Redesigning an innovation section of the Balanced Scorecard model: An African perspective

J.K. Khomba, F.N.S. Vermaak & D.G. Gouws

A B S T R A C T

The Balanced Scorecard model was designed for Western countries that operate within a capitalist system. Africa differs from such Western countries with regard to dimensions such as infrastructure, markets and customers, sources of capital, government intervention, literacy levels and socio-cultural frameworks. Africa is more humanist and socialist in nature than Western societies. The purpose of this study was therefore to redesign the innovation perspective of the Balanced Scorecard model to suggest a new management approach for organisations based in Africa. In this study, exploratory factor analysis and correlation analysis using SPSS Version 16.0 were employed to identify four correlated principal components that could constitute an African innovation perspective of the Balanced Scorecard model, namely: (1) Africanisation values for general issues surrounding African socio-cultural frameworks, (2) learning values realised when employees gain indigenous culture and knowledge, (3) customer values focused on Africanising customer care and satisfaction, and (4) innovation values, clarifying values gained from skilled and motivated employees. All four components add value to improve productivity and corporate performance.

Key words: Africa, Balanced Scorecard, *Ubuntu*, indigenous knowledge, innovation, culture, exploratory factor analysis, Malawi, learning

Introduction

The Balanced Scorecard model was developed to address the use of both financial and non-financial measures during the corporate planning and performance measurement systems. The aim of the model was to add leading measures that represent

Dr J.K. Khomba is a Senior Lecturer in the Department of Management Studies, University of Malawi. Prof. F.N.S. Vermaak and Prof. D.G. Gouws are in the Department of Financial Management Sciences, University of Pretoria. E-mail: jkkhomba@gmail.com; jkkhomba@poly.ac.mw
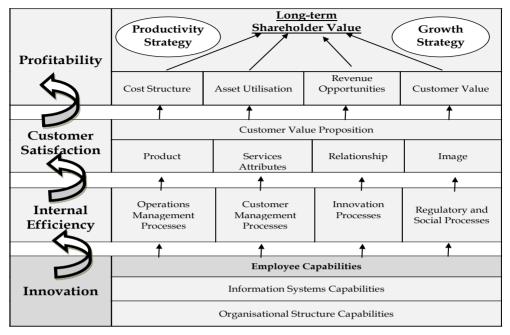
indicators of future financial performance to traditional financial measures, which are based on past performance and are in fact lagging measures (Kaplan & Norton 1992: 72). The Balanced Scorecard model emphasises the need for an information set that covers all relevant areas of corporate performance measurement systems. The information that the model requires includes financial (profitability) perspectives, and adds three more non-financial perspectives, namely the customer satisfaction, internal efficiencies and innovation perspectives. In this way, the model balances financial and non-financial performance measures. These four perspectives are balanced in the sense that organisations are required to think in terms of all four perspectives to prevent a situation in which improvements are made in one area at the expense of another.

Despite its holistic approach, the Balanced Scorecard model has some limitations. The model was designed for Western societies, which are characterised by a mechanistic, capitalist system that emphasises the maximisation of shareholders' wealth in terms of profitability, rather than addressing other critical stakeholders' needs, such as community (Bourguignon, Malleret & Norreklit 2004: 118–119; Voelpel, Leibold & Eckhoff 2006: 54). African countries differ from countries in which Western economies are dominant with regard to dimensions such as infrastructure, literacy levels, markets and customers, sources of capital, government intervention and socio-cultural frameworks (Broodryk 2007). In Africa, the *Umunthu* or *Ubuntu* (humanness) principles, which are essentially socialist and humanist in nature, apply and they are considered critical in any African organisation (Mangaliso 2001). Africa has its own unique socio-cultural settings, which have a direct impact on people-centred systems, including corporate performance, and thus on innovation too.

The innovation perspective describes how an organisation can improve in the long term by considering what extra skills would benefit the organisation. There are three leading measures of innovation, namely organisational structure capabilities, information systems capabilities, and employee capabilities (Kaplan & Norton 2004). This study focuses on employee capabilities as reflected in the strategy map in Figure 1.

The employee capabilities measure looks how an organisation's intangible assets (in the form of human capital) reflect the availability of skills, talent and know-how, which are the means by which an individual either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth (Drucker 2002: 95).

As the strategy map in Figure 1 shows, the innovation perspective is the foundation of value creation by an organisation. A strategy map (Kaplan, Norton & Rugelsjoen 2010: 116) allows managers to see how attaining objectives at the innovation perspec-

Source: Adapted from Kaplan & Norton (2004: 11)

Figure 1: A strategy map showing how an organisation creates value

tive level can assist an organisation to improve continuously upon internal efficiencies and thereafter to achieve customer satisfaction, which ultimately improves profitability through large sales volumes.

Research problem and objective

The current innovation perspective (in particular, the employee capabilities measure) of the Balanced Scorecard model, which is based on Western values, cannot be fully reconciled with an African environment. The aim of this study was to redesign the innovation perspective of the Balanced Scorecard model to represent the values of an organisation based in Africa.

African innovation guided by the *Ubuntu* philosophy

Voelpel et al. (2006: 51) warn that the de-emphasis of socio-cultural perspectives is a serious flaw in the Balanced Scorecard model. In order to align the scorecard with

an African context, indigenous beliefs and values must be conceptualised into a new innovation perspective.

Selected aspects of management theories developed in the West may well apply to the African context, but the adoption of foreign practices should be contingent upon contextual circumstances in the adopting society (Darley & Blankson 2008; Ghebregiogis & Karsten 2006; Gray, Shrestha & Nkasah 2008). Management scholars and executive managers appear to be confident that using Western cultural management models in African countries is appropriate, but this confidence may be misplaced. Instead, African beliefs and social and cultural values could be conceptualised into a new African innovation perspective through *Ubuntu*. *Ubuntu* means 'humanity towards others' and is the basis of African social laws, encompassing social values such as sharing and respect (Binedell 1995; English 2002; Moloketi 2009). *Ubuntu* implies that if people are treated well, they are likely to perform better. The contribution that the principle of *Ubuntu* can make to improved employee capabilities measures, particularly for use in an African context, is investigated.

The *Ubuntu* concept is omnipresent in almost all parts of the African continent (Rwelamila, Talukhaba & Ngowi 1999). To a large extent, the *Ubuntu* philosophy is integrated into all aspects of day-to-day life throughout Africa.

The *Ubuntu* philosophy embodies the ethics that define Africans and their social behaviours (Battle 1997; Eze 2006; Mangaliso 2001). Africans as social beings are in constant communion with one another, and a human being is regarded as a human being only through his or her relationships to other human beings. The survival of a human being depends on other people – the community and society. The worth of every person depends on social, cultural and spiritual criteria. In this sense, African learning and innovation are more of an external organisational phenomenon than just an internal one.

Teamwork is an important element of the *Ubuntu* philosophy, because it implies synergies (Mangaliso 2001; Mbigi & Maree 1995; Muuka & Mwenda 2004). Group solidarity is reached by sharing burdens during hard times. When people do so, the suffering is also shared and diminished; thus people share a fundamental collective experience.

In an African context, cultural and social linkages are considered a key determining factor in the success of any organisation (An Afro-centric Alliance 2001; Karsten & Illa 2005; Mangaliso 2001; Mbigi & Maree 1995).

The basic management principles derived from African tribal communities that embody *Ubuntu* include trust, interdependence and spiritualism (Broodryk 2007). In African management systems, the African *Ubuntu* is a pervasive spirit of caring within the community, where organisations function on the premise that community care

is paramount. Members in the community have to love one another for an African system to be successful (Mangaliso 2001).

Organisations that operate in Africa need to have a clear understanding of the African framework, including historical, legal, educational, economic and competitive factors influencing corporate operations, in order for them to be effective (David 2006). Hence, African countries need to develop their own unique approaches that are appropriate to their respective environments.

It is agreed that there must be a proper identification of the African indigenous philosophies and values that underlie the African context (Binedell 1994; McFarlin, Coster & Mogale-Pretorius 1999). Within the indigenisation spirit, new African management systems dictate that culture be incorporated into the organisational set-up for there to be an effective and productive system (Mangaliso 2001; Mangcu 2007; Shubani 2007).

Apart from employee training and innovation on the job, there are several values that employees should uphold for them to be effective and productive. These values emanate from African socio-cultural backgrounds. In Africa, employees have to be treated as human beings and not necessarily as programmed machines (Prinsloo 2000). In a society-centred setting, employees have extended family systems that should also be respected.

In summary, this analysis has highlighted some hidden general issues that may be relevant to the innovation perspective of the Balanced Scorecard model and its limitations in an African setting where the African socio-cultural setting has to be contextualised within the *Ubuntu* framework. The next section discusses the research methodology that was used during the study.

Research methodology

Initially, exploratory research was conducted in Malawi to find evidence of the general impact of the Balanced Scorecard perspectives on corporate performance as measured by economy, efficiency and effectiveness. In the course of this study, 18 large Malawian companies were involved through questionnaires and interviews with executives. The results indicated that, in general, African organisations need special Afro-centric orientation on management systems that are in line with their environment. This was a prominent finding especially with regard to the innovation section of the Balanced Scorecard model.

Detailed reviews were conducted of the literature on performance measurement, financial measures and the Balanced Scorecard. A review of case studies and interviews with key informants on the subject matter was also done, based on Mouton

and Prozesky's (2007: 81) argument that an exploratory approach is necessary where the subject of study itself is relatively new.

An extensive review was undertaken of relevant and related theories and practices regarding *Ubuntu* and innovation, including prior research. People who have had extensive experience related to the topic in academia and in practice were interviewed. Finally, real-world case studies on the study area were analysed. It was essential to comprehend these new insights before any further development of the African innovation perspective of the Balanced Scorecard model could be attempted.

Next, an exploratory research method was employed to study different variables and their relationships with regard to issues involving the innovation perspective of the Balanced Scorecard model. The exploratory studies were done by means of a structured questionnaire that was administered during the primary data collection processes.

Data collection

Empirical data were collected by means of a survey. The results were used for an empirical analysis of the findings. A structured questionnaire was designed, guided by the research problem and research objective. The questionnaire was tested by means of a pilot exploratory study, and was supported by a final literature review. The questionnaire focused on variables that might affect the innovation perspective within an African context.

Questionnaire structure

The survey targeted senior and middle executives of various organisations, so the questionnaire had to be user-friendly. Nominal settings (Middle/Senior Management), ordinal settings (Rank order 1–5) and interval settings using a five-point Likert-style rating scale (for example, Strongly Agree to Strongly Disagree) were used.

A five-point scale was used to assess validity regarding the extent of agreement about statements that were formulated based on the initial literature review. In the Likert-style rating scale, the same order of response categories was maintained so as not to confuse respondents, as recommended by Dillman (2000). Managers were asked to rate their responses on the continuum scale that they were given. The questionnaire also assisted in the formulation of an objective and scientific report of the study findings.

Pre-testing

After the questionnaire had been designed, it was pre-tested by means of several personal interviews with senior managers to ascertain the validity of the content of measures. Pre-testing involved the construction of variables based on the theoretical nature of the constructs. An extensive pre-testing process was done to iron out any errors that could have arisen during the formulation of the initial questionnaire. A sample of 12 respondents was used during the pre-testing process for the questionnaire.

After the questionnaire had been validated, the pre-testing interviews allowed for the clarification and redefinition of survey items and for the rectification of any potential deficiencies where necessary. Variables with similar distributional properties had to be checked to improve the reliability of the data, as suggested by Field (2009). To achieve reliability, eight of the initial 32 variables were removed at this stage, and several runs were done using the SPSS package without affecting the factor structure. The wording of the statements in the final survey questionnaire is discussed in the Results section. A total of 24 variables were retained.

Sampling

The structured questionnaire was administered in both hard copy and an electronic format. The electronic questionnaires were emailed to potential respondents, and the hard copy versions were posted to the respondents, and then these were followed up for any feedback. Reminder telephone calls were made and e-mails were sent every two weeks for the three-month duration of the questionnaire survey. Organisations were randomly selected from the Malawi Telecommunications Directory (a general directory) and the Malawi Confederation Chamber of Commerce and Industry Business Directory (purely for the private sector).

A total of 250 organisations comprising private companies, the public service and non-governmental organisations (NGOs) were targeted. Out of the 250 organisations, 112 responded to the questionnaire, giving a final response rate of 44.8% (Table 1). Of the private companies, 12 are listed on the Malawi Stock Exchange (MSE) and nine were multinationals, most of which are also listed on the JSE Limited. In order to get readily available information, the researcher targeted only large corporations. The sampling statistics show that the Kaiser-Meyer-Olkin measure of sampling adequacy is 0.832, confirming the factorability of items, as described by Chenhall (2005).

Data reliability and validity

Data reliability as a measure of internal consistency of the data constructs was determined by means of the Cronbach's alpha (α) – an α coefficient above 0.7 is considered reliable (Costello & Osborne 2005; Field 2009). In this study, the overall α coefficient was 0.902, which suggests that the internal consistency of the data constructs was good. Furthermore, the results of the analysis indicate that all variables have uniformly high communalities of above 0.60 without cross-loadings.

In terms of data validity, the questionnaire targeted large corporations focusing on senior (62.5%) and middle managers (37.5%) in various organisations. Table 1 indicates that 84.8% of the respondents had industrial work experience of more than five years. Furthermore, the statistics also indicate that the Barrett test of sphericity was significant for all factors, suggesting that multicolinearity does not exist in these survey data, as explained by Field (2009). Finally, the results of the survey reveal anti-image correlation loadings of above the required minimum of 0.5.

Data analysis

The Statistical Package for Social Sciences (SPSS) version 16.0 was used to capture and analyse data that was collected.

Descriptive statistics

The descriptive statistics show that of the 112 respondents, 34 (30.4%) came from the public sector, while the private and NGO sectors were represented by 74 managers (66.1%) and only four managers (3.6%) respectively. A majority of 70 of the respondents were senior managers, making up 62.5% of the respondents. Only 42 were middle managers (37.5%). Only 17 of the 112 respondents had work experience of up to five years, whilst the remaining 85 managers (84.8% of the total) had work experience of more than five years. The statistics reveal that a majority of 72 managers (64.3%) had work experience of more than ten years.

Descriptive statistics on the 112 respondents in respect of their organisational sector, managerial position and work experience are summarised in Table 1.

Exploratory factor analysis

Because of the exploratory nature of the study, exploratory factor analysis was done using the principal component extraction method. The 24 variables in the questionnaire were subjected to promax rotation with Kaiser normalisation, which

Table 1: Descriptive statistics (N=112)

	Frequency	Percentage	Cumulative percentage
Organisational sector			
Public	34	30.4	30.4
Private	74	66.1	96.4
NGO	4	3.6	100.0
Total	**112**	**100.0**	
Respondents' managerial positions			
Senior management	70	62.5	62.5
Middle management	42	37.5	100.0
Total	**112**	**100.0**	
Respondents' work experience			
Up to 5 years	17	15.2	15.2
From 6 to 10 years	23	20.5	35.7
From 11 to 15 years	36	32.1	67.9
From 16 to 20 years	28	25.0	92.9
From 21 to 25 years	8	7.1	100.0
Total	**112**	**100.0**	

grouped or factored them into components (factors) for further observations. Oblique rotation using the promax method was chosen, as suggested by Floyd and Widaman (1995), because the selected variables might correlate with one another.

During the research, data were collected and analysed with the *a priori* assumption of variable interconnectedness. Therefore, the analysis identified and analysed the extent to which variables did affect one another. The universal correlation or relation of variables is explained by communalities that were extracted using the data. All variables had communality loadings of above 0.6, which suggests a healthy situation according to Field (2009).

The eigenvalues of extracted components were examined by using the scree test. Six factors were identified, each with an eigenvalue above 1 (as reflected in Table 2).

Multiple factor analyses were also run by setting factor loadings at six, five, four and three to come up with the optimum number of factors to be considered for further observations, in line with suggestions by Costello and Osborne (2005). After several rotations, it was clear that a factor loading of four produced the best factor structure. The pattern matrix clearly loads each variable on a specific component without any

Table 2: Eigenvalues and variances

Principal component	Initial eigenvalues		
	Total	% of variance	Cumulative %
1	7.635	31.814	31.814
2	2.360	9.833	41.647
3	1.925	8.019	49.666
4	1.472	6.133	55.799
5	1.204	5.018	60.817
6	1.005	4.189	65.005

cross-loadings. The final loadings of the factors are summarised in Tables 4 to 8 in the Results section.

Results

This section reports the results of the exploratory factor analysis. Four principal components were extracted from the statistical analysis, using factor analysis, as summarised in Table 3.

Table 3: Factor analysis with promax rotation

Principal component	Extraction sums of squared loadings			Rotation sums of squared loadings
	Eigenvalues	% of variance	Cumulative %	Total
1	7.635	31.814	31.814	6.594
2	2.360	9.833	41.647	3.993
3	1.925	8.019	49.666	4.040
4	1.472	6.133	55.799	2.897

The interpretation of the extracted four factors demanded considerable thought, as common themes on each factor had to be carefully identified. Through the generation of a pattern matrix, clear high value factor loadings of variables on each component were identified. The description of each component is admittedly subjective, but the following factor names appear to reflect the concepts involved well.

Factor 1: Africanisation values

Factor 1 had the greatest variable loadings of the four factors that were extracted. It had loadings of ten out of 24 variables, resulting in the highest variance figure of

31.814%. All the variables in this factor seem to focus on Africanisation issues that include indigenous knowledge and culture. The rotated factor also best describes the strong relationships among the ten variables of corporate performance. In summary, Factor 1 suggests that there is a strong correlation between *Africanisation values* and the innovation perspective of the corporate performance attributes. Details of each variable or item in the factor are summarised in Table 4.

Table 4: Factor 1 (Africanisation values)

(Eigenvalues=7.635, % of variance=31.814, μ=3.658036)	Component			
Item	1	2	3	4
Indigenous knowledge promotes competitive advantage (B2.16)	**0.804**	0.035	-0.131	-0.043
Indigenous culture and knowledge promote productivity (B2.10)	**0.769**	-0.028	0.122	0.095
Indigenous knowledge enhances corporate performance (B2.17)	**0.712**	0.094	-0.082	0.031
Indigenous culture and knowledge promote teamwork (B2.7)	**0.707**	-0.083	-0.079	0.087
Indigenous knowledge promotes financial viability (B2.11)	**0.690**	0.009	0.295	0.021
Indigenous culture and knowledge promote innovations (B2.9)	**0.628**	0.008	0.229	-0.153
Indigenous knowledge promotes environmental protection (B2.12)	**0.626**	0.126	0.119	-0.106
Indigenous knowledge boosts employee morale and productivity (B2.5)	**0.612**	-0.054	-0.242	0.414
African culture must be incorporated into organisational set-ups (B2.15)	**0.576**	0.361	-0.124	0.140
Indigenous knowledge promotes corporate sustainability (B2.14)	**0.536**	0.023	0.366	0.014

Factor 2: Learning values

Factor 2 has been labelled *learning values* and had six out of 24 loadings. While these factor items recognise issues of Africanisation in terms of culture and knowledge in management systems, most of the attributes seem to focus on values pertaining to employee learning (Items B3.1, B1.3 and B3.2). With regard to employee learning values, the responses suggested that there is a need to internalise African innovation systems for better corporate productivity and performance. For instance, Variable B2.1 indicates that process improvements are foundational to further improvement of internal operations. Apart from internal parameters, Factor 2 reveals the contributions

Table 6: Factor 3 (Customer values)

(Eigenvalues=1.925, % of variance=8.019, μ=3.787202)	Component			
Item	1	2	3	4
Employee training promotes asset utilisation (B3.3)	-0.146	0.076	**0.812**	0.040
Africa needs to build an Africanised workforce (B2.2)	0.234	-0.252	**0.623**	0.383
Indigenous knowledge promotes customer orientation (B2.8)	0.143	0.186	**0.564**	0.136
Financial reporting systems provide no adequate foundation (B1.4)	0.281	0.018	**0.447**	-0.386

Table 7: Factor 4 (Innovation values)

Factor 4 (Eigenvalues=1.472, % of variance=6.133, μ=4.223214)	Component			
Item	1	2	3	4
Motivated employees enhance organisational processes (B1.2)	-0.134	0.050	0.280	**0.762**
Indigenous knowledge promotes *Umunthu* in communities (B2.4)	0.217	-0.297	-0.073	**0.680**
Socio-cultural linkages are key success factors (B2.6)	0.301	0.131	0.108	**0.444**
Skilled employees drive organisational processes (B1.1)	-0.037	0.285	0.344	**0.423**

Correlation analysis of four components

It was deemed important to analyse the strength of relationships among the four components using the means of variables on the four extracted components discussed. The variable means were then subjected to Pearson correlation analysis, as summarised in Table 8.

The Pearson correlation analysis shows that at a 1% significance level (two-tailed), all four components extracted are significantly correlated. *Africanisation values* and *customer values* showed the highest correlation ($r=0.611$, $p<0.01$) and *learning values* and *customer values* registered the lowest correlation values ($r=0.327$, $p<0.01$). The correlations between all four factors ranged from $r=0.327$ to $r=0.611$, as summarised in Table 8.

Table 8: Pearson correlation analysis

	Africanisation values	Learning values	Customer values	Innovation values
Africanisation values	1			
Learning values	0.423**	1		
Customer values	0.611**	0.327**	1	
Innovation values	0.487**	0.418**	0.376**	1

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

The Pearson correlation values were significant at a 1% level ($0.327 \leq$ r ≥ 0.611). The analysis thus indicates that there is moderate correlation among the four factors affecting the innovation perspective of the Balanced Scorecard model. Moderate correlation implies that the factors measure different constructs that are related to one another, which is good news according to Field (2009).

Conceptual framework of an African innovation perspective

These relationships were summarised in a conceptual framework of an African innovation perspective of the Balanced Scorecard model, as shown in Figure 2.

The conceptual framework shows relationships of variables at different levels. The conceptual framework shows relationships between the four extracted principal components and their sub-components (formulated statements representing variables). It should be noted that all variables and components are interconnected, as shown by the dotted lines in the conceptual framework, and that they are positively correlated. The 24 correlated variables feed into four respective components, as shown by the arrows at the variable level. Progressively, the four components describing organisational value-adding activities constitute an African innovation perspective of the Balanced Scorecard model (Figure 3).

Discussion

The empirical results of the study reveal that an Africanisation of the innovation perspective of the Balanced Scorecard would be the ideal approach within an African
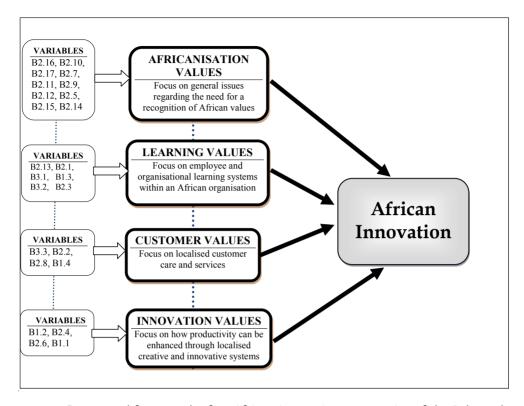
Figure 2: Conceptual framework of an African innovation perspective of the Balanced Scorecard

organisation. The statistical empirical results are in line with the proposition that the adoption of foreign management systems should be adapted to the contextual framework of the African society where they will be used, and that Africa needs to build an Africanised workforce for best value creation (Ghebregiogis & Karsten 2006; Prinsloo 2000; Mbigi & Maree 1995).

An African innovation perspective on the Balanced Scorecard

The study identified four key components comprising a new African innovation perspective of the Balanced Scorecard model, as shown in Figure 3. All four components of the African innovation perspective are related to one another.

The first component, *Africanisation values*, includes general issues that lead to a better understanding of the need to localise innovation and learning for better corporate performance. Empirically, it has been revealed that indigenous knowledge
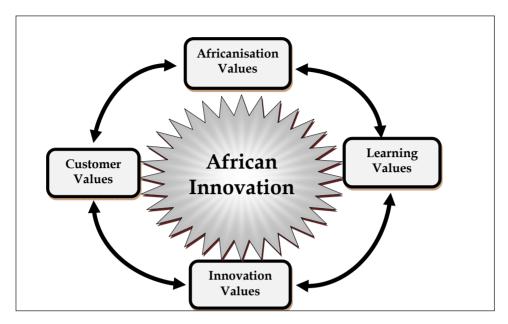
Figure 3: Four components of an African innovation perspective model

has a significant positive impact on corporate productivity and performance. Specific contributions that can be made by adopting an Africanising innovation perspective to fit into socio-cultural settings include enhancing teamwork, improving understanding of the environment and its needs, boosting employee morale and productivity, promoting financial viability, promoting training and innovations, and generally improving corporate productivity and sustainability.

The second dimension, *learning value*s, encapsulates employee competencies and values leading to an Africanised working environment that would improve corporate productivity and performance. In respect of this component, the empirical results indicate that taking into account and learning about indigenous culture and knowledge by the workforce can improve and promote social responsibility, lead to improved internal business processes and operations, and enhance corporate management policies and systems. Furthermore, the improved employee learning and innovation values in turn lead to an overall improvement in corporate productivity and performance. The results seem to support the notion that employee training and knowledge have a positive impact on the performance of organisations (Busi & Bititci 2006; Carr, MacLachlan, Kachedwa & Kanyangale 1997; Prinsloo 2000). The results also suggest that using indigenous employee knowledge should be regarded as an important doctrine for organisations based in Africa.

The third factor comprises the *customer values*, constituted of variables leading to the satisfaction and retention of customers in the African local business environment. The study reveals that Africa needs to build an Africanised workforce in order to promote customer satisfaction and hence create more national values, as proposed by McFarlin et al. (1999). It is vital to note the empirical evidence that Western financial reporting systems provide no adequate foundation for managing and measuring value creation through knowledge, as Kaplan and Norton (1996) argue. Generally, the study results confirm that there may be a need for a localised learning organisation or workforce that serves customers better and hence creates more value for the organisation.

The final principal component, *innovation values*, focuses on the value and values of a skilled and motivated workforce. The empirical evidence in this study indicates that organisational processes succeed when motivated and skilled employees manage internal operations. Furthermore, it is revealed that skills and knowledge gained locally would also lead to a better understanding of organisational socio-cultural linkages. Such linkages ultimately lead to the promotion of humanness (Broodryk 2007; Du Plessis 2001). This confirms that a workforce that is skilled and motivated would be innovative and productive; hence, corporate performance would be improved.

Conclusion and recommendations

The study has revealed general issues regarding an African innovation perspective of the Balanced Scorecard model. Four major themes governing the use of an African innovation perspective of the Balanced Scorecard are Africanisation values, learning values, customer values and innovation values. The factor *Africanisation values* addresses general issues related to the African socio-cultural environment including the *Ubuntu* philosophy, while the factor *learning values* recognises that when employees are trained and gain indigenous knowledge, their productivity and performance improve. The factor *customer values* focuses on Africanising customer care and satisfaction. Finally, the factor *innovation values* clarifies the gains that are realised from skilled and motivated employees. All four values are positively correlated with one another and could add value to corporate performance.

The most important finding of this study is the significant contribution that indigenous knowledge and an *Ubuntu* philosophy could make to corporate performance in an organisation based in Africa. Therefore, it is envisaged that the new innovation perspective could be adopted by organisations operating in an African environment. The empirical evidence in this study suggests that the new

conceptual framework (Figure 2) of an innovation perspective would be an ideal tool to ensure better performance measurement for organisations in Africa.

The study has some limitations that should be considered when applying the findings and drawing conclusions from the results. Firstly, the geographic coverage of the primary survey was limited to Malawi. Apart from the secondary data gathered through the literature review, other African regions were not covered. However, the researchers believe that the coverage is representative of an African setting, as most of the organisations that were surveyed operate throughout Africa, and 12 were listed on the JSE. However, further research covering a wider area of the African region would be appropriate to support the findings.

Furthermore, the study results represent necessary but not sufficient conditions for proof of causal relationships. Although the survey statistics show paths of individual association among the components and sub-components, there is a need for further research employing experimental methods on longitudinal cases that empirically investigate the causality relating to individual components and variables.

Notwithstanding the limitations of the study, the results suggest that an African innovation perspective of the Balanced Scorecard model addresses the socio-cultural frameworks of the continent and hence should be adopted by any organisation based in Africa. The new innovation perspective would represent African ideologies and socio-cultural frameworks on the Balanced Scorecard model.

References

An Afro-centric Alliance. 2001. 'Indigenising organisational change: Localization in Tanzania and Malawi', *Journal of Managerial Psychology*, 16(1): 59–78.

Battle, M. 1997. *Reconciliation: The Ubuntu Theory of Bishop Desmond Tutu.* Cleveland, OH: Pilgrim's Press.

Binedell, N. 1994. 'Vision and reality: Business in the new South African environment', In Christie, P., Lessem, R. & Mbigi, L. (eds), *African Management*. Johannesburg: Knowledge Resources.

Broodryk, J. 2007. *Ubuntu Management Philosophy*. Randburg: Knowres Publishing.

Bourguignon, A., Malleret, V. & Norreklit, H. 2004. 'The balanced scorecard versus the French *tableau de bord*: The ideological dimension', *Management Accounting Research*, 15: 107–134.

Busi, M. & Bititci, U.S. 2006. 'Collaborative performance management: Present gaps and future research', *International Journal of Productivity and Performance Management*, 55(1): 7–25.

Carr, S.C., MacLachlan, M., Kachedwa, M. & Kanyangale, M. 1997. 'The meaning of work in Malawi', *Journal of International Development,* 9: 899–911.

Chenhall, R.H. 2005. 'Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study', *Accounting, Organizations and Society*, 30: 395–422.

Costello, A.B. & Osborne, J.W. 2005. 'Best practice in exploratory factor analysis: Four recommendations for getting the most from your analysis', *Practical Assessment, Research and Evaluation*, 10(7): 1–9.

Darley, W.K. & Blankson, C. 2008. 'African culture and business markets: Implications for marketing practices', *Journal of Business and Industrial Marketing,* 23(6): 374–383.

David, F. 2006. *Strategic Management: Concepts and Case Studies.* New York: Prentice Hall.

Dillman, D.A. 2000. *Mail and International Surveys: The Tailored Design Method.* New York: Wiley.

Drucker, P.F. 2002. 'The discipline of innovation', *Harvard Business Review,* 80(8): 95–103.

Du Plessis, C. 2001. 'Sustainability and sustainable construction: The African context', *Building Research and Information*, 29(5): 374–380.

English, J. 2002. 'Managing cultural differences to improve industrial efficiency', *Building Research and Information*, 30(3): 196–204.

Eze, M.O. 2006. *Ubuntu: A Communitarian Response to Liberal Individualism?* Pretoria: University of Pretoria.

Field, A. 2009. *Discovering Statistics Using SPSS.* London: Sage.

Floyd, F.J. & Widaman, K.F. 1995. 'Factor analysis in the development and refinement of clinical assessment instruments', *Psychological Assessment,* 7(3): 291–314.

Ghebregiogis, F. & Karsten, L. 2006. 'Human resource management practices in Eritrea: Challenges and prospects', *Employee Relations*, 28(2): 144–163.

Gray, K.R., Shrestha, N.R. & Nkasah, P. 2008. 'A cross-cultural perspective on management in Kenya', *Journal of African Business,* 9(1): 27–58.

Kaplan, R.S. & Norton, D.P. 1992. 'The balanced scorecard: Measures that drive performance', *Harvard Business Review,* January–February: 71–79.

Kaplan, R.S. & Norton, D.P. 1996. *The Balanced Scorecard: Translating Strategy into Action.* Boston, MA: Harvard Business School Press.

Kaplan, R.S. & Norton, D.P. 2004. *Strategy Maps Converting Intangible Assets into Tangible Outcomes.* Boston, MA: Harvard Business School Press.

Kaplan, R.S., Norton, D.P. & Rugelsjoen, B. 2010. 'Managing alliances with the Balanced Scorecard', *Harvard Business Review*, 88(1): 114–120.

Karsten, L. & Illa, H. 2005. 'Ubuntu as a key African management concept: Contextual background and practical insights for knowledge application', *Journal of Managerial Psychology,* 20(7): 607–620.

Mangaliso, M.P. 2001. 'Building competitive advantage from Ubuntu: Management lessons from South Africa', *Academy of Management Executive*, 15(3): 23–33.

Mangcu, X. 2007. *Visions of Black Economic Empowerment*. Pretoria: Jacana.

Mbigi, L. & Maree, J. 1995. *Ubuntu: The Spirit of African Transformation Management.* Randburg: Knowledge Resources.

McFarlin, D.B., Coster, E.A. & Mogale-Pretorius, C. 1999. 'South African management development in the twenty-first century: Moving toward an Africanized model', *Journal of Management Development*, 18(1): 63–78.

Moloketi, G.R. 2009. 'Towards a common understanding of corruption in Africa', *Public Policy and Administration*, 24(3): 331–338.

Mouton, E.B.J. & Prozesky, P.V.B. 2007. *The Practice of Social Research*. Cape Town: Oxford University Press.

Muuka, G.N. & Mwenda, K.K. 2004. 'Towards best practices for micro finance institutional engagement in African rural areas: Selected cases and agenda for action', *International Journal of Social Economics*, 30(1/2): 143–158.

Prinsloo, E.D. 2000. 'The African view of participatory business management', *Journal of Business Ethics*, 25(4): 275–286.

Rwelamila, P.D., Talukhaba, A.A. & Ngowi, A.B. 1999. 'Tracing the African project failure syndrome: The significance of "Ubuntu"', *Engineering, Construction and Architectural Management*, 6: 335–346.

Shubani, K. 2007. 'An argument for capital concentration and socially responsible investing'. In Mangcu, X. (ed.), *Visions of Black Economic Empowerment*. Pretoria: Human Sciences Research Council.

Voelpel, S.C., Leibold, M. & Eckhoff, R.A. 2006. 'The tyranny of the Balanced Scorecard in the innovation economy', *Journal of Intellectual Capital*, 7(1): 43–60.