on the country of origin, industry, size of the organisation, stakeholder considerations, management level and work experience of respondents, and the use of the Balanced Scorecard model and ratings on its usefulness for those who used the model.

8.2.1 Country of participating organisations

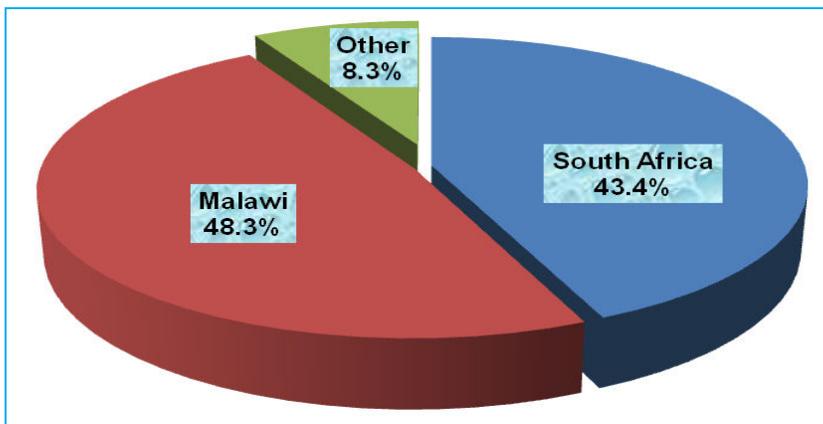
The demographics of the participating organisations (Total=387) indicate that 168 respondents (43.4%) were from South Africa, 187 respondents (48.3%) were from Malawi, and 32 (8.3%) respondents were from other African countries, which included Zimbabwe, Mozambique, Lesotho, Botswana and Zambia. As reflected in the statistics, the majority (91.7%) of respondents were in Malawi and South Africa, combined with 8.3% in other African countries. A summary of the

countries in which the survey respondents are working is shown in Table 16 and Figure 15, below.

Table 16: Country of participating organisations

Country	Frequency	Percentage	Cumulative Percentage
South Africa	168	43.4%	43.4%
Malawi	187	48.3%	91.7%
Other	32	8.3%	100.0%
Total	387	100.0%	

Figure 15: Country of participating organisations



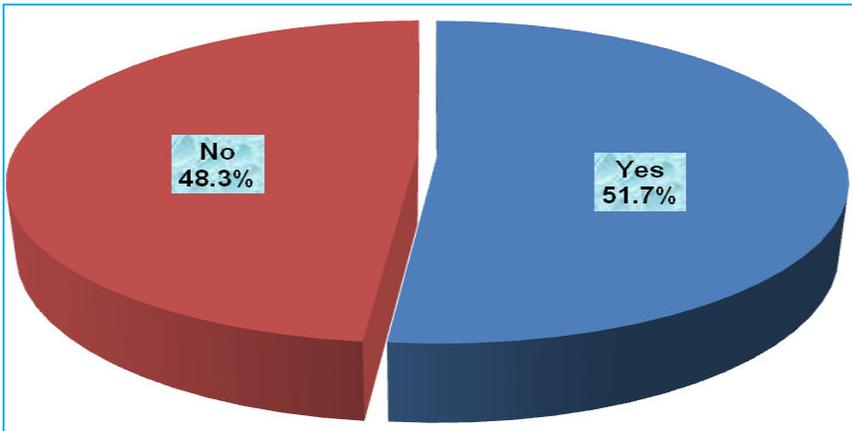
8.2.2 Use of the Balanced Scorecard model

Out of the 387 respondents, a total of 51.7% indicated that they were using the Balanced Scorecard model, whilst 48.3% indicated that they were not. This shows that, whilst many companies in Africa have adopted and implemented the Balanced Scorecard model, some have not yet adopted the model for their business activities. The results on whether or not companies use the Balanced Scorecard model are summarised in Table 17 and Figure 16, overleaf.

Table 17: Use of the Balanced Scorecard model

Response	Frequency	Percentage
Yes	200	51.7%
No	187	48.3%
Total	387	100.0%

Figure 16: Use of the Balanced Scorecard model



8.2.3 Rating of the usefulness of the Balanced Scorecard model

Respondents who indicated “Yes” to the question of whether they use the Balanced Scorecard model (Total=200) were asked to rate the usefulness of the model towards meeting their organisational objectives when executing their strategies. The majority (86.0%) of these respondents showed satisfaction with the Balanced Scorecard model (“Useful”=36.5%, “Very Useful”=43.0% and “Most Useful”=6.5%). A total of 14.0% (“Not Useful”=3.0% and “Somehow Useful”=11.0%) indicated that they were not satisfied with the Balanced Scorecard model.

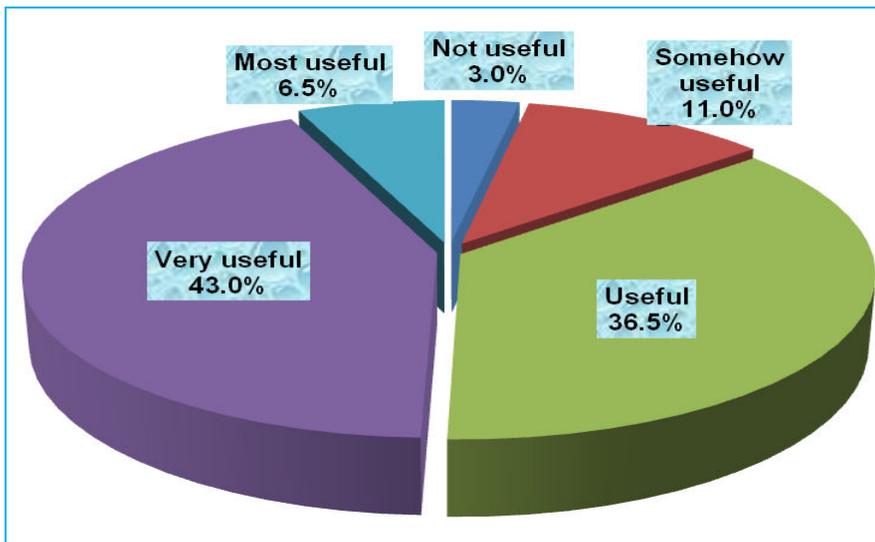
It can therefore be implied from these findings that generally the principles behind the Balanced Scorecard model are good, but the conceptualisation of its perspectives could be an area of concern to many organisations. Thus, there is still a need to improve the model by redesigning some of its perspectives to suit a

local African framework. Responses on the usefulness of the Balanced Scorecard model are summarised in Table 18 and Figure 17, below.

Table 18: Rating of the usefulness of the Balanced Scorecard model

Response	Frequency	Percentage	Cumulative Percentage
Not useful	6	3.0%	3.0%
Somehow useful	22	11.0%	14.0%
Useful	73	36.5%	50.5%
Very useful	86	43.0%	93.5%
Most useful	13	6.5%	100.0%
Total	200	100.0%	

Figure 17: Rating of the usefulness of the Balanced Scorecard model



8.2.4 Management level of respondents

The study targeted both senior and middle management teams, who should be conversant with issues concerning corporate planning and performance measurement systems. Other business executives, such as board members, were also interviewed during the study. However, junior employees such as

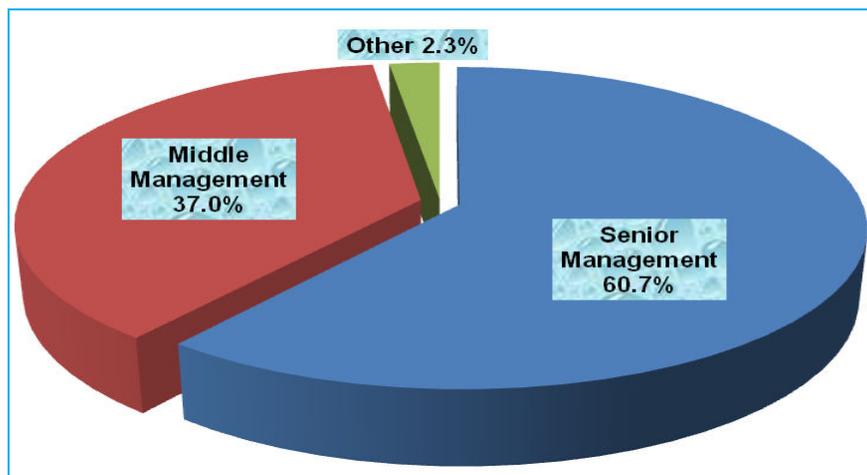
supervisors and operators were not interviewed, as these levels are largely involved in the day-to-day running of organisational operations and not necessarily with corporate strategy issues.

The study demographics indicate that 60.7% of the respondents were in senior management, whilst 37.0% were middle managers and 2.3% were members of the board. Stated differently, 97.7% were members of the internal senior and middle management of the participating organisations. The participation of the vast majority of senior management (60.7%) in this study suggests that the survey results are valid and reliable. The composition of respondents' management level is summarised in Table 19 and Figure 18, below.

Table 19: Management level of respondents

Management Level	Frequency	Percentage	Cumulative Percentage
Senior Management	235	60.7%	60.7%
Middle Management	143	37.0%	97.7%
Other	9	2.3%	100.0%
Total	387	100.0%	

Figure 18: Management level of respondents



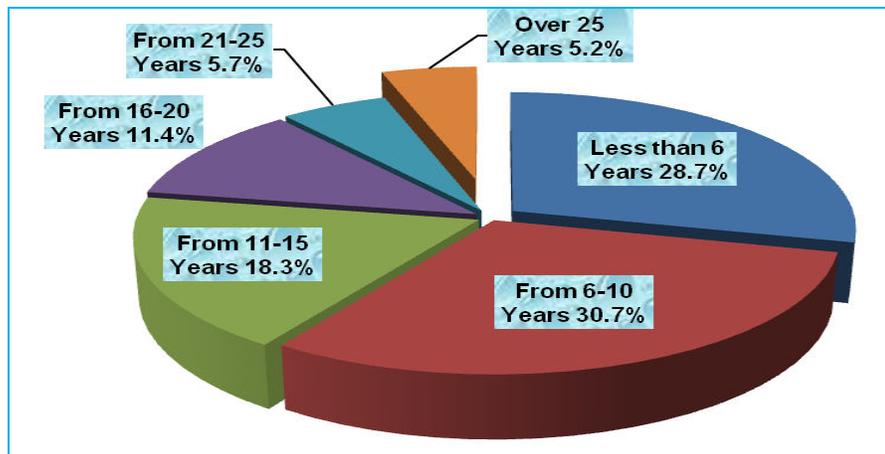
8.2.5 Work experience of respondents

The structured questionnaire also asked respondents to indicate their work experience in terms of the number of years that they have been serving on the organisational management team. The demographics show that the vast majority of the respondents (71.3%) have work experience in this capacity of over five years and above, whilst 40.6% of respondents have work experience of over ten years. These demographics are important, because they indicate that the data that were collected can be relied upon, as experience and management knowledge are well represented in the sample. Statistics on the work experience of the participants, reflected in the form of years of service in management, are summarised in Table 20 and Figure 19, below.

Table 20: Work experience of respondents

Number of years in service	Frequency	Percentage	Cumulative Percentage
Less than 6 years	111	28.7%	28.7%
From 6-10 years	119	30.7%	59.4%
From 11-15 years	71	18.3%	77.8%
From 16-20 years	44	11.4%	89.1%
From 21-25 years	22	5.7%	94.8%
Over 25 years	20	5.2%	100.0%
Total	387	100.0%	

Figure 19: Work experience (years) of respondents



8.2.6 Industry of participating organisations

The study focused on the commercial sector, where all statements made on the structured questionnaire would be addressed. The research results indicate that all industries of the commercial sector were represented, with most of the respondents in the information and communication (19.4%), finance and insurance (17.3%), manufacturing (14.5%), and wholesale and retail trade (13.7%) industries. The “Other” industry category (9.8%) consisted largely of educational institutions, consulting groups, and health practitioners. The findings on the representation of respective industries are summarised in Table 21, below.

Table 21: Demographics on industries

Industry	Frequency	Percentage
Agriculture, Forestry & Fishing	13	3.4%
Mining & Quarrying	19	4.9%
Manufacturing	56	14.5%
Electricity, Gas & Water	22	5.7%
Construction	18	4.7%
Wholesale & Retail trade	53	13.7%
Transport & Storage	9	2.3%
Tourism & Hospitality	11	2.8%
Real estate	6	1.6%
Information & Communication	75	19.4%
Financial & Insurance	67	17.3%
Other	38	9.8%
Total	387	100.0%

8.2.7 Number of employees

The participating organisations were also asked to indicate the number of their employees, as this data provided a way of assessing the size of the organisation. However, some organisations, especially those that are service-oriented, are not

labour intensive, but rather capital intensive, as most of their business processes are automated – this is very typical of financial institutions. The results indicate that a vast majority of 84.2% of the respondents have over 100 employees. Furthermore, the data indicate that 64.1% employ more than 400 people, and the majority (57.6%) employ more than 500 people. The research findings also indicate that 27.6% of respondents employ over 1 000 people, comprising the biggest category of the organisations.

The above statistics show that the majority of participating organisations can be classified as large-scale companies, rather than as SMEs. A statistical summary of the number of employees in the participating organisations is shown in Table 22, below.

Table 22: Number of employees

Number of employees	Frequency	Percentage	Cumulative Percentage
Less than 101	61	15.8%	15.8%
From 101-200	39	10.1%	25.8%
From 201-300	25	6.5%	32.3%
From 301-400	14	3.6%	35.9%
From 401-500	29	7.5%	43.4%
From 501-600	26	6.7%	50.1%
From 601-700	16	4.1%	54.3%
From 701-800	26	6.7%	61.0%
From 801-900	19	4.9%	65.9%
From 901-1 000	25	6.5%	72.4%
Over 1 000	107	27.6%	100.0%
Total	387	100.0%	

8.2.8 Organisational stakeholders

Each participant was asked to indicate the stakeholders (out of the listed eleven stakeholders) that they consider when executing their corporate planning and performance measurement. The results indicate that the most popular five

stakeholders as indicated by the respondents were shareholders (99.0%), management and staff (97.7%), customers (97.4%), suppliers (92.2%), and government (91.5%).

These results demonstrate that most organisations include these five stakeholders in their corporate planning and performance measurement systems. The recognition of suppliers and government as critical elements in the running of business is not emphasised in the Balanced Scorecard model. However, shareholders are recognised under the financial perspective, whilst management and staff fall under the learning and growth perspective, and customers are also recognised under the customer perspective. A summary of stakeholder involvement amongst the participating organisations is shown in Table 23, below.

Table 23: Organisational stakeholders

Stakeholder	Yes		No		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Shareholders	383	99.0%	4	1.0%	387	100.0%
Debt Providers	258	66.7%	129	33.3%	387	100.0%
Customers	377	97.4%	10	2.6%	387	100.0%
Suppliers	357	92.2%	30	7.8%	387	100.0%
Competitors	304	78.6%	83	21.4%	387	100.0%
Management & Staff	378	97.7%	9	2.3%	387	100.0%
Government	354	91.5%	33	8.5%	387	100.0%
External auditors	349	90.2%	38	9.8%	387	100.0%
Regulatory bodies	302	78.0%	85	22.0%	387	100.0%
Community	269	69.5%	118	30.5%	387	100.0%
Natural Environment	119	30.7%	268	69.3%	387	100.0%

N=387

The above table also shows that some of the popular stakeholders include external auditors (90.2%), competitors (78.6%), regulatory bodies (78.0%), the community (69.5%) and debt providers (66.7%). However, the majority of the respondents (69.3%) indicated that they do not consider the natural environment as their main stakeholder.

Further industry analysis shows that a lack of recognition of the natural environment as a stakeholder is prevalent amongst the service industries, such as the tourism and hospitality industry (100.0% “Disagree”), the real estate industry (100.0% “Disagree”), and the financial and insurance industry (78.7% “Disagree”). Only among organisations from the manufacturing (60.7% “Agree”), mining and quarrying (57.9% “Agree”), and transport and storage (71.8% “Agree”) indicate that they include the natural environment as the main stakeholder, with the rest indicate that they do not.

The industrial analysis by country shows that most organisations in Malawi (76.5%), South Africa (60.7%) and other African countries (71.9%) indicated that they do not consider the natural environment as their main stakeholder (see Appendix B). The above statistics demonstrate that most organisations disregard the natural environment as a primary source of capital, confirming the findings of a study by Epstein and Wisner (2001). The present status of focus on issues relating to the natural environment should be a source of serious concern, as it may be a recipe for the sacrifice of long-term corporate sustainability.

The stakeholder rankings emerging from the participants’ responses are summarised in Table 24, overleaf. It is clear that shareholders were ranked the highest (Yes=99.0%) and the natural environment was ranked the lowest (Yes=30.7%). It should also be borne in mind that the stakeholder rankings correspond with the research findings of the univariate analysis of statements on the strategic themes of the conceptual framework, as discussed more fully in Section 8.3.

Table 24: Stakeholder popularity rankings

No	Stakeholder	Popularity
		Percentage
1	Shareholders	99.0%
2	Management & Staff	97.7%
3	Customers	97.4%
4	Suppliers	92.2%
5	Government	91.5%
6	External Auditors	90.2%
7	Competitors	78.6%
8	Regulatory Bodies	78.0%
9	Community	69.5%
10	Debt Providers	66.7%
11	Natural Environment	30.7%

N=387

8.3 UNIVARIATE ANALYSIS OF QUESTIONNAIRE STATEMENTS

Univariate analysis was conducted by means of frequency tables and graphs showing the means of the respondents' ratings on each strategic theme. This analysis was aimed at addressing the first research question of the study:

Research Question 1: To what extent do organisations agree with each statement on the strategic themes of the conceptual framework?

The conceptual framework provides a summary representing the relationships of different stakeholders, grouped into the six strategic themes that represent identifiable areas that would strategically affect corporate planning and performance measurement within an African context. The strategic themes were identified as, first, the relationships and culture theme; second, the stakeholder theme; third, the processes and practices theme; fourth, the intellectual capital theme; fifth, the value creation theme; and, sixth, the corporate conscience strategic theme. All these strategic themes are supposed to be interconnected and interdependent.

Overall, the analysis shows that there were varied responses from participants regarding the extent of their agreement on each on the questionnaire statements covering a particular strategic theme. A summary of participants' responses for each strategic theme of the conceptual framework is presented in frequency table form and graph of means, as shown below.

8.3.1 The relationships and culture strategic theme

Organisational survival is a question of relationships and organisational culture. This strategic theme aims at evaluating relationships that exist between an organisation and its stakeholders and the organisational culture. Culture has been interpreted to mean the organisational values, norms or philosophies that govern the behaviour of people in working toward organisational improvements (Flamholtz, 2001:271; Flamholtz, 2005:86; Gregory *et al.*, 2009:674-675). This section reports on the study results and analysis of all 15 statements relating to the relationships and culture strategic theme (Theme 1).

1) Theme 1, Statement 1. We recognise the interdependence of relationships of our stakeholders

There seems to be a general understanding that an organisation can succeed only if all stakeholders are recognised as members of and contributors to corporate performance, as reflected in the conceptual framework. All the respondents agreed (45.2% "Agree", 46.5% "Strongly Agree" and 8.3% "Somehow Agree"). The analysis thus indicates that the majority of contemporary managers take cognisance of the stakeholder-centred approach in their operations. Thus, stakeholder-centred management models would be appropriate for the African framework. The above analysis confirms the provisions regarding the interconnectedness of organisational stakeholders that is acknowledged by practising organisations. The results also confirm the provisions of the conceptual framework of the study (Figure 1, on p. 7).

2) Theme 1, Statement 2: Our managers listen to and openly communicate with our stakeholders regarding their concerns and contributions

The research results reveal that a total of 86.6% of the respondents agree (40.3% “Agree” and 46.3% “Strongly Agree”) that managers listen to and openly communicate with their stakeholders regarding stakeholders’ concerns about and contributions towards organisational operations. The results further show that only 3.1% are in disagreement, whilst 10.3% “Somehow Agree” with the statement. The analysis demonstrates that the majority of managers in Africa realise that good and effective communication systems with stakeholders enhance business activities, and ultimately overall corporate performance.

The above results suggest that there is open dialogue between most organisations and their stakeholders, and that stakeholders are continuously updated on corporate activities and performance. Open and effective communication also provides honest feedback from stakeholders which should lead to continuous improvement processes in the organisation(s) concerned, as indicated by Szwajkowski (2000).

3) Theme 1, Statement 3: Our primary goal of external reporting is to contribute to an ongoing stakeholder dialogue

Apart from open communication and feedback systems, the study also aimed at assessing the extent of the external reporting systems that are intended to meet stakeholders’ informational needs. The study results reveal that a majority of 78.1% of the respondents agreed (40.6% “Agree” and 37.5% “Strongly Disagree”) that their external reporting systems are primarily meant to maintain stakeholder dialogue with the respective corporations. Only 2.8% disagree, whilst 19.1% “Somehow Agree” with the above statement. This analysis indicates that the majority of managers take

cognisance of good stakeholder dialogue, which is achieved through external reporting systems. This kind of stakeholder relationship would enhance cooperation and active participation amongst different stakeholders who are fully aware of corporate operations and overall performance.

4) Theme 1, Statement 4: Our financial reports are constructed towards meeting interests of our external stakeholders

A total of 74.5% of the respondents agreed that their financial reports are focused on meeting interests of their external stakeholders. The study results also show that 7.0% disagree and 18.6% “Somehow Agree” with the above statement. This analysis demonstrates that most organisations in Africa target their external stakeholders when producing financial reports. Thus, the research findings demonstrate that most corporations in Africa embrace a stakeholder-centred approach, confirming the “inclusiveness” of African management systems that was also observed by Rossouw (2005) and the Institute of Directors in Southern Africa (2009).

5) Theme 1, Statement 5: Our external financial reporting system takes into account our social obligations towards local communities

Although a majority of 60.4% agreed (32.0% “Agree” and 28.4% “Strongly Agree”) that the external financial reporting systems incorporate social elements, 11.9% disagreed, and 27.6% were not in total agreement (“Somehow agree”) with the statement. The analysis of the responses to this statement reveals that whilst some organisations have embraced social reporting systems, others have not. This trend suggests that the amount of emphasis given to corporate social responsibility issues is still in a transitional stage and that more has to be done to sensitise corporations, as corporate citizens, to their roles in respect of local communities. This can be achieved through adherence to the recommendations set out in the King III

Report about the inclusion of social reporting systems in corporate reports (Institute of Directors in Southern Africa, 2009:12, 109).

6) *Theme 1, Statement 6: Our external financial reporting system takes into account our environmental obligations*

The study results reveal that 50.9% of the respondents agreed that their financial reporting systems incorporate environmental issues as a corporate obligation. A total of 19.9% of the participants disagreed (17.3% “Disagree” and 2.6% “Strongly Disagree”) with the statement, whilst 29.2% “Somehow agree” with the above statement. As is the case with corporate social responsibility issues, this analysis indicates that most organisations do not fully incorporate environmental issues in their financial reporting systems. The research findings are in line with the ecological demographics (see Section 8.2.8, where it was indicated that only 30.7% of respondents recognise the natural environment as one of their stakeholders.

The results demonstrate that there is little focus on issues regarding the natural environment and that attention to issues is still in a transitional stage. The implementation of the provisions set out in the King III Report about the inclusion of environmental reporting systems in corporate reports (Institute of Directors in Southern Africa, 2009:109) will facilitate the sensitisation process amongst corporations.

7) *Theme 1, Statement 7: Our external financial reporting system integrates economic, social and environmental dimensions (triple bottom line reporting)*

The relationships and culture strategic theme also focuses on the triple bottom line reporting system. The study results indicate that 59.9% of the respondents think that their organisations adhere to the integration of all three elements (economic, social and natural environmental elements) in

their external reporting systems. The results further reveal that 9.1% disagree with the statement, while 31.0% “Somehow agree”. The analysis demonstrates that most organisations have started implementing the triple bottom line reporting system, as recommended by the King III Report (Institute of Directors in Southern Africa, 2009:109).

Furthermore, the above analysis indicates that sustainability issues are in a transitional stage, as some have not yet embraced the triple bottom line reporting system in their financial reports. Corporate sustainability issues are unlikely to permeate organisational systems, unless social and environmental issues are integrated in the main business streams, as advocated by the triple bottom line concept (Pedersen & Neergaard, 2008:10). To achieve the triple bottom line, a more open-ended perspective should be adopted and the focus should be more stakeholder-centred, rather than shareholder-focused, as it is at present with the Balanced Scorecard model.

8) *Theme 1, Statement 8: Our financial statements are prepared based on the generally accepted accounting principles (GAAP)*

The financial reporting systems that are targeted at different stakeholders are supposed to follow GAAP for objectivity and comparability purposes (Needles & Powers, 2010; Wold *et al.*, 1974). The study results reveal that the vast majority (86.3%) agree that they follow GAAP when preparing their financial statements. However, 5.9% disagree and 7.8% are not in full agreement (“Somehow Agree”) with the statement, signifying that there are still some cases where GAAP may not be followed.

Overall, this analysis indicates that most organisations in Africa adhere to GAAP in preparing their financial reports for external consumption. The results confirm the objectivity of corporate financial reports, which can

enhance decision-making by users of the financial statements regarding the performance of the organisations concerned.

9) Theme 1, Statement 9: Our financial statements are verified by the appointed external auditors for external reporting

The study results show that a total of 90.1% agree (27.9% “Agree” and 58.4% “Strongly agree”) that their corporate financial statements are verified by the appointed external auditors for the purposes of external reporting systems. However, there are also some departures from the statement, as 5.5% disagree and 4.4% “Somehow Agree” with the statement. The analysis establishes that the majority of organisations in Africa let their financial statements be independently verified by external auditors, thereby enhancing the reliability of the financial statements that are used by different stakeholders during their decision-making processes.

10) Theme 1, Statement 10: We are committed in making decisions with the customer’s perspectives in mind

Consideration of customers’ wants and needs is paramount for the sustainability of future business (Drucker, 1993). The study results reveal that a total of 87.3% agree (49.1% “Agree” and 38.2% “Strongly agree”) that their organisations are committed to making decisions that focus on the perspectives of their customers. Only 3.4% are in disagreement, whilst 9.3% “Somehow Agree” with the above statement. The analysis demonstrates that most organisations focus on customer perspectives in order to satisfy them in the provision of better goods and services.

The study findings further confirm that most organisations regard relationships with customers as foundational for the sustainability of their business operations. Corporations may be guided by the premise that more focus on a customer leads to high new and repeat sales achieved through

customer satisfaction and customer delight (Kotler & Keller, 2006). Consequently, high profitability levels for the business are more likely ultimately to be realised.

11) Theme 1, Statement 11: We treat our suppliers as an integrated part of our business

The study results disclose that 72.8% agree (33.3% “Agree” and 39.5% “Strongly Agree”) that their suppliers are integrated into their business processes as strategic partners. Only 0.3% of the respondents “Disagree”, whilst 26.9% “Somehow Agree” with the above statement. The analysis demonstrates that most corporations recognise the need for running their operations with a supplier, in mind as suppliers are the sole providers of raw materials and other inputs for the production of goods and services.

It can therefore be expected that there are healthy supplier relationships in most companies in Africa. It is reflected in the research findings that most organisations realise the significance of supplier integration into business processes that are stakeholder-centred. However, the recognition of a suppliers as a stakeholder is not fully highlighted in the Balanced Scorecard model (just implied under the internal business process perspective). Thus, the model will be redesigned to accommodate these findings about a supplier as a stakeholder towards business operations.

12) Theme 1, Statement 12: We demonstrate mutual respect with our competitors

Modern business philosophy proposes formation of strategic partnerships, including ones with competitors (David, 2005). The study results reveal that 66.2% agree (37.0% “Agree” and 29.2% “Strongly agree”) that they demonstrate mutual respect for competitors in their industry. Only 8.3% disagree, whilst 25.6% “Somehow agree” that they show mutual respect for

the competition. The high levels of mutual respect maintained with competitors show that most organisations recognise competition as a way to foster benchmarking for continuous improvement of their products and services.

13) Theme 1, Statement 13: Our organisation is highly respected for maintaining and promoting environmental protection

The study findings indicate that few agree that their organisations are respected for maintaining and promoting environmental protection. A total of 44.2% agree (20.2% “Agree” and 24.0% “Strongly agree”) with the statement. The results reveal that a total of 27.7% disagree (25.6% “Disagree” and 2.1% “Strongly disagree”), whilst 28.2% “Somehow agree” with the above statement. The findings in this analysis resonate with those relating to Statement 6 analysed above regarding environmental reporting systems.

This lack of corporate respect would be a result of either a corporation’s disregard for environmental protection matters or, if it is engaged in such environmental protection projects, there is non-disclosure of such information through the corporate external reporting systems, thus ignoring the recommendations of the King III Report (Institute of Directors in Southern Africa, 2009). A high focus on natural environmental activities by the corporation would enhance the sustainability of a business for the current and future generations. Such elements constitute significant elements in the redesigning of the Balanced Scorecard model.

14) Theme 1, Statement 14: We constantly interact with and help the local community in which we operate

The statement was aimed at establishing the extent of the relationship between an organisation and the local community and its organisational

culture in this regard. Whilst the majority agree (63.3%) with the above statement, some do not (13.7%). Of the respondents, 23.0% “Somehow agree” that they constantly interact with the local communities within which their business operates, casting doubt on the quality of such a community relationship.

These research findings conform with the findings relating to Statement 5, as analysed above, regarding corporate social responsibility reporting systems. The analysis demonstrates that some organisations are not involved in helping their local communities. This is also demonstrated by the low levels reported on environmental protection activities in relation to Statement 13, above. With full sensitisation, one would expect full compliance with corporate citizenship obligations, which include sustainability reporting, as recommended by the King III Report (Institute of Directors in Southern Africa, 2009)

15) Theme 1, Statement 15: We treat employees as the most valuable asset of our organisation

The majority agree that they treat their employees as the most valuable assets of their organisation. A total of 73.6% agree (34.6% “Agree” and 39.0% “Strongly Agree”) with the statement, 10.6% disagree, whilst 15.8% “Somehow agree” with the statement. This analysis indicates that most organisations value their employees as a sole source of the human resources for their operations. Recognising employees as valuable assets creates an environment conducive to more employee participation, resulting in higher levels of productivity and better corporate performance.

The above univariate analysis of the 15 statements on the relationships and culture strategic theme is summarised in Table 25, overleaf. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means of the

response ratings for each statement under the relationships and culture strategic theme are diagrammatically presented in Figure 20, overleaf.

Table 25: Statistical summary of the univariate analysis on the relationships and culture strategic theme

Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. We recognise the interdependence of relationships of our stakeholders	0.0	0.0	8.3	45.2	46.5	100
2. Our managers listen to and openly communicate with our stakeholders regarding their concerns and contributions	0.3	2.8	10.3	40.3	46.3	100
3. Our primary goal of external reporting is to contribute to an ongoing stakeholder dialogue	0.0	2.8	19.1	40.6	37.5	100
4. Our financial reports are constructed towards meeting interests of our external stakeholders	0.3	6.7	18.6	38.8	35.7	100
5. Our external financial reporting system takes into account our social obligations towards local communities	0.3	11.6	27.6	32.0	28.4	100
6. Our external financial reporting system takes into account our environmental obligations	2.6	17.3	29.2	30.7	20.2	100
7. Our external financial reporting system integrates economic, social and environmental dimensions (triple bottom line reporting)	1.6	7.5	31.0	31.0	28.9	100
8. Our financial statements are prepared based on the generally accepted accounting principles (GAAP)	1.0	4.9	7.8	27.9	58.4	100
9. Our financial statements are verified by the appointed external auditors for external reporting	1.6	3.9	4.4	27.1	63.0	100
10. We are committed in making decisions with the customer's perspectives in mind	0.0	3.4	9.3	49.1	38.2	100
11. We treat our suppliers as an integrated part of our business	0.3	0.0	26.9	33.3	39.5	100
12. We demonstrate mutual respect with our competitors	1.6	6.7	25.6	37.0	29.2	100
13. Our organisation is highly respected for maintaining and promoting environmental protection	2.1	25.6	28.2	20.2	24.0	100
14. We constantly interact with and help the local community in which we operate	1.3	12.4	23.0	39.0	24.3	100
15. We treat employees as the most valuable asset of our organisation	3.6	7.0	15.8	34.6	39.0	100

N=387

In summary, the graph in Figure 20 indicates that Theme 1, Statement 13: “Our organisation is highly respected for maintaining and promoting environmental protection” ($\mu=3.39$) and Statement 6: “Our external financial reporting system

takes into account our environmental obligations” ($\mu=3.49$) register very low means on the response ratings. These low means demonstrate that few respondents agree with Statement 13 (44.2%) and Statement 6 (50.9%), as already discussed above.

Figure 20: Means of the response ratings of statements under the relationship and culture strategic theme



Source: Own observation

Further examination of the graph also shows that Theme1, Statement 1: “We recognise the interdependence of relationships of our stakeholders” ($\mu=4.38$), Statement 8: “Our financial statements are prepared based on the generally accepted accounting principles (GAAP)” ($\mu=4.38$), and Statement 9: “Our financial statements are verified by the appointed external auditors for external reporting” ($\mu=4.46$) register relatively high means on the response ratings. This indicates that most respondents agreed with Statement 1 (91.7%), Statement 8 (86.3%), and Statement 9 (90.1%), as already discussed above.

The high scores on the above statements are indicative of how seriously organisations take issues of stakeholder relationships, and the external financial reporting systems that are prepared by following the prescribed GAAP. Generally, respondents agreed with the statements under the relationships and culture strategic theme ($\mu > 3.50$), as displayed in the above graph, in Figure 20.

The next section analyses research findings on the stakeholder strategic theme of the conceptual framework.

8.3.2 The stakeholder strategic theme

The stakeholder strategic theme (Theme 2) of the conceptual framework aimed at evaluating relationships about the level of contributions that individual stakeholders make towards the internal operations of an organisation as perceived by the management team. Under the stakeholder strategic theme, there were varied responses on each of the statements, as discussed below.

1) *Theme 2, Statement 1: Our organisation puts more emphasis on maximisation of shareholders' wealth than of other stakeholder's wealth*

Under the stakeholder strategic theme, the questionnaire aimed at assessing the application of the popular maxim of “shareholder wealth maximisation” that is the beginning and end of shareholder-centred management theories. The study findings reveal that 45.5% agree (24.3% “Agree” and 21.2% “Strongly agree”) that their organisations put more emphasis on the maximisation of shareholders’ wealth than on other stakeholders’ wealth. A total of 27.9% disagree, whilst 26.6% “Somehow agree” with the statement.

The analysis of the study findings indicates that there are some companies that are still inclined to focus on the maximisation of the shareholder value rather than look at value for other stakeholders too. However, other

companies have embraced the stakeholder-centred approach within their visionary focus. The above analysis also confirms the provisions of the conceptual framework of this study, which is inclusive and stakeholder-centred (Figure 1, on p. 7).

2) Theme 2, Statement 2: Our customers comprise the most important element of our business

The majority of survey participants (80.1%) agree that their customers are regarded as the most important element of their business operations. Only 8.3% disagree, whilst 11.6% “Somehow agree” with the above statement. This analysis suggests that most organisations focus on serving customers better, which resonates with the research findings regarding the relationships and culture strategic theme (Statement 10, on p. 300) signifying the corporation’s commitment to focusing on customer perspectives, which is good news for the long-term sustainability of a business.

3) Theme 2, Statement 3: We make profits because of our efficient labour force

The efficiency of the labour force has also been acknowledged as a source of profitability. A total of 55.6% agree (34.9% “Agree” and 20.7% “Strongly Agree”) that they realise high profitability because of their efficient labour force. The results show that 16.6% disagree with the statement, while 27.9% “Somehow agree”. The analysis of the study findings confirms that labour is a critical source of capital, as articulated by Drucker (1993) and that it should be respected.

4) Theme 2, Statement 4: Our operations rely on debt provisions from our financiers

Apart from the provision of equity capital from shareholders, the study also aimed at establishing whether or not companies rely on debt capital in their undertakings. Whilst a total of 41.0% agree that their operations rely on debt provisions from different financiers, 38.5% disagree with the statement, and 20.4% “Somehow agree”. The study results indicate that some companies in Africa are financially highly leveraged through debt provisions confirming research findings in Ghana by Kyereboah-Coleman (2007:68).

The study findings also confirm the need to recognise debtors as a key stakeholder towards corporate operations and overall performance (see stakeholder analysis on p. 294). These research findings support the conceptual framework, which recognises that debt capital is critical within an African framework. The provision of debt capital is not explicit under the generic Balanced Scorecard model.

5) Theme 2, Statement 5: Our organisation runs on the premise that community care is paramount

The recognition of the local community as a critical stakeholder has not yet been grasped by many companies. The study findings reveal that 50.9% agree that community care and attention is paramount. The study results also indicate that 27.9% disagree (19.1% “Disagree” and 8.8% “Strongly disagree”), whilst 21.2% “Somehow agree” with the above statement.

The above analysis demonstrates that corporate attention on local communities in the form of corporate social responsibility is still in a transitional stage and that currently there is not enough community focus, as already established under the relationships and culture strategic theme (Theme 1, Statements 5 and 14). It is imperative that the newly redesigned

model will have to accommodate these research findings regarding the significance of community interfacing and support in recognition of the fact that the community is a source of the current and future labour force and final consumers of products and services.

6) Theme 2, Statement 6: Our organisation focuses on protection of the natural environment as a stakeholder

With regard to the natural environment as a stakeholder, 48.3% agree (31.5% “Agree” and 16.8% “Strongly agree”) that they focus on the protection of the natural environment. Moreover, the study results indicate that a total of 30.5% (21.7% “Disagree” and 8.8% “Strongly disagree”) of respondents do not focus on protecting the natural environment, whilst 21.2% “Somehow agree” with the statement. The study findings resonate with earlier findings on environmental issues, as discussed above, under the relationships and culture strategic theme.

This analysis demonstrates that the natural environment is disregarded by many corporations, confirming the findings of a study by Epstein and Wisner (2001). It is therefore not surprising that the King III Reports on governance recommends that corporations should also report on environmental and social elements apart from financial bottom line in their corporate reports (Institute of Directors in Southern Africa, 2009). As the natural environment dictates the sustainability of future business (Stead & Stead, 2004, White, 2005), the new model must capture natural environmental elements that are not emphasised in the existing Balanced Scorecard model.

7) Theme 2, Statement 7: Government contributions are foundational to our business operations

The study findings show that a total of 56.0% agree (27.6% “Agree” and 28.4 “Strongly agree”) that government contributions are regarded as

foundational to corporate business. The study results reveal that 33.3% disagree with the statement, while 10.6% “Somehow agree”. The research findings confirm the provisions of the conceptual framework, where government is recognised as one of the key players towards business success. The government provides grant and debt financing, business infrastructural systems, and legislation. Reflected in the analysis is that government forms a critical element towards the success of corporations in Africa and should be treated as a strategic business partner.

The above findings are also in line with the stakeholder analysis (Table 23, on p. 292), where an overwhelming majority of 91.5% of respondents indicated that they see government as a stakeholder towards their operations. However, the above findings are contrary to the provisions of the Balanced Scorecard model, which does not fully recognise government as a major contributor towards business success.

The above univariate analysis of the seven statements on the stakeholder strategic theme is summarised in Table 25, overleaf. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means of the response ratings on each statement under the stakeholder strategic theme are diagrammatically presented in Figure 21, overleaf.

In summary, the graph in Figure 21 indicates that Theme 2, Statement 4: “Our operations rely on debt provisions from our financiers” ($\mu=3.12$) registers the lowest mean on the response ratings, because few respondents (41.0%) agreed with the statement, as already discussed above. Further examination of the graph also shows that Statement 2: “Our customers comprise the most important element of our business” ($\mu=4.22$) has the highest mean on the response ratings. A total of 80.1% agree that they consider customers as critical to their operations. Apart from Statements 2 and 3, the above graph shows that few respondents agreed with the statements under the stakeholder strategic theme, as is clear from their low means ($\mu<3.5$).

Table 26: Statistical summary of univariate analysis on stakeholder strategic theme

Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. Our organisation puts more emphasis on maximisation of shareholders wealth than of other stakeholders wealth	7.5	20.4	26.6	24.3	21.2	100
2. Our customers comprise the most important element of our business	0.5	7.8	11.6	29.7	50.4	100
3. We make profits because of our efficient labour force	1.6	15.0	27.9	34.9	20.7	100
4. Our operations rely on debt provisions from our financiers	9.3	29.2	20.4	22.7	18.3	100
5. Our organisation runs on the premise that community care is paramount	8.8	19.1	21.2	30.0	20.9	100
6. Our organisation focuses on protection of the natural environment as a stakeholder	8.8	21.7	21.2	31.5	16.8	100
7. Government contributions are foundational to our business operations	13.7	19.6	10.6	27.6	28.4	100

N=387

Figure 21: Means on response ratings of statements under the stakeholder strategic theme



Source: Own observation

The next section analyses research findings on the business processes and practices strategic theme of the conceptual framework.

8.3.3 The processes and practices strategic theme

The processes and practices strategic theme (Theme 3) was included to assess relationships surrounding the internal business processes and practices of various organisations in terms of their economy, efficiency and effectiveness (the 3Es). Traditionally, these 3Es are regarded as the determining factors of corporate performance (Neely *et al.*, 1995:80-85). The research findings and analysis of the results on the eight statements about the business processes and practices strategic theme are reported below.

1) Theme 3, Statement 1: We adopt processes that address concerns of our stakeholders

The study results indicate that the vast majority of respondents adopt business processes and practices that are aimed at addressing the concerns of stakeholders. A total of 87.0% agree (47.5% “Agree” and 39.5% “Strongly agree”) with the above statement, with only 2.8% disagreeing. However, 10.1% of organisations only “Somehow agree” that their business processes are stakeholder-centred.

The findings reveal that corporations are oriented towards satisfying a broader pool of their stakeholders rather than just the shareholders. Thus, the research results confirm earlier findings on the stakeholder strategic theme (Theme 2, Statement 1, on p. 306) that support the inclusive approach to corporate governance in Africa (Institute of Directors in Southern Africa, 2009:13). The above analysis also confirms the conceptual framework of this study, which indicates that business processes should be linked to all stakeholders (Figure 1, on p. 7).

2) Theme 3, Statement 2: We use benchmarking to continuously improve our business processes

A majority of 62.5% indicate that they use benchmarking for continuous improvement of their business processes for better products and services. However, 24.0% disagree with the statement, whilst 13.4% “Somehow agree”. These results reflect how much corporations emphasise benchmarking as a critical component of business processes and practices. The analysis reveals conformity with the notion that a high focus on benchmarking facilitates continuous improvement to meet customer needs, thus sustaining business activities in the long term (David, 2005; Horngren *et al.*, 2002; Laudon & Laudon, 2006).

3) Theme 3, Statement 3: We are able to objectively measure the social impact of our operations

Measurement of the social impact of organisational activities is still elusive, in that many organisations are not knowledgeable on the area. The study results show that 48.1% agree (35.7% “Agree” and 12.4% “Strongly agree”) that they are able to objectively measure the social impact of their operations on communities. Significantly, a total of 25.9% disagree (20.2% “Disagree” and 5.7% “Strongly disagree”), while 26.1% “Somehow agree” with the statement.

The analysis demonstrates that many organisations still experience problems in measuring the social impact of their activities. Such measurement problems could be a result of the complexity that is involved in such measurement systems, which are largely qualitative. This would confirm the earlier findings of Senge *et al.*, (2007) and Vernon *et al.* (2003). The analysis also demonstrates that more has to be done to ensure that corporations are able to institute social measurement systems that are not provided in the Balanced Scorecard model. The redesigned new Balanced

Scorecard model will strive to incorporate such important social measures within its framework.

4) Theme 3, Statement 4: We are able to objectively measure the impact of our operations on the natural environment

As with Theme 3, Statement 3 above, many corporations are not able to measure the impact of their operations on the natural environment. The study results indicate that only 41.4% agree (26.4% “Agree” and 15.0% “Strongly agree”) that they are able to objectively measure the impact of their operations on the natural environment. A total of 26.7% disagree (20.2% “Disagree” and 6.5% “Strongly disagree”), while 32.0% “Somehow agree” with the statement.

The above analysis of results demonstrates that despite the fact that some organisations have embraced environmental measurement systems, many corporations are still experiencing problems in measuring the environmental impact of their activities; the finding confirms observations by Senge *et al.*, (2007) and Vernon *et al.* (2003). This could be largely a result of the complexity that is involved in environmental measurement systems.

The analysis also indicates that there is a need to redesign current measurement systems so that corporations will be able to measure the vital environmental impact of their operations, and meet the requirement for environmental reporting as an aspect of good corporate governance as recommended by the King III Report (Institute of Directors in Southern Africa, 2009). Unfortunately, environmental measurement systems are not provided in the Balanced Scorecard model. The redesigned Balanced Scorecard model will strive to accommodate such important environmental measures within its framework.

5) ***Theme 3, Statement 5: Our sustainability programmes take into account economic, social and environmental issues***

Despite the difficulty in measuring environmental and social elements, most organisations report that their external reporting systems take into account the triple bottom line as recommended by the King III Report (Institute of Directors in Southern Africa, 2009). A total of 63.1% agree (36.7% “Agree and 26.4% “Strongly agree”), while 15.7% disagree and 21.2% “Somehow agree” with the statement.

The above analysis indicates that whilst many organisations have embraced the triple bottom line reporting system, some organisations are not fully adhering to the triple bottom line reporting requirements, signifying the transitional nature of triple bottom line reporting system within corporate reports, a scenario that is not provided for in the generic Balanced Scorecard model.

6) ***Theme 3, Statement 6: Customer feedback is key to our performance appraisal systems***

A vast majority of 77.3% indicate that they consider customer feedback a key element in their performance measurement systems. Only 9.1% disagree with the above statement, whilst 13.7% “Somehow agree”. The results are in line with the previous results on the relationships and culture strategic theme (Theme 1, Statement 10) and the stakeholder strategic theme (Theme 2, Statement 2). The analysis indicates that many organisations recognise the significance of getting more information from their customers for continuous improvement purposes and the sustainability of their long-term business activities.

7) Theme 3, Statement 7: We work cooperatively with our business partners

Collaborative commerce through business partnership has become the order of the day in modern business processes (Laudon & Laudon, 2006). True to this ideology, the vast majority, totalling 88.4%, agree (47.8% “Agree” and 40.6% “Strongly agree”) that they cooperatively work with their business partners. Only 3.6% disagree with the statement, whilst 8.0% “Somehow agree”.

The study results demonstrate that most corporations venture into strategic partnerships with different organisations to enable them to execute their business operations effectively. Most organisations realise the value of coexistence with other business partners for their long-term survival. These research findings support the conceptual framework, which recognises business collaboration as an important strategic facet of the survival of a modern organisation. Business partners, as stakeholders, are not emphasised in the Balanced Scorecard model.

8) Theme 3, Statement 8: Our corporate performance indicators are geared towards future corporate performance

This statement was aimed at establishing whether corporations adopt short-termism or long-termism when executing their business operations. The study findings indicate that the vast majority (90.1%) of the respondents agree that their corporate performance indicators are geared towards future corporate performance (36.4% “Agree” and 53.7% “Strongly agree”). Only 2.6% disagree and 7.2% “Somehow agree” with the statement.

The above analysis reflects that corporations are more focused on strategic planning than on short-term planning, which is good news for corporate sustainability. The findings also support the conceptual framework of this

study, which is a strategic management framework for corporate planning and performance measurement systems.

The above univariate analysis of the eight statements on the business processes and practices strategic theme is summarised in Table 27, below. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means of the response ratings for each statement under the processes and practices strategic theme are diagrammatically presented in Figure 22, overleaf.

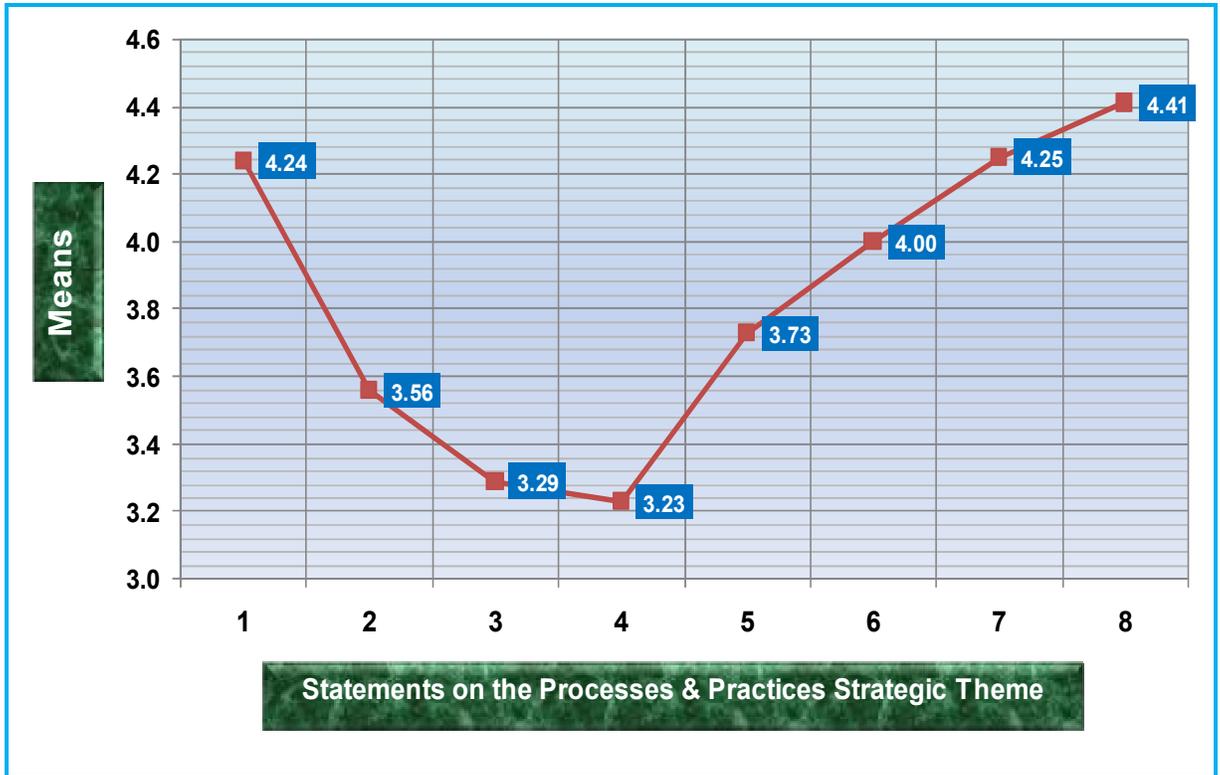
Table 27: Statistical summary of univariate analysis on processes and practices strategic theme

Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. We adopt processes that address concerns of our stakeholders	0.0	2.8	10.1	47.5	39.5	100
2. We use benchmarking to continuously improve our business processes	10.3	13.7	13.4	34.6	27.9	100
3. We are able to objectively measure the social impact of our operations	5.7	20.2	26.1	35.7	12.4	100
4. We are able to objectively measure the impact of our operations on the natural environment	6.5	20.2	32.0	26.4	15.0	100
5. Our sustainability programmes take into account economic, social and environmental issues	0.5	15.2	21.2	36.7	26.4	100
6. Customer feedback is key to our performance appraisal systems	2.1	7.0	13.7	43.7	33.6	100
7. We work cooperatively with our business partners	0.0	3.6	8.0	47.8	40.6	100
8. Our corporate performance indicators are geared towards future corporate performance	0.8	1.8	7.2	36.4	53.7	100

N=387

In summary, the graph in Figure 22 indicates that Theme 3, Statement 4: “We are able to objectively measure the impact of our operations on the natural environment” ($\mu=3.23$) and Theme 3, Statement 3: “We are able to objectively measure the social impact of our operations” ($\mu=3.29$) register the lowest means on the response ratings. As discussed above, 41.4% and 48.1% of respondents agreed with Statements 4 and 3 respectively.

Figure 22: Means on response ratings of statements under the processes and practices strategic theme



Source: Own observation

Further examination of the graph also shows that Theme 3, Statement 1: “We adopt processes that address concerns of our stakeholders” ($\mu=4.22$), Statement 7: “We work cooperatively with our business partners” ($\mu=4.25$), and Statement 8: “Our corporate performance indicators are geared towards future corporate performance” ($\mu=4.41$) received higher ratings than Statements 3 and 4.. Generally, the above graph shows that most respondents agreed with statements under the processes and practices strategic theme as depicted by their high means ($\mu>3.5$).

The next section analyses research findings on the intellectual capital strategic theme of the conceptual framework.

8.3.4 The intellectual capital strategic theme

The intellectual capital strategic theme (Theme 4) represents relationships relating to the intellectual capital attributes that contribute to corporate performance. Intellectual capital is classified as the primary source of profitability (Drucker, 1992:95). The intellectual capital strategic theme recognises significant contributions made by non-financial forms of capital, especially intellectual capital, towards corporate performance. Thus, it was necessary to validate all six statements under this strategic theme.

There were varied responses on the each of the six statements that were formulated under the intellectual capital strategic theme. This section reports the study findings and analysis of the results relating to the intellectual capital strategic theme.

1) *Theme 4, Statement 1: Intellectual capital is our main source of profitability*

The research findings reveal that 50.1% agree (32.8% “Agree” and 17.3% “Strongly agree”) that intellectual capital is their main source of profitability. A total of 17.3% disagree (14.5% “Disagree” and 2.8% “Strongly disagree”), while 32.6% “Somehow agree” with the statement. These results indicate that while the small majority (50.1%) agree that intellectual capital is a source of profit, still, some organisations do not recognise that intellectual capital is a source of profitability as argued by Drucker (1993).

High recognition of intellectual capital as a strategic asset for business would ultimately encourage better allocation of resources to more value-adding activities, including intellectual capital. The conceptual framework recognises intellectual capital as a hub that links all the other sources of capital, comprising financial, debt, human resources, and natural resources as forms of capital.

2) Theme 4, Statement 2: Emphasis on human capital development improves our corporate performance

The statement aimed at evaluating the impact of internal and external human resource development programmes for an organisation. A majority of 62.5% agree that their emphasis on human capital development improves overall corporate performance. Only 9.9% disagree, whilst 27.6% “Somehow agree” with the statement.

This analysis demonstrates that human capital development is recognised as a contributor towards overall corporate performance. The findings also highlight the importance that corporations attach to human capital development. Thus, the research findings support the conceptual framework and propositions of Flamholtz (2005), who recognises human resources development as a critical factor in the improvement of the corporate bottom line, profitability.

3) Theme 4, Statement 3: Innovation is promoted through our good knowledge management systems that we pursue

The vast majority of respondents agree that their innovation is promoted through good knowledge management systems that are pursued by their organisations. A total of 68.5% agree (49.1% “Agree” and 19.4% “Strongly agree”) with the statement, whilst only 4.4% disagree and 27.1% “Somehow agree” with the statement.

The research findings indicate that most organisations put more focus on innovation, which is a source of new ideas for product development and improvement that ultimately meets customers’ satisfaction. The high focus on innovation, which makes a big contribution towards meeting customers’ wants and needs, ultimately leads to high sales volumes and a better bottom line in the form of profitability. Prolonged profitability would enhance

the sustainability of the business in the long term. These research findings support the conceptual framework, which recognises innovation as an important element in business processes and practices.

4) Theme 4, Statement 4: Knowledge about local culture promotes marketing through customer satisfaction

The statement was aimed at establishing whether the knowledge about local culture promotes marketing through customer satisfaction, as propagated by Skinner and Mersham (2008:251). A majority of 70.2% agree (50.6% “Agree” and 19.6% “Strongly agree”) with the above statement, while only 8.5% disagree and 21.2% “Somehow agree” with the above statement.

These research findings support the proposition that organisations have to realign themselves towards indigenous knowledge and culture for them to serve the local customers better (Koster, 1996:99-118; Nussbaum, 2003:21-26). The study findings would be even more applicable to multinationals that need to adapt their local marketing efforts by offering customised products and services to the African marketplace. The study findings further confirm the provisions of the conceptual framework, which recognises the influence of the African Ubuntu philosophy in the local socio-cultural frameworks.

5) Theme 4, Statement 5: Knowledge about the local culture improves our corporate performance

The statement was aimed at assessing the role that knowledge about local culture plays on overall corporate performance. Regarding the contribution of knowledge about local culture towards corporate performance, the majority (74.6%) agree with the above statement, whilst only 7.7% disagree and 17.6% “Somehow agree”.

The analysis demonstrates that most corporations recognise the significance of local cultural settings for their operations. Largely, this recognition comes as a result of continued interactions between an organisation and its local communities, which are identified by their unique social frameworks. The local community, with its African Ubuntu philosophy, is the main provider of the labour force and final consumers for corporations operating in Africa (see the conceptual framework in Figure 1, on p. 8). As is suggested in the discussion of Theme 4, Statement 4 above, the conceptual framework accommodates the Ubuntu community and its influence on overall corporate performance.

6) *Theme 4, Statement 6: Our organisation invests heavily in supporting employee knowledge*

The research findings reveal that most organisations invest heavily in supporting employee knowledge for improved productivity and ultimately improved corporate performance. A total of 77.3% agree (42.4% “Agree” and 34.9% “Strongly agree”), while only 8.3% disagree with the statement. Out of the total number of participants, 14.5% “Somehow agree” with the above statement.

The research findings indicate that most organisations recognise the significance of investing in employee knowledge activities that boost innovations and corporate performance. The high human resources capital investment achieved through employee knowledge would support and also enhance future corporate activities, as business operations are facilitated through new ideas from employees.

Generally, the above univariate analysis of variable statements supports the conceptual framework of the study, which recognises intellectual capital as one of the strategic pillars for organisational performance.

The statistical results of the research findings relating to this strategic theme are summarised in Table 28, below. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means on the response ratings on each statement relating to the intellectual capital strategic theme are diagrammatically presented in Figure 23, overleaf.

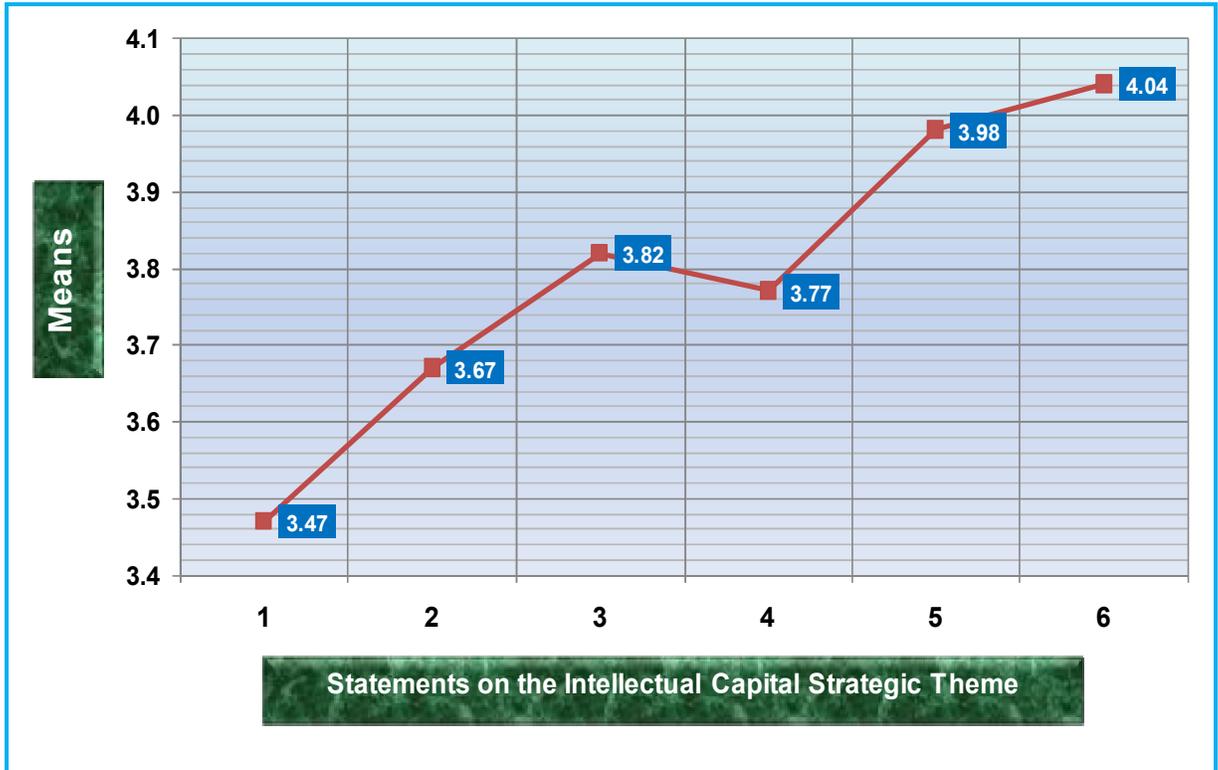
Table 28: Statistical summary of the univariate analysis on the intellectual capital strategic theme

Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. Intellectual capital is our main source of profitability	2.8	14.5	32.6	32.8	17.3	100
2. Emphasis on human capital development improves our corporate performance	4.7	5.2	27.6	43.4	19.1	100
3. Innovation is promoted through our good knowledge management systems that we pursue	1.0	3.4	27.1	49.1	19.4	100
4. Knowledge about local culture promotes marketing through customer satisfaction	4.4	4.1	21.2	50.6	19.6	100
5. Knowledge about the local culture improves our corporate performance	4.1	3.6	17.6	39.5	35.1	100
6. Our organisation invests heavily in supporting employee knowledge	0.0	8.3	14.5	42.4	34.9	100

N=387

In summary, the graph in Figure 23 indicates that Theme 4, Statement 1: “Intellectual capital is our main source of profitability” ($\mu=3.47$) registers the lowest mean, as 50.1% agreed with the statement as discussed above. Further examination of the graph also shows that Statement 6: “Our organisation invests heavily in supporting employee knowledge” ($\mu=4.04$) attracted the highest rating of all the statements. A majority of 77.3% agree that they invest heavily in supporting employee knowledge. Generally, most respondents agree with the statements relating to intellectual capital ($\mu>3.50$), as displayed on the above graph in Figure 23.

Figure 23: Means of the response ratings on statements under the intellectual capital strategic theme



Source: Own observation

The next section analyses the research findings on the value creation strategic theme of the conceptual framework.

8.3.5 The value creation strategic theme

The value creation strategic theme (Theme 5) encapsulates relationships relating to the critical ingredients for value creation in an organisation. It was necessary to assess perspectives that managers believe are foundational in the creation of value for their organisation, in other words, in the maximisation of organisational wealth or value. There were varied responses to each of the five statements that were formulated under the value creation strategic theme. This section reports on the study findings and analysis of results relating to this strategic theme in the conceptual framework.

1) Theme 5, Statement 1: Our profitability success is a result of inputs from various stakeholders

The statement was aimed at evaluating the organisation's recognition of stakeholder involvement in the value creation activities of the corporation. The vast majority of the respondents recognise that their profitability bottom line is a result of inputs from different stakeholders from within and outside the organisation. Thus 81.9% agree (47.0% "Agree" and 34.9% "Strongly agree") with the above statement, while only 3.9% disagree and 14.2% "Somehow agree".

This analysis indicates that most organisations recognise significant contributions by different stakeholders towards their operations. This result is in line with the "inclusive" nature of African management systems. These research findings also support the conceptual framework (Figure 1, on p. 7), which recognises the interconnectedness and inter-dependence of different stakeholders of an organisation.

2) Theme 5, Statement 2: We are competitive because of our customer oriented activities

A total of 65.9% agree (39.5% "Agree" and 26.4% "Strongly agree") that their organisations are competitive because their operations are geared towards engaging with customers' perspectives. Only 11.9% disagree, and 22.2% "Somehow agree" with the above statement. The study results indicate that the majority of organisations in Africa give the customers priority, which promotes the sustainability of their business operations. This finding conforms with earlier findings under the relationships and culture strategic theme and the stakeholder strategic theme, as already discussed above.

3) ***Theme 5, Statement 3: Our internal business processes contribute a lot towards organisational profitability***

Similarly, the majority of organisations agree that their internal business processes contribute significantly to organisational profitability. A total of 64.6% agree (43.4% “Agree” and 21.2% “Strongly agree”) with the above statement, whilst only 8.3% disagree and 27.1% “Somehow agree”. The analysis reveals the importance of internal business processes and practices for the strategic survival of any business, supporting the conceptual framework, which recognises internal business processes and practices as one of the strategic pillars of the survival of any organisation in Africa. The above findings are also in line with the earlier findings under the business processes and practices theme, as already discussed above.

4) ***Theme 5, Statement 4: Our profitability is a result of the abundant natural resources capital that we get from the environment***

This statement was aimed at establishing whether organisations recognise the natural environment as another contributor towards profitability. The research findings reveal that only 23.0% agree (14.2% “Agree” and 8.8% “Strongly agree”) with the statement, whilst a majority of 56.4% disagree (31.3% “Disagree” and 25.1% “Strongly disagree”) that natural resources capital contributes directly to their profitability. The research results also show that 20.7% of the participants “Somehow agree” with the statement.

This analysis indicates that most organisations, especially the service-oriented ones, such as financial institutions, wholesale and retailing companies, do not attach enough emphasis to issues relating to the natural environment as a source of their goods and services (see detailed industrial analysis in Appendix B). However, the majority of manufacturing companies (60.7%) recognise the natural environment as a critical contributor towards value creation. This analysis is in line with the low popularity rankings of the

natural environment as a stakeholder, as indicated under the stakeholder analysis in Table 24 (on p. 294).

5) *Theme 5, Statement 5: Our profitability is a result of the social values that we get from local communities*

Regarding contributions by social values, 46.0% agree that their profitability is a result of social interfacing. However, 29.5% disagree, and 24.5% “Somehow agree” with the statement. This analysis shows that many organisations recognise social values to be part of their value creation processes, because the local community represents the main provider of the human resources capital required for organisational operations and also a provider of final consumers for products and services.

It is also worth noting that some organisations do not agree that profitability is a result of the social values that are realised from local communities. The above research findings are also in line with earlier analyses under the relationships and culture strategic theme, as well as the stakeholder strategic theme.

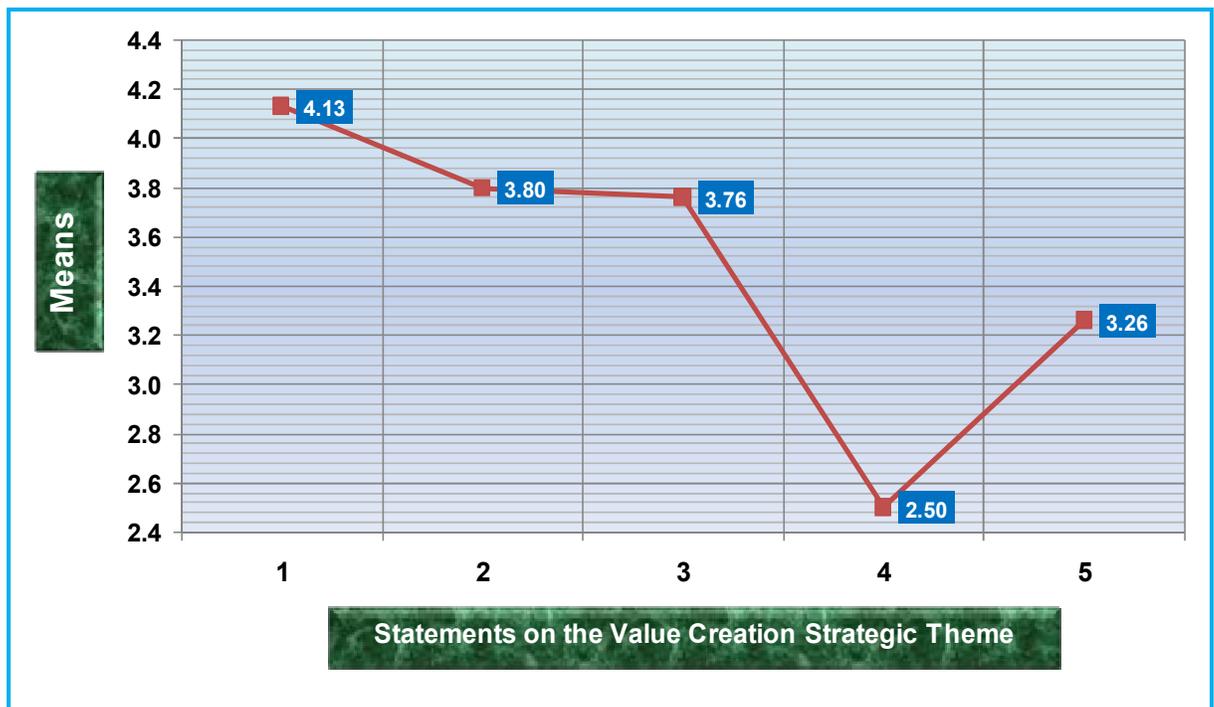
The univariate analysis of the five statements on the value creation strategic theme generally provided insights on pertinent issues raised in the conceptual framework. The analysis of all statements under this strategic theme is summarised in Table 29, overleaf. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means of the response ratings for each statement under the value creation strategic theme are diagrammatically presented in Figure 24, overleaf.

Table 29: Statistical summary of the univariate analysis on the value creation strategic theme

Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. Our profitability success is a result of inputs from various stakeholders	0.0	3.9	14.2	47.0	34.9	100
2. We are competitive because of our customer oriented activities	0.3	11.6	22.2	39.5	26.4	100
3. Our internal business processes contribute a lot towards organisational profitability	1.8	6.5	27.1	43.4	21.2	100
4. Our profitability is a result of the abundant natural resources capital that we get from the environment	25.1	31.3	20.7	14.2	8.8	100
5. Our profitability is a result of the social values that we get from local communities	7.5	22.0	24.5	29.2	16.8	100

N=387

Figure 24: Means of the response ratings on statements relating to the value creation strategic theme



Source: Own observation

In summary, the above graph indicates that Theme 5, Statement 4: “Our profitability is a result of the abundant natural resources capital that we get from the environment” ($\mu=3.26$) registers the lowest mean. Only 23.0% of the respondents agreed with the statement. Further examination of the graph shows that Statement 1: “Our profitability success is a result of inputs from various stakeholders” ($\mu=4.13$) attracted the highest rating of all the statements under this theme. A vast majority of 81.9% agree with Statement 1, as discussed above. Generally, the other statements have also registered high ratings ($\mu>3.50$) from respondents, as the graph in Figure 24, above, indicates.

The next section analyses the research findings on the corporate conscience strategic theme in the conceptual framework.

8.3.6 The corporate conscience strategic theme

Finally, there was a need to validate and analyse how corporations allocate their resources to different stakeholders who are involved in the value creation process. The corporate conscience strategic theme (Theme 6) focuses on how the organisational wealth that is created is allocated and distributed to those that are directly or indirectly involved in the process of value creation.

Under the corporate conscience strategic theme, there were varied responses on the each of the eleven statements that were formulated for the survey. This section reports on the study findings and analysis of the results relating to this theme, which is one of the pillars of the conceptual framework.

1) *Theme 6, Statement 1: We recognise the interdependence of efforts and rewards among our stakeholders*

The majority of organisations recognise the interdependence of efforts and rewards among their stakeholders. A total of 74.4% agree (46.4% “Agree” and 27.9% “Strongly agree”) with the above statement, while only 2.3% disagree and 23.3% “Somehow agree”.

The analysis demonstrates that most organisations recognise a stakeholder-centred approach, which is not supported by the generic Balanced Scorecard model. The recognition of the interdependence of stakeholders by various organisations confirms an “inclusive” management approach that is congruent with the African Ubuntu philosophy (Mbigi & Maree, 2005; Tutu, 2004) and also with a recognition of the nature of ecosystems (Capra & Pauli, 1995), where all parts of the system are interconnected and depend on each other for common strategic survival. This “inclusiveness”, as reported in the research findings, is not fully recognised by the Balanced Scorecard model. The research findings support the conceptual framework, where stakeholder interdependence and coexistence are emphasised strongly.

2) *Theme 6, Statement 2: Organisational wealth is allocated to each stakeholder based on their relative contributions towards the overall corporate performance*

Although organisations recognise the interconnectedness and interdependence of stakeholders, as discussed above, the results of the survey suggest that the need for equitable allocation of organisational wealth to stakeholders is not fully recognised by some organisations. The results show that 52.2% of the respondents agree that their wealth is allocated to each stakeholder based on the stakeholder’s relative contribution to overall corporate performance, which is usually measured in the form of profitability. A total of 16.8% disagree with the statement, while 31.0% “Somehow agree”.

The findings demonstrate that some large corporations are still not engaged in equitable sharing of their resources with different stakeholders. The research findings suggest that some stakeholders do not benefit from the organisational wealth that they themselves have created. The sharing element constitutes a critical element of the African Ubuntu philosophy. The

findings are in line with the low ratings under the statements relating to the community and natural environment strategic themes. It is therefore not surprising that the new provisions under the King III Report emphasise the need for corporations to disclose their social and environmental allocations and impacts. The allocation of wealth will be captured under the new model to guide organisations that should operate under the sharing and inclusive ideologies of African societies.

3) Theme 6, Statement 3: All stakeholders receive sufficient benefits to assure their continued collaboration with our organisation

The research findings show that a total of 69.7% agree (43.9% “Agree” and 25.8% “Strongly agree”) that their stakeholders are given sufficient benefits by the organisation to ensure that there is continued stakeholder collaboration within its operations. Only 8.3% disagree, while 22.0% “Somehow agree” with the above statement.

These research findings indicate that most organisations believe that sufficiency in the allocation of organisational wealth would be a motivating factor that ultimately enhances long-term cooperation and collaboration by different stakeholders. Such stakeholder collaboration would also promote long-term corporate sustainability, which is the premise of the conceptual framework of stakeholder relationships and networks (Figure 1 on p. 8).

4) Theme 6, Statement 4: Equitable distribution of organisational wealth to our stakeholders enables us to gain continued corporate reputation

A majority of 70.0% agree that equitable distribution of their wealth to different stakeholders enables them to gain a continued good corporate reputation. Only 4.9% disagree and 25.1% “Somehow agree” with the statement. As with the preceding analysis on the three statements above, these research findings indicate that most organisations recognise the need

to be equitable in resource allocations to their stakeholders. Organisations realise that a more equitable distribution of organisational wealth is likely to build a good reputation and create goodwill amongst stakeholders, which will in turn promote the sustainability of their business operations.

5) Theme 6, Statement 5: We are open in disclosing wealth distribution to our stakeholders through corporate reporting systems

The statement was aimed at ascertaining whether or not organisations are open in distributing their wealth to different stakeholders through corporate reporting systems, as recommended by Sz wajkowski (2000). A vast majority (80.9%) of respondents agree (46.0% “Agree” and 34.9% “Strongly agree”) that they deploy open resource allocation disclosure. Only 3.1% disagree, while 16.0% “Somehow agree” with the above statement. This analysis demonstrates that most organisations prefer open disclosure of resource allocations, which would ultimately encourage participation by different stakeholders in the business activities. Thus, stakeholder knowledge and active participation would influence corporate sustainability in the long term.

6) Theme 6, Statement 6: Our managers do not practise corruption that deprives our valuable stakeholders

This statement was aimed at determining whether or not corporate executives illegally and inequitably share organisational resources in a corrupt manner. The research findings show that a total of 79.1% agree (25.6% “Agree” and 53.5% “Strongly agree”) that their managers do not practise corruption, which deprives the very same stakeholders that an organisation is supposed to interconnect and depend upon. However, some respondents disagree (2.8%) and others (18.1%) only “Somehow agree” with the statement.

Although the evidence is slim, the survey results reveal that corruption still occurs amongst managers in Africa, which is against the teachings of the African Ubuntu philosophy, which advocates a spirit of solidarity, caring and sharing, where wealth is be distributed to all members, and not just to a very few undeserving and selfish individuals.

7) Theme 6, Statement 7: We pay our suppliers fairly by offering competitive prices in the industry

A vast majority of the organisations agree that they pay their suppliers fairly by offering competitive prices in the respective industries. A total of 83.2% agree (34.9% “Agree” and 48.3% “Strongly agree”), while only 2.1% disagree and 14.7% “Somehow agree” with the statement. The research results indicate that most organisations not only recognise the significance of suppliers towards corporate activities as providers of inputs, as already analysed and discussed under the stakeholder strategic theme (p. 304), but also that corporations allocate their wealth to suppliers by offering competitive prices as well. It is expected that continued fair trading practices with suppliers would motivate suppliers to continue providing the organisation with high quality inputs for long-term business sustainability. These research findings support the redesigning of the existing Balanced Scorecard model, which does not emphasise organisation-supplier relationships.

8) Theme 6, Statement 8: We are involved in financially supporting educational projects for our future business operations

Most of the respondents indicate that they are involved in financially supporting educational projects as a basis for the continuity of business operations. A total of 72.6% agree with the above statement. Only 12.1% disagree and 15.2% “Somehow agree”. The study findings demonstrate that most organisations make a point of promoting education, thus encouraging

the sustainability of future business operations. Unlike other factors of production, such as land and finance, a knowledgeable workforce is considered a critical factor of production in the modern business environment (Drucker, 1993).

9) Theme 6, Statement 9: We take direct responsibility for social problems that we have caused

The research findings also indicate that most companies take direct responsibility for the social problems that they cause in the course of their operations. A majority of 69.0% agree with the statement, while 12.7% disagree and 18.3% “Somehow agree”. The figures from the analysis indicate that issues of corporate social responsibility are still in transition, as some corporations still do not take on direct social responsibility for effects that they have caused. These research findings are pertinent to the disclosure of social impact in corporate reports, as recommended by the King III Report (Institute of Directors in Southern Africa, 2009:109).

10) Theme 6, Statement 10: Our organisation reserves funds for natural environmental (ecological) preservation projects

A total of 45.9% of the respondents indicate that their organisations reserve funds for the preservation of the natural environment, whilst 28.5% do not. Out of the respondents, 25.6% indicate that they “Somehow agree” that their organisations allocate funds towards natural environmental projects.

These research findings demonstrate that issues of environmental preservation and protection are in transition, as many organisations are still not putting much emphasis on the issue of environmental protection. This finding is worrying, because the sustainability of current and future businesses and generations depends on how organisations conserve the natural environment today. The protection of the natural environment would

improve the likelihood of the continued provision of many raw materials and other inputs for production, which is a fundamental facet in the conceptual framework.

11) Theme 6, Statement 11: We contribute substantially to the overall welfare of the society

Generally, the vast majority of respondents indicate that their organisations contribute substantially towards the overall welfare of the local society. A total of 79.1% agree (40.6% “Agree” and 38.5% “Strongly agree”) with the above statement. Only 8.8% disagree and 12.1% “Somehow agree”. These research findings are in line with the stakeholder demographics and are also analysed under the stakeholder strategic theme, where the local community is ranked as one of the key stakeholders of many organisations (Table 23 and Table 24).

Whilst the majority of the respondents’ organisations recognise the presence of local communities through their contributions, the overall analysis indicates that there are still some corporations that are not ploughing back into the local communities in which they operate. Within the framework of the King III Report’s recommendations (Institute of Directors in Southern Africa, 2009:109), one would expect the majority of companies to adhere to the provisions of good corporate governance and duly report the social and environmental sustainability together with an economic element in their corporate reports.

The research findings on this strategic theme provide insights regarding critical issues that govern the allocation and sharing of organisational wealth, hence supporting the conceptual framework. The corporate conscience strategic theme is not conceptualised in the Balanced Scorecard model, which will be remodelled to reflect these findings.

The analysis of the eleven statements under the corporate conscience strategic theme is summarised in Table 30, below. Summations of “Agreements” and “Disagreements” are shown in Appendix F. The means of the response ratings for each statement relating to the corporate conscience strategic theme are diagrammatically presented in Figure 25, overleaf..

Table 30: Statistical summary of the univariate analysis on the corporate conscience strategic theme

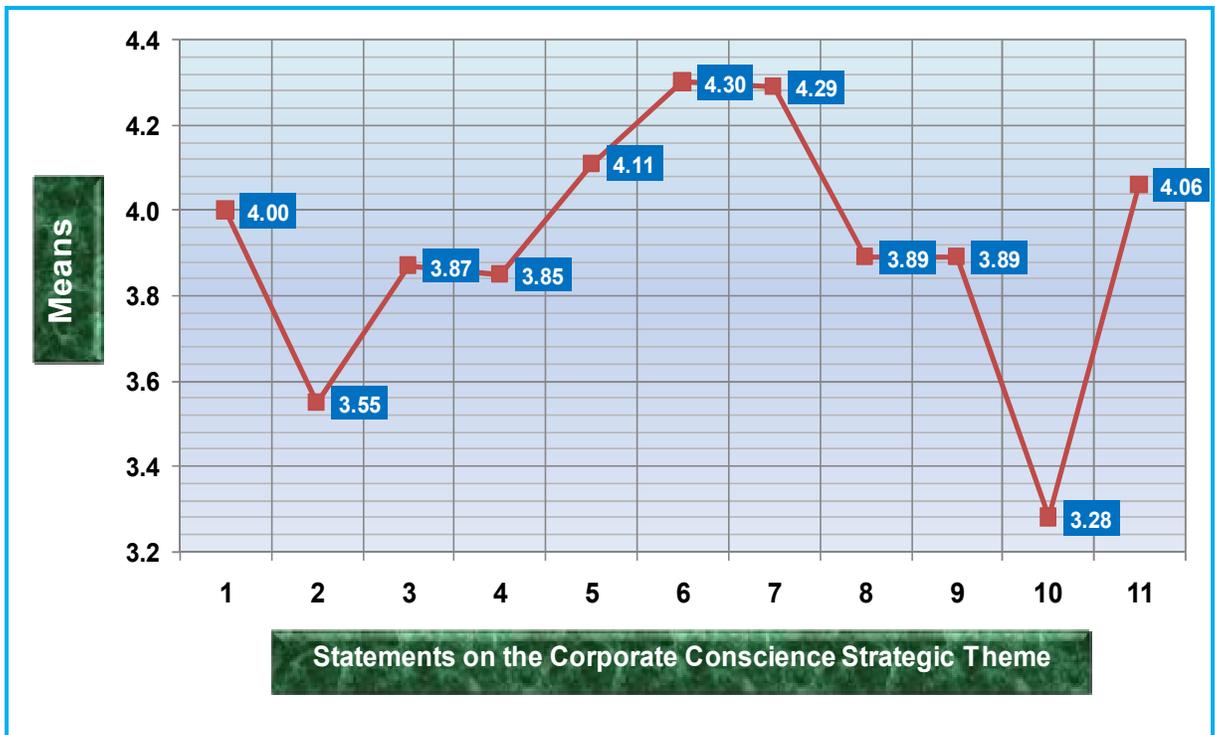
Statement	Rating scale (%)					TOTAL
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	
1. We recognise the interdependence of efforts and rewards among our stakeholders	0.0	2.3	23.3	46.5	27.9	100
2. Organisational wealth is allocated to each stakeholder based on their relative contributions towards the overall corporate performance	2.3	14.5	31.0	30.5	21.7	100
3. All stakeholders receive sufficient benefits to assure their continued collaboration with our organisation	0.8	7.5	22.0	43.9	25.8	100
4. Equitable distribution of organisational wealth to our stakeholders enables us to gain continued corporate reputation	1.0	3.9	25.1	48.8	21.2	100
5. We are open in disclosing wealth distribution to our stakeholders through corporate reporting	2.1	1.0	16.0	46.0	34.9	100
6. Our managers do not practise corruption that deprives our valuable stakeholders	0.0	2.8	18.1	25.6	53.5	100
7. We pay our suppliers fairly by offering competitive prices in the industry	0.0	2.1	14.7	34.9	48.3	100
8. We are involved in financially supporting educational projects for our future business operations	2.3	9.8	15.2	41.3	31.3	100
9. We take direct responsibility for social problems that we have caused	2.6	10.1	18.3	33.3	35.7	100
10. Our organisation reserves funds for natural environmental (ecological) preservation projects	5.2	23.3	25.6	30.7	15.2	100
11. We contribute substantially to the overall welfare of the society	2.3	6.5	12.1	40.6	38.5	100

N=387

In summary, the graph in Figure 25 indicates that Theme 6, Statement 10: “Our organisation reserves funds for natural environmental (ecological) preservation projects” ($\mu=3.28$) registered the lowest mean. Under the univariate analysis as discussed above, 45.9% of the respondents agreed with the statement. Further

examination of the above graph shows that Statement 6: “Our managers do not practise corruption that deprives our valuable stakeholders” ($\mu=4.30$) and Statement 7: “We pay our suppliers fairly by offering competitive prices in the industry” ($\mu=4.29$) attracted the highest ratings. Generally, the other statements have also been given high ratings ($\mu>3.50$), as the graph in Figure 25, below, shows.

Figure 25: Means of the response ratings on statements relating to the corporate conscience strategic theme



Source: Own observation

The above univariate analysis of statements on the corporate conscience strategic theme concludes the univariate analysis of questionnaire statements addressing the strategic themes on the conceptual framework. Summaries of the means deviations on all 52 questionnaire statements are provided in the table in Appendix H and the graph in Appendix I.

8.3.7 Summary of the univariate analysis

Overall, the above univariate analysis on the 52 statements that were formulated for the six strategic themes of the conceptual framework give important insights into the research findings, as detailed above. Generally, the propositions of the conceptual framework, which includes the recognition of government, suppliers, debt capital and the local community as the main stakeholders, are supported by the research findings. The research findings also reveal the “inclusive” nature of the African management frameworks, which contrasts with the Western “exclusive” management approach. However, the research findings indicate that current management business practices disregard the natural environment as a stakeholder, unlike the conceptual framework.

Furthermore, the above research findings shed more light on the significance of value creation in relation to the allocation of organisational resources. Issues relating to sharing and the corporate conscience that every organisation has to exercise as part of corporate citizenship have also been highlighted in the research findings. More importantly, the discussion has commented on issues regarding the external corporate reporting systems that underlie the need for the triple bottom line reporting systems as recommended by the King III Report on good corporate governance.

The above analysis of statements under the six strategic themes demonstrates interrelationships and interconnectedness between the strategic themes and their statements. The findings under each strategic theme correspond with the findings relating to other strategic themes. For example, the community is ranked as one of the main organisational stakeholders, which has been confirmed in that most organisations (63.3%) constantly interact and help the local community in which they operate (relationships and culture strategic theme). Such findings also confirm those relating to the corporate conscience strategic theme, where 79.1% of respondents agree that their organisations contribute substantially to the overall welfare of the local society. By contrast, the low response ratings elicited

in response to statements on the natural environment in all strategic themes of the conceptual framework signify that such issues are not much emphasised by many organisations.

The above research findings shed light on more findings on critical areas that are not fully incorporated into the Balanced Scorecard model. These results will form a basis for redesigning the Balanced Scorecard model so that it fits into an African framework. The findings will also help the researcher to formulate implementable recommendations for the strategic success of companies operating in Africa.

The next section reports on the bivariate analysis of the strength of variable relationships within each strategic theme of the conceptual framework.

8.4 BIVARIATE ANALYSIS (CORRELATION ANALYSIS) OF VARIABLES

The bivariate analysis, using Pearson correlation analysis, was conducted to address the second research question:

Research Question 2: What is the strength of relationships between variables of individual strategic themes for the conceptual framework?

The following section reports in detail on the findings of the correlation analysis under each strategic theme of the conceptual framework. It was necessary to assess such relationships so that the strength of interconnectedness and interdependence of variables within each strategic theme could be established, as discussed below.

8.4.1 The relationships and culture strategic theme

The assessment of the relationships among the 15 variables under the relationships and culture strategic theme was aimed at testing the first hypothesis (H_1) of the study:

H₁: The relationships between variables within the relationships and culture strategic theme are significantly correlated

The correlation analysis that shows the relationship between two variables at a time was conducted using the Pearson correlation technique. The results of the correlation analysis of the variables under the relationships and culture theme are shown in Table 31, overleaf.

The correlation analysis in Table 31 shows that all the variables are partially correlated with each other, except for Variables 8 and 15, where there is almost no correlation ($r = -0.005$), signifying that the change in one variable does not affect the other variable. Furthermore, the correlation analysis indicates that all the variables are significantly correlated with the other variables within the relationships and culture strategic theme. The significant correlations of variables are true at either the 0.05 level of significance (* $p < 0.05$) or at the 0.01 level of significance (** $p < 0.01$), as indicated in Table 31, overleaf.

However, there is also a significant negative correlation between Variables 1 and 5 ($r = -0.129$, $p < 0.05$), implying that an increase in the one variable is matched by a decrease in the other. That is to say, the higher the rating on the organisational recognition of the interdependence of relationships between stakeholders (Variable 1), the lower the rating on external financial reporting systems that take into account organisational social obligations towards local communities (Variable 5), and vice versa.

Table 31: Pearson correlation analysis for the relationships and culture strategic theme

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. We recognise the interdependence of relationships of our stakeholders	1													
2. Our managers listen to and openly communicate with our stakeholders regarding their concerns and contributions	0.200**	1												
3. Our primary goal of external reporting is to contribute to an ongoing stakeholder dialogue	0.151**	0.144**	1											
4. Our financial reports are constructed towards meeting interests of our external stakeholders	0.057	0.089	0.263**	1										
5. Our external financial reporting system takes into account our social obligations towards local communities	-0.129*	0.018	0.192**	0.194**	1									
6. Our external financial reporting system takes into account our environmental obligations	0.179**	0.278**	0.151**	-0.069	0.127*	1								
7. Our external financial reporting system integrates economic, social and environmental dimensions (triple bottom line reporting)	0.119*	0.128*	0.174**	0.174**	0.100*	0.367**	1							
8. Our financial statements are prepared based on the generally accepted accounting principles (GAAP)	0.055	0.022	0.175**	0.317**	0.052	0.038	0.068	1						
9. Our financial statements are verified by the appointed external auditors for external reporting	0.040	0.058	0.118*	0.185**	0.279**	0.055	0.012	0.448**	1					
10. We are committed in making decisions with the customer's perspectives in mind	0.039	0.108*	0.212**	0.127*	0.166**	0.200**	0.065	0.302**	0.406**	1				
11. We treat our suppliers as an integrated part of our business	0.181**	0.259**	0.298**	0.240**	-0.096	0.207**	0.177**	0.289**	0.271**	0.491**	1			
12. We demonstrate mutual respect with our competitors	0.111*	0.145**	0.240**	0.198**	0.016	0.224**	0.212**	0.131**	0.049	0.312**	0.487**	1		
13. Our organisation is highly respected for maintaining and promoting environmental protection	0.144**	0.167**	0.134**	0.153**	0.124*	0.396**	0.215**	0.041	-0.046	0.136**	0.280**	0.348**	1	
14. We constantly interact with and help the local community in which we operate	0.189**	0.217**	0.134**	0.180**	0.192**	0.401**	0.139**	-0.006	0.065	0.232**	0.271**	0.268**	0.601**	1
15. We treat employees as the most valuable asset of our organisation	0.286**	0.297**	0.174**	0.132**	-0.037	0.284**	0.241**	0.049	0.038	0.281**	0.521**	0.341**	0.415**	0.463**

*. Correlation is significant at the 0.05 level (2-tailed), $p < 0.05$.

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

Overall, the research findings suggest that there is significant interconnectedness and interdependence between the 15 variables relating to the relationships and culture strategic theme. The results also show that the correlation coefficients are moderate – the highest are those of Variables 11 and 15 ($r = 0.521$, $p < 0.01$) signifying that the variables under this strategic theme measure different constructs that are related to one another. Thus, the correlation analysis supports the first hypothesis (H_1), namely that the relationships between variables under the relationships and culture strategic theme are significantly correlated.

The next section reports on the correlation analysis of variables under the stakeholder strategic theme.

8.4.2 The stakeholder strategic theme

The assessment of the relationships between the seven variables under the stakeholder strategic theme was aimed at testing the second hypothesis (H_2) of the study:

H_2 : The relationships between variables within the stakeholder strategic theme are significantly correlated

The results of the correlation analysis of variables relating to the stakeholder strategic theme are shown in Table 32, overleaf.

The correlation analysis in Table 32 shows that all the variables are partially correlated with each other, and that all the variables are significantly correlated with other variables relating to the stakeholder strategic theme. The significant correlations of variables are true at either the 0.05 level of significance ($* p < 0.05$) or at the 0.01 level of significance ($** p < 0.01$), as indicated above.

Table 32: Pearson correlation analysis for the stakeholder strategic theme

Variable	1	2	3	4	5	6
1. Our organisation puts more emphasis on maximisation of shareholders' wealth than of other stakeholders' wealth	1					
2. Our customers comprise the most important element of our business	0.164**	1				
3. We make profits because of our efficient labour force	0.139**	0.071	1			
4. Our operations rely on debt provisions from our financiers	0.015	-0.086	0.157**	1		
5. Our organisation runs on the premise that community care is paramount	-0.035	-0.038	0.170**	0.217**	1	
6. Our organisation focuses on protection of the natural environment as a stakeholder	0.065	-0.118*	0.103*	0.224**	0.657**	1
7. Government contributions are foundational to our business operations	-0.045	-0.273**	0.030	0.086	0.318**	0.299**

*. Correlation is significant at the 0.05 level (2-tailed), $p < 0.05$.

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

However, there are two significant negative correlations between Variable 2 (the customer as a stakeholder) and Variable 6 (the natural environment as a stakeholder), where $r = -0.118$, $p < 0.05$; and also Variable 2 (the customer as a stakeholder) and Variable 7 (the government as a stakeholder), where $r = -0.273$, $p < 0.05$. The analysis further reveals that the customer as a stakeholder is generally negatively correlated with other stakeholders listed in the analysis, except for labour capital (Variable 5), where $r = 0.071$.

Overall, the research findings indicate that there is significant interconnectedness and interdependence between the seven variables relating to the stakeholder strategic theme. The results also show that the correlation coefficients are moderate (the highest is that of the correlation between Variables 5 and 6 ($r = 0.657$, $p < 0.01$)). The correlation analysis therefore supports the second hypothesis (H_2) that the relationships between variables relating to the stakeholder strategic theme are significantly correlated.

The next section reports on the correlation analysis of variables under the business processes and practices strategic theme.

8.4.3 The processes and practices theme strategic theme

The assessment of relationships between the eight variables under the processes and practices strategic theme was aimed at testing the third hypothesis (H_3) of the study:

H₃: The relationships between variables within the processes and practices strategic theme are significantly correlated

The research results of the correlation analysis of variables under the processes and practices strategic theme are shown in Table 33, below.

Table 33: Pearson correlation analysis for the processes and practices strategic theme

Variable	1	2	3	4	5	6	7
1. We adopt processes that address concerns of our stakeholders	1						
2. We use benchmarking to continuously improve our business processes	0.140**	1					
3. We are able to objectively measure the social impact of our operations	0.179**	0.419**	1				
4. We are able to objectively measure the impact of our operations on the natural environment	0.107*	0.198**	0.509**	1			
5. Our sustainability programmes take into account economic, social and environmental issues	0.249**	0.236**	0.477**	0.513**	1		
6. Customer feedback is key to our performance appraisal systems	0.191**	0.036	0.171**	0.192**	0.323**	1	
7. We work cooperatively with our business partners	0.285**	-0.021	0.225**	0.165**	0.218**	0.394**	1
8. Our corporate performance indicators are geared towards future corporate performance	0.393**	-0.070	0.082	0.121*	0.240**	0.339**	0.373**

*. Correlation is significant at the 0.05 level (2-tailed), $p < 0.05$.

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above correlation analysis shows that all the variables are partially correlated with each other and that all the variables are significantly correlated with other variables within the processes and practices strategic theme. Under this analysis, the significant correlations are reflected at either the 0.05 level of significance (* $p < 0.05$) or at the 0.01 level of significance (** $p < 0.01$). Variables 1, 4 and 5 correlate significantly with all the other variables under the above analysis. Furthermore, all the variables are positively correlated with each other, apart from Variables 2 and 7 ($r = -0.021$) and Variables 2 and 8 ($r = -0.070$).

Overall, the research findings indicate that there is significant interconnectedness and interdependence between the eight variables under the processes and practices strategic theme. The results also show that the correlation coefficients are moderate. The highest is the correlation between Variables 3 and 4 ($r = 0.509$, $p < 0.01$). Thus, the above correlation analysis supports the third hypothesis (H_3), that the relationships between variables under the processes and practices theme are significantly correlated.

The next section reports on the correlation analysis of variables under the intellectual capital strategic theme.

8.4.4 The intellectual capital strategic theme

The assessment of relationships between the six variables under the intellectual capital strategic theme was aimed at testing the fourth hypothesis (H_4) of the study:

H₄: The relationships between variables within the intellectual capital strategic theme are significantly correlated

The research results of the correlation analysis of variables under the intellectual capital strategic theme are shown in Table 34, overleaf.

Table 34: Pearson correlation analysis for the intellectual capital strategic theme

Variable	1	2	3	4	5
1. Intellectual capital is our main source of profitability	1				
2. Emphasis on human capital development improves our corporate performance	0.474**	1			
3. Innovation is promoted through our good knowledge management systems that we pursue	0.152**	0.425**	1		
4. Knowledge about local culture promotes marketing through customer satisfaction	0.171**	0.500**	0.463**	1	
5. Knowledge about the local culture improves our corporate performance	0.172**	0.455**	0.356**	0.756**	1
6. Our organisation invests heavily in supporting employee knowledge	0.072	0.430**	0.415**	0.540**	0.570**

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above correlation analysis shows that all the variables are partially correlated and that all the variables are significantly correlated with other variables in the intellectual capital strategic theme. Under this analysis, the significant correlations are true at the 0.01 level of significance (** $p < 0.01$), as indicated in Table 34, above. Apart from the correlation of Variables 1 and 6 ($r = 0.072$), all the variables correlate significantly with all the other variables. Furthermore, the analysis also shows that all the variables are positively correlated with each other.

Overall, the above analysis indicates that there is significant interconnectedness and interdependence between the six variables under the intellectual capital strategic theme. The results also show that the correlation coefficients are moderate. The highest is the correlation between Variables 3 and 5 ($r = 0.756$, $p < 0.01$). Thus, the above correlation analysis supports the fourth hypothesis (H_4), that the relationships between variables under the processes and practices strategic theme are significantly correlated.

The next section reports on the correlation analysis of variables under the value creation strategic theme.

8.4.5 The value creation strategic theme

The assessment of relationships of the five variables under the value creation strategic theme was aimed at testing the fifth hypothesis (H_5) of the study:

H₅: The relationships of variables within the value creation strategic theme are significantly correlated

The research results of the correlation analysis of the variables under the value creation strategic theme are shown in Table 35, below.

Table 35: Pearson correlation analysis for the value creation strategic theme

Variable	1	2	3	4
1. Our profitability success is a result of inputs from various stakeholders	1			
2. We are competitive because of our customer oriented activities	0.370**	1		
3. Our internal business processes contribute a lot towards organisational profitability	0.316**	0.388**	1	
4. Our profitability is a result of the abundant natural resources capital that we get from the environment	-0.154**	0.066	0.230**	1
5. Our profitability is a result of the social values that we get from local communities	-0.057	0.256**	0.067	0.385**

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above correlation analysis shows that all the variables are partially correlated with each other and that all the variables are significantly correlated with other variables within the value creation strategic theme. Under this analysis, the significant correlation is reflected only at a 0.01 level of significance (** $p < 0.01$). However, there is a significant negative correlation between Variables 1 and 4 ($r = -0.154$, $p < 0.01$). Such a significant negative correlation

signifies that as the rating on the profitability contributed by various stakeholders increases (Variable 1), the rating on the profitability contribution from the natural environment decreases (Variable 4), and the other way around.

Although it is not significant, there is also a negative correlation between Variable 1 on the profitability contribution from the natural environment and Variable 5 on the profitability contribution from local communities ($r = -0.057$). Such negative correlations resonate with the results of the univariate analysis for the same theme, where 81.9% of the respondents agree with the stakeholder contribution towards profitability, whilst only 23.0% agree on the profitability contribution by the natural environment, and 46.0% agree that local communities contribute towards profitability, as reported in Table 29, on p. 328.

Overall, the research findings indicate that there is significant interconnectedness and interdependence between the five variables under the value creation strategic theme. The results also show that the correlation coefficients are moderate. The highest is the correlation between Variables 2 and 3 ($r = 0.388$, $p < 0.01$). Thus, the above correlation analysis supports the fifth hypothesis (H_5), that the relationships between the variables under the value creation strategic theme are significantly correlated.

The next section reports on the correlation analysis of variables under the corporate conscience strategic theme of the conceptual framework.

8.4.6 The corporate conscience strategic theme

The assessment of the relationships between the eleven variables under the corporate conscience strategic theme was aimed at testing the sixth hypothesis (H_6) of the study:

H₆: The relationships between variables within the corporate conscience strategic theme are significantly correlated

The research results of the correlation analysis of variables relating to the corporate conscience strategic theme are shown in Table 36, below.

Table 36: Pearson correlation analysis for the corporate conscience strategic theme

Variable	1	2	3	4	5	6	7	8	9	10
1. We recognise the interdependence of efforts and rewards among our stakeholders	1									
2. Organisational wealth is allocated to each stakeholder based on their relative contributions towards the overall corporate performance	0.277**	1								
3. All stakeholders receive sufficient benefits to assure their continued collaboration with our organisation	0.259**	0.413**	1							
4. Equitable distribution of organisational wealth to our stakeholders enables us to gain continued corporate reputation	0.280**	0.311**	0.528**	1						
5. We are open in disclosing wealth distribution to our stakeholders through corporate reporting	0.191**	0.183**	0.405**	0.545**	1					
6. Our managers do not practice corruption that deprives our valuable stakeholders	0.185**	0.077	0.262**	0.242**	0.285**	1				
7. We pay our suppliers fairly by offering competitive prices in the industry	0.151**	0.271**	0.338**	0.251**	0.306**	0.380**	1			
8. We are involved in financially supporting educational projects for our future business operations	0.375**	0.194**	0.231**	0.212**	0.069	0.258**	0.261**	1		
9. We take direct responsibility for social problems that we have caused	0.166**	-0.006	0.035	0.058	-0.041	0.026	0.127*	0.477**	1	
10. Our organisation reserves funds for natural environmental (ecological) preservation projects	0.153**	0.200**	0.059	0.024	-0.079	0.138**	0.186**	0.279**	0.314**	1
11. We contribute substantially to the overall welfare of the society	0.408**	0.103*	0.082	0.046	0.007	0.090	0.224**	0.420**	0.383**	0.429**

*. Correlation is significant at the 0.05 level (2-tailed), $p < 0.05$.

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above correlation analysis shows that almost all these variables are partially correlated with each other. However, there is almost no correlation between Variables 2 and 9 ($r = 0.007$), or Variables 5 and 11 ($r = -0.006$). The analysis also indicates that all variables are significantly correlated with other variables in the corporate conscience strategic theme. The significant correlations are true at either the 0.05 level of significance (*. $p < 0.05$) or at the 0.01 level of significance (** $p < 0.01$). At a 0.01 confidence level, Variable 1 (“We recognise the

interdependence of efforts and rewards among our stakeholders”) correlates significantly with all other ten variables under the above analysis, signifying the positive impact of this variable on others.

Overall, the above analysis indicates that there is interconnectedness and interdependence between the eleven variables under the corporate conscience strategic theme. The results also show that the correlation coefficients are moderate. The highest is the correlation between Variables 10 and 11 ($r = 0.429$, $p < 0.01$). Thus, the above correlation analysis supports the sixth hypothesis (H_6) that the relationships between variables under the corporate conscience strategic theme are significantly correlated.

The next section reports on the correlation analysis of the interconnectedness and relationships between the six strategic themes.

8.4.7 The six strategic themes of the conceptual framework

Finally, the correlation analysis using the Pearson correlation statistical technique was conducted to address the third research question:

Research Question 3: What is the strength of interrelationships between the six strategic themes of the conceptual framework?

A correlation analysis using the Pearson correlation analysis technique was conducted to assess the relationships and interconnectedness between the six strategic themes. The researcher believed that such further analysis would be instrumental for the redesigning of the Balanced Scorecard model, especially when dealing with critical areas that are covered in the conceptual framework and the strengths of their linkages. The assessment of relationships between the six strategic themes of the conceptual framework was aimed at testing the seventh hypothesis (H_7) of the study:

H₇: The interrelationships between the six strategic themes of the conceptual framework are significantly correlated

The intercorrelation between the strategic themes of the conceptual framework has been determined through computations of variable means on each strategic theme. The means were then subjected to Pearson correlation analysis, as per a statistical method used by Flamholtz and Kannan-Narasimhan (2005:54). The research results of the correlation analysis of the six strategic themes are shown in Table 37, below.

Table 37: Pearson correlation analysis for the six strategic themes of the conceptual framework

Strategic Theme	Relationships & Culture	Stakeholder	Processes & Practice	Intellectual Capital	Value Creation
Relationship & Culture	1				
Stakeholder	0.289**	1			
Processes & Practice	0.566**	0.350**	1		
Intellectual Capital	0.597**	0.324**	0.573**	1	
Value Creation	0.408**	0.322**	0.460**	0.540**	1
Corporate Conscience	0.614**	0.207**	0.572**	0.593**	0.581**

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above correlation analysis shows that the strategic themes correlate with each other and that such intercorrelations are significant for all the strategic themes. The above correlation analysis also indicates that the intercorrelations between the six strategic themes are significant only at a 0.01 level of significance (** $p < 0.01$), as indicated in Table 37, above. Moreover, all the variables under analysis above are positively correlated with each other.

Overall, the above analysis indicates that there is significant interconnectedness and interdependence between the six strategic themes of the conceptual framework. The results also show that the correlation coefficients that range from $r = 0.207$ to $r = 0.614$, are moderate, signifying that the six strategic themes of the conceptual framework measure different constructs that are related to one another. Thus, the analysis supports the seventh hypothesis (H_7) that the relationships between the six strategic themes of the conceptual framework are significantly correlated.

8.5 MULTIVARIATE ANALYSIS USING FACTOR ANALYSIS

After establishing the significant moderate correlations of variables on each strategic theme and a significant, if moderate, intercorrelation between the strategic themes themselves, as discussed above, the researcher went on to test the factorability of the variables. Using factor analysis, it was necessary to verify whether or not individual variables would load on respective strategic themes, as originally conceptualised in the study framework. It is recommended that further analysis of quantitative data collected should also be factor-analysed to evaluate the component loadings of the multiple variables, as suggested by Lunenburg and Irby (2008:223). The use of factor analysis would also enable the researcher to address the fourth research question of the study:

Research Question 4: What are the foundational elements of the new African Balanced Scorecard model?

It was envisaged that the identification of the foundational elements or perspectives of the new Balanced Scorecard model would be achieved through the use of the powerful factor analysis statistical tool. As detailed in the research design and methodology chapter, exploratory factor analysis is aimed at evaluating the intercorrelations among a large set of measures to identify a small number of common factors or components for further analysis and observation (Babbie & Mouton, 2007; Field, 2009; Lunenburg & Irby, 2008; Saunders *et al.*,

2003). An important prerequisite for a successful factor analysis is that variables must correlate fairly, but not perfectly (Field, 2009:657). In this study, the above prerequisite of factor analysis was satisfied, because the variables under analysis do indeed correlate moderately, as already noted from the correlation analysis above.

Further, the statistics indicate that the Bartlett's test of sphericity $X^2 (1326) = 10479.92$, $p < 0.001$ was significant for all factors, suggesting that one can be confident that multicollinearity does not exist among these survey data and that factor analysis is appropriate, according to Field's (2009:661) criteria. Also, all 52 variables achieved communalities of above 0.50, with an average of 0.705, which is a "great" value according to Field (2009:659). The extracted communalities on the 52 variables, as shown in Appendix F, signify that there is significant intercorrelation between variables.

This section therefore reports on the results and interprets the exploratory factor analysis results for the 52 variables in the survey questionnaire.

8.5.1 Codification of the variables under exploratory factor analysis

For the purposes of exploratory factor analysis, the 52 questionnaire variables were coded from 1 to 52 to reflect their unique identification, as shown in Appendix I. The above reclassification of variables helped the researcher to identify the variables and interpret the results from several extracted rotations until the best and final composition of components was achieved. Thus, the codification assisted the researcher in interpreting the results of the variable loadings on specific components better, as is discussed below.

8.5.2 Rotation of the variables using the promax rotation method

In this study, the 52 variables for multivariate correlation analysis were subjected to computations that produced clusters of variables that intercorrelate highly within the cluster concerned, but have low correlations with other clusters. The

factor analysis was conducted by means of the principal component extraction method. The 52 variables were subjected to promax rotation with Kaiser Normalisation, which factored the variables into different major components for further observation, as shown in the analysis below. The promax rotation was chosen on the understanding that the 52 variables correlate with each other as already analysed above.

Initially, the 52 variables were subjected to factor rotation by setting an eigenvalue of at least 1 as the threshold, which is Kaiser's minimum criterion (Field, 2009:652). The factor rotation produced 15 components, as shown in Appendix J. The extracted 15 components explained 70.461% of the total variance. However, this factor rotation produced cross-loadings, rendering it inappropriate. Furthermore, 15 components was considered to be too many and therefore unmanageable for this kind of model formulation.

Thereafter, the researcher subjected the 52 variables to factor rotation by setting the extraction components to six to evaluate whether or not the variables loaded on their specific strategic themes, as originally envisaged during the conceptualisation of the study. The results were unexpected. The factor rotation produced a pattern of variable loadings that was not consistent with the original variable allocation on the conceptual framework of this study (see Appendix K). For instance, Component 1 loaded Variables 33, 34, 35 and 36 from the intellectual capital strategic theme, Variables 1, 2, 3, 6, 7, 14, 11, 13, 14 and 15 from the relationships and culture strategic theme, Variables 42, 49, 50, 51 and 52 from the corporate conscience strategic theme, Variables 38 and 41 from the value creation strategic theme, Variable 26 from the processes and practices strategic theme, and Variable 16 from the stakeholder strategic theme. Different variables from all six strategic themes were loaded on Component 1. The reallocation of variables to different components that had different characterisations from the original strategic themes signalled that it was

imperative that the researcher do more analyses of the 52 variables by means of more factor rotations, in order to come up with the best pattern of factor loadings.

The second problem encountered in the initial variable rotation, assigning the six rotated components, was the occurrence of cross-loadings of variables on more than one component. When cross-loadings occur, it signifies that the variable is sharing or satisfying the theme of more than one component, which can be problematic, especially in terms of the best choice of component to attach to the variable concerned (Field, 2009:666). For example, Variable 16 loaded significantly on Components 1 and 2. Similarly, Variable 26 loaded significantly on Components 1, 3 and 4. The cross-loadings signalled a need for further rotations of the 52 variables to find the best combination of variables that share a common theme on one component.

Multiple factor rotations were then run by setting the number of factors at five, four and three to come up with the optimum number of factors to be considered for further observation, as recommended by Costello and Osborne (2005) and Field (2009). After several factor rotations had been run, the factor loadings for four components produced the best pattern or factor structure. The final pattern matrix clearly loads each variable on a specific component, without cross-loadings, as shown in Appendix K.

The four components that were extracted from the statistical analysis using promax rotation are summarised in Table 38, which shows the eigenvalues, as well as the percentage of variance of the four components that were extracted during the rotation process. Each component has an eigenvalue of over 2, which is well above the minimum requirement of 1, as required by Kaiser (Field, 2009:652).

Table 38: Total variance explained by the four components

Component	Eigenvalues		
	Total	% of Variance	Cumulative %
1	10.669	20.517	20.517
2	4.507	8.667	29.183
3	2.433	4.679	33.862
4	2.370	4.558	38.421

Extraction method: Principal Component Analysis.

The above analysis shows the percentage of the total variance that is explained by each principal component. For example, Component 1 explains 20.517% of the total variance, while Component 3 explains 4.679% of the total variance. A combination of the four components explains 38.421% of the total variance.

8.5.3 Interpretation of the rotation results on four components

The interpretation of the extracted four components demanded considerable thought, as common themes on each factor had to be carefully identified through an analysis of the attributes of individual variables loaded on each extracted component. The interpretation of the factor rotation results was guided by further analysis to relate the description of each variable to the strategic theme of the conceptual framework and its loading on the statistical components extracted, as summarised in Appendix N. While the description of each component is subjective, it is believed that the factor nomenclatures have the following conceptual connotations:

a) Component 1 (Relationships and culture)

In general, the first component captures variables that deal with organisational relationships and culture. Such issues include organisational relationships and continued dialogue with different stakeholders, corporate

social responsibility, protection of the natural environment, and knowledge about local culture, as indicated in Table 39 below. Component 1 reports the greatest variable loadings of all the extracted four components. The component has loadings of 18 out of 52 variables, resulting in the greatest percentage of variance figure (20.517%). The component yields the highest eigenvalue of 10.669, as shown in Table 38 and Table 39.

Table 39: Component 1 (Relationships and culture)

(Eigenvalue=10.669, Percentage of variance=20.517%)	Component			
	1	2	3	4
6. Our external financial reporting system takes into account our environmental obligations	0.715	-0.134	-0.085	-0.008
35. Knowledge about the local culture improves our corporate performance	0.675	0.083	0.104	0.014
50. We take direct responsibility for social problems that we have caused	0.652	-0.106	-0.081	0.037
36. Our organisation invests heavily in supporting employee knowledge	0.630	0.290	-0.106	-0.123
52. We contribute substantially to the overall welfare of the society	0.623	-0.118	0.069	0.171
16. Our organisation puts more emphasis on maximisation of shareholders wealth than of other stakeholders wealth	-0.610	0.043	0.368	0.185
34. Knowledge about local culture promotes marketing through customer satisfaction	0.602	-0.013	0.232	0.064
1. We recognise the interdependence of relationships of our stakeholders	0.555	-0.045	-0.215	0.028
15. We treat employees as the most valuable asset of our organisation	0.548	0.073	0.128	0.237
51. Our organisation reserves funds for natural environmental (ecological) preservation projects	0.498	-0.059	0.190	-0.102
27. Our sustainability programmes take into account economic, social and environmental issues	0.495	0.073	0.256	-0.149
2. Our managers listen to and openly communicate with our stakeholders regarding their concerns and contributions	0.470	0.032	-0.016	0.034
49. We are involved in financially supporting educational projects for our future business operations	0.466	0.180	0.068	0.115
14. We constantly interact with and help the local community in which we operate	0.453	-0.153	0.346	0.123
7. Our external financial reporting system integrates economic, social and environmental dimensions (triple bottom line reporting)	0.408	0.098	0.003	-0.049
41. Our profitability is a result of the social values that we get from local communities	0.396	0.310	0.264	-0.277
3. Our primary goal of external reporting is to contribute to an ongoing stakeholder dialogue	0.336	-0.039	-0.007	0.240
38. We are competitive because of our customer oriented activities	0.329	0.244	0.051	0.272

Extraction method: Principal Component Analysis.

Rotation method: Promax with Kaiser Normalisation.

b) Component 2 (Corporate conscience)

The second component loads variables that deal with corporate conscience. The issues that are loaded on this component include equitable allocation and distribution of wealth to different stakeholders, fair trading with suppliers, corruption, and corporate reporting systems, as shown in Table 40, below. Component 2 has 13 loadings out of the 52 variables. The component reports an eigenvalue of 4.507 and represents a percentage of total variance of 8.667%, as summarised in Table 38 and Table 40.

Table 40: Component 2 (Corporate conscience)

(Eigenvalue=4.507, Percentage of Variance=8.667%)	Component			
	1	2	3	4
45. Equitable distribution of organisational wealth to our stakeholders enables us to gain continued corporate reputation	0.019	0.793	0.000	-0.163
46. We are open in disclosing wealth distribution to our stakeholders through corporate reporting	-0.109	0.743	0.030	-0.184
44. All stakeholders receive sufficient benefits to assure their continued collaboration with our organisation	0.089	0.742	-0.120	-0.059
37. Our profitability success is a result of inputs from various stakeholders	-0.090	0.589	-0.130	0.085
30. Our corporate performance indicators are geared towards future corporate performance	-0.171	0.571	0.062	0.127
43. Organisational wealth is allocated to each stakeholder based on their relative contributions towards the overall corporate performance	0.113	0.557	-0.242	-0.083
48. We pay our suppliers fairly by offering competitive prices in the industry	0.269	0.520	-0.237	-0.057
23. We adopt processes that address concerns of our stakeholders	0.017	0.514	0.080	0.084
47. Our managers do not practice corruption that deprives our valuable stakeholders	-0.011	0.459	0.070	0.160
39. Our internal business processes contribute a lot towards organisational profitability	-0.350	0.386	0.169	0.172
5. Our external financial reporting system takes into account our social obligations towards local communities	0.000	0.362	0.077	-0.141
33. Innovation is promoted through our good knowledge management systems that we pursue	0.192	0.299	0.229	0.095
42. We recognise the interdependence of efforts and rewards among our stakeholders	0.260	0.288	0.050	0.225

Extraction method: Principal Component Analysis.

Rotation method: Promax with Kaiser Normalisation.

c) Component 3 (Value creation)

The third component loads variables that address issues concerning the creation of value through organisational operations and processes in order to achieve maximum economy, efficiency and effectiveness. Value creation activities include enhancing the efficiency of the labour force, human capital development systems, benchmarking for continuous improvement, natural environment measurement systems, feedback control systems, and intellectual capital, as highlighted in Table 41, below. This component loads 12 loadings out of the 52 variables. The component reports an eigenvalue of 2.433 and represents a percentage of total variance of 4.679%, as reflected in Table 38 and Table 41.

Table 41: Component 3 (Value creation)

(Eigenvalue=2.433, Percentage of Variance=4.679%)	Component			
	1	2	3	4
40. Our profitability is a result of the abundant natural resources capital that we get from the environment	-0.119	-0.113	0.745	-0.321
31. Intellectual capital is our main source of profitability	-0.275	-0.017	0.644	0.218
25. We are able to objectively measure the social impact of our operations	0.169	0.027	0.601	-0.129
32. Emphasis on human capital development improves our corporate performance	0.194	-0.050	0.600	0.059
21. Our organisation focuses on protection of the natural environment as a stakeholder	0.121	-0.113	0.516	-0.219
24. We use benchmarking to continuously improve our business processes	0.093	0.032	0.501	-0.141
18. We make profits because of our efficient labour force	-0.187	0.113	0.482	0.134
20. Our organisation runs on the premise that community care is paramount	0.279	-0.030	0.457	-0.181
13. Our organisation is highly respected for maintaining and promoting environmental protection	0.134	-0.122	0.412	0.057
26. We are able to objectively measure the impact of our operations on the natural environment	0.192	-0.099	0.396	-0.006
19. Our operations rely on debt provisions from our financiers	0.100	-0.031	0.306	-0.038
28. Customer feedback is key to our performance appraisal systems	-0.114	0.174	0.293	0.071

Extraction method: Principal Component Analysis.

Rotation method: Promax with Kaiser Normalisation.

d) Component 4 (Stakeholder)

The final component captures variables that are focused on stakeholder activities. The variable attributes that are loaded on this component include stakeholders such as customers, competitors, government, suppliers, external auditors and business partners, as shown in Table 42, below. Component 4 has nine loadings out of the 52 variables. This fourth component reports an eigenvalue of 2.370 and a percentage of total variance of 4.558%, as reflected in Table 38 and Table 42.

Table 42: Component 4 (Stakeholders)

(Eigenvalue=2.370, Percentage of Variance=4.558%)	Component			
	1	2	3	4
10. We are committed in making decisions with the customer's perspectives in mind	0.094	-0.065	0.067	0.707
11. We treat our suppliers as an integrated part of our business	0.149	-0.049	-0.079	0.636
17. Our customers comprise the most important element of our business	-0.233	-0.093	0.030	0.603
8. Our financial statements are prepared based on the generally accepted accounting principles (GAAP)	0.112	-0.107	-0.277	0.599
9. Our financial statements are verified by the appointed external auditors for external reporting	0.134	-0.008	-0.331	0.530
22. Government contributions are foundational to our business operations	0.186	-0.116	0.180	-0.509
12. We demonstrate mutual respect with our competitors	0.162	0.006	0.243	0.449
29. We work cooperatively with our business partners	-0.075	0.322	0.159	0.432
4. Our financial reports are constructed towards meeting interests of our external stakeholders	-0.003	-0.130	0.246	0.336

Extraction method: Principal Component Analysis.

Rotation method: Promax with Kaiser Normalisation.

8.5.4 Intercorrelation of the four extracted components

The researcher also aimed at establishing the level of strength of the four components that were extracted from the statistical rotation for further analysis. Before the four components could be adopted as representing the new perspectives of the new African Balanced Scorecard model, it was necessary to

determine the strength of the intercorrelation. The intercorrelation analysis was aimed at testing the eighth hypothesis (H_8) of the study:

H_8 : The interrelationships between the four components cum perspectives of the new African Balanced Scorecard model are significantly correlated.

Pearson correlation analysis was used to evaluate the intercorrelation between the four components extracted by means of the factor analysis. The interrelationship between the four components was ascertained through computations of the means of the variables on each component. Thereafter, the component means were subjected to Pearson correlation analysis, as adopted from Flamholtz and Kannan-Narasimhan (2005:54). The research results of the correlation analysis on the four components are shown in Table 43, below.

Table 43: Pearson correlation analysis for the four components using exploratory factor analysis

Component	Relationships & Culture	Corporate Conscience	Value Creation	Stakeholder
Relationships & Culture	1			
Corporate Conscience	0.553**	1		
Value creation	0.781**	0.363**	1	
Stakeholder	0.501**	0.464**	0.349**	1

** . Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$.

N=387

The above analysis shows that all four components are significantly correlated with each other, signifying their interconnectedness and interdependence. All intercorrelations are significant at the 0.01 level of significance, where $p < 0.01$.

The significant relationship coefficients range from $r = 0.349$ to $r = 0.781$. The research results indicate that the correlation coefficients are moderate, implying that the four extracted components measure different constructs that are related to one another, which is “excellent” news, according to Field (2009).

8.5.5 Complementarity of multivariate, bivariate and univariate analyses

The above multivariate analysis supports the results of the univariate and correlation analyses discussed above. Similar findings were also posted under the correlation analysis for each strategic theme of the conceptual framework as discussed above.

The above exploratory factor analysis also supports the findings of the univariate analysis. For example, according to the univariate analysis, only 45.7% of the respondents indicated that their organisations put more emphasis on the maximisation of shareholders’ wealth than on that of other stakeholders’ wealth, as reported on p. 306 of this thesis. This low outcome on the univariate analysis is reflected as a negative loading of -0.610 (see Table 39 above under the relationships and culture component), implying the opposite direction of the multivariate analysis results. Stated differently, Variable 16, which is under discussion, should have read “Our organisation **does not** put more emphasis on maximisation of shareholders wealth than of other stakeholders” for it to yield a positive loading of 0.610 on the same component.

8.5.6 The four components as foundational elements for the new African Balanced Scorecard model

The reduction of the 52 variables into the four components is also linked to the six strategic themes that were initially formulated under the conceptual framework of this study. The four statistical components condense and fully support the six strategic themes. It can also be observed that all four extracted components (the relationships and culture, stakeholder, value creation, and

corporate conscience components) focus on critical areas of the conceptual framework. That is to say, the four components from factor analysis resonate with the six strategic themes of the conceptual framework, namely the relationships and culture, stakeholder, processes and practices, intellectual capital, value creation, and corporate conscience themes.

The factor rotation has maintained the conceptual framework's strategic themes on relationships and culture, stakeholder and corporate conscience and has consolidated the themes of processes and practices, intellectual capital, and value creation into one condensed component labelled value creation. Thus, the four statistical components condense and fully support the six strategic themes of the conceptual framework and also reload 52 variables into their foundational perspectives for the new African Balanced Scorecard model, as summarised in Figure 26, overleaf.

The above quantitative analysis has addressed the primary objective of this study, because it has been established that there is indeed a need for a different understanding of the perspectives on the current Balanced Scorecard model, and a need for new perspectives. These new perspectives need to be conceptualised, developed and adapted specifically for organisations based in Africa. Based on the statistical analyses of the study results, the researcher used the four components as strategic pillars or perspectives in the process of redesigning the Balanced Scorecard model. Thus, the four perspectives comprising the **relationships and culture** perspective, the **stakeholder** perspective, the **value creation** perspective, and the **corporate conscience** perspective finally form the strategic cornerstones of the new model on corporate planning and performance measurement systems for organisations operating in Africa.

Figure 26: Statistical components and the corresponding perspectives of the new African Balanced Scorecard model



Source: Own observation

8.6 CONCLUSION

This chapter has reported on the research results and analysis of the quantitative data gathered during the primary research. The analysis focused on the participants' demographics in terms of the country where the participating organisations operate, their industry, number of employees, organisational stakeholders, use of the Balanced Scorecard model together with the rating about its usefulness, and management levels of respondents.

Furthermore, the chapter has reported on detailed analysis and interpretation of results on the respondents' ratings using Likert scale ranking on the 52 questionnaire statements. The univariate analysis of each statement was reported on, using frequency tables and graphs. The chapter has also reported on the relationships between variables within each strategic theme of the conceptual framework. Such relationships have been analysed by means of the Pearson correlation method. A similar correlation analysis on the interrelationships between the six strategic themes was also conducted.

Finally, the chapter has reported on the multivariate analysis of the 52 variables that was conducted to analyse the factorability of the variables by means of the factor analysis technique. After the 52 variables were subjected to principal component analysis rotation to rearrange them into their major factors, four principal components portraying the best pattern on variable loadings were extracted. The four components condense and fully support the six strategic themes that were originally conceptualised at the start of the study. Therefore, the four statistical components constitute the perspectives of the new redesigned Balanced Scorecard model.

The next chapter details the redesigning process of the Balanced Scorecard model, based on the above research findings so that the new model conforms with the African management framework revealed by the analysis of the research results, as well as the literature analysis.