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VALUE OF INTELLECTUAL CAPITAL ON CORPORATE PERFORMANCE: An African experience

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ABSTRACT

Drucker (1992) views intellectual capital as the only major source of capital that can create productivity and contribute towards profits for corporations. The problem statement refers to lack of recognition about this significant contribution of intellectual capital towards corporate performance by some organisations in Africa. Thus, the objective of the research was to focus on the intellectual constructs in order to fully understand its dynamics within an African framework. The study drew corporate data from different companies using structured questionnaires. The data was analysed through the use of univariate and correlation analysis. It is found that some corporations are not still aware of the importance and necessity of intellectual capital that brings innovation and profitability. Many managers in Africa still tend to put much emphasis on the other four sources of capital as comprising labour capital, natural resource capital, financial capital and debt capital more than the intellectual capital. Thus, recognition of intellectual capital is still in the transitional stage amongst many organisations in Africa. It is expected that the results of this research will enhance knowledge and recognition of intellectual capital value as another source of productivity and a contributor towards corporate performance and profitability.

Keywords: *Africa, corporate performance, innovation, intellectual capital, Malawi, Ubuntu, value creation*

INTRODUCTION

The discussion about the recognition and significance of intellectual capital has become paramount amongst researchers and business practitioners all over the world. Scholars of the theory of an organisation have begun to put much emphasis on the sources and conditions of what has been described as "the organisational advantage" for better corporate performance and sustainability (Nahapiet and Ghoshal, 1998). Typically, researchers see such organisational advantage as accruing from the particular capabilities organisations have for creating and sharing knowledge in the form of intellectual capital.

Drucker (1992) classifies intellectual capital as the primary source of productivity with the other traditional factors of production such as land, capital and labour becoming secondary. It is argued that these other secondary sources of productivity as aforementioned can be obtained quite easily, provided that the organisation has specialised knowledge. Such a debate on the on the value of intellectual capital is also being propagated within the African corporations (Kamukama et al., 2011).

To have a specialised knowledge also entails to be conversant with the underpinnings of the society within which an organisation is operating – social capital. In their study, Nahapiet and Ghoshal (1998) established that social capital facilitates the creation of new intellectual capital and that organisations, as institutional settings, are conducive to the development of high levels of social capital. It is further revealed that social capital that firms has a competitive advantage over markets in creating and sharing intellectual capital.

The African organisational framework is unique in that it is founded on its socio-cultural Ubuntu philosophy. The Ubuntu philosophy represents an African conception of the human being, and his/her relationship with the community that embodies the ethics that define Africans and their social behaviours (Khoza, 2006; Luhabe,

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2002; Mbigi and Maree, 2005;). The word "Ubuntu" is derived from a Nguni (isiZulu) aphorism: *Umuntu Ngumuntu Ngabantu*, which can be translated as "a person is a person because of or through others" (Mandela, 2006; Moloketi, 2009; Tutu, 1999; Tutu, 2004).

RESEARCH PROBLEM AND OBJECTIVE

Despite so much recognition of and debate on intellectual capital as the primary source of corporate performance in general and financial profitability in particular, there seem to be little emphasis of this cognisance amongst corporate managers in Africa. The problem statement refers to this apparent lack of recognition about the significant contributions of intellectual capital towards corporate performance by some corporate managers in Africa. Therefore, the objective of the research was to focus on the intellectual constructs in order to fully understand its dynamics within an African framework. The study aimed at validating an understanding of intellectual capital attributes by corporate managers in Africa.

INTELLECTUAL CAPITAL AND CORPORATE PERFORMANCE

An intellectual capital refers to the collective knowledge of the individuals working in an organisation (BusinesDictionary.com, 2012). This knowledge can be applied to produce wealth, to multiply the output of physical assets, to gain a competitive advantage, and/or to enhance the value of other types of capital. Intellectual capital acts as a hub that integrates all the other capital sources for the creation of maximum organisational wealth for long-term corporate sustainability.

These four sources of capital comprise the financial capital acquired from shareholders; debt capital sourced from debt financiers; labour capital derived from the labour force; and natural resources capital taken from the natural environment. Corporate managers tend to recognise and respect these four sources of capital in their corporate planning and execution programmes more than the intellectual capital (Ghosh & Wu, 2007; Kong, 2008; Vergauwen et al., 2009). However, intellectual capital acts as a catalyst for innovations in the value creation processes and activities of an organisation. The other four sources are secondary as they tend just to support primary foundations of the intellectual capital, as also observed by Drucker (1992).

Kamukama et al. (2011) indicates that competitive advantage is a significant mediator in the association between intellectual capital and financial performance as studied amongst the Ugandan microfinance institutions. Their research findings confirmed a partial type of mediation between the intellectual capital, competitive advantage and financial performance of corporations.

Regarding the contributions that intellectual capital makes towards the overall corporate performance, Komnenic and Pokrajcic (2012) reveal that intellectual capital is positively associated with three key corporate performance measures that comprise profitability, productivity and return on equity. A similar study conducted by Biserka and Dragana (2012) also confirms that intellectual capital is positively associated with the three corporate performance measures as comprising return on assets, return on equity and productivity.

The above research findings confirm results of an earlier study by Chu et al. (2011) that established that intellectual capital was positively associated with the financial bottom line - profitability of companies. This study also revealed that there is a growing trend in the significance of intellectual capital amongst different organisations as intellectual capital continues to play a notable part in enhancing corporate profitability. Through the use of correlation and linear multiple regression analysis, it was established that intellectual capital is a strong predictor of corporate financial performance such as return on equity and profitability.

There is now a great demand that corporations should disclose their intellectual capital (Gholamhossein et al., 2012) just like any other capitals as discussed above. Studies by Branswijck and Everaert (2012) indicate that there is existence of intellectual capital disclosure commitment amongst some organisations However, their research established that corporations tend to report more extensively on intellectual capital in their prospectuses in comparison to their annual reports. When companies disclose their intellectual capital to different stakeholders, Vafaei et al. (2011) reveal that such a disclosure if positively associated with the market price/value in companies; thus intellectual capital has value relevance.

The above literature analysis reveals that intellectual capital plays a pivotal role in determining the performance and sustainability of any business. This is indicative that intellectual capital, just like the other sources of capital, is significant in the processes of creating wealth through enhanced productivity and improved corporate performance. Therefore, it is incumbent upon all managers to recognise this significant contribution that non-financial kinds of capital, especially intellectual capital, make towards corporate performance.

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SOCIAL CAPITAL AND INTELLECTUAL CAPITAL WITHIN AN AFRICAN CONTEXT

Africa has its own unique socio-cultural settings, which have a direct impact on people-centred systems encompassing leadership, employee welfare, extended family systems, caring and sharing, and corporate governance. Such social settings that form the social capital as part of the intellectual capital contribute significantly towards corporate performance and sustainability (Mangaliso, 2001).

Within an African environment, socio-cultural underpinnings rigorously apply and the African *Umunthu* or *Ubuntu* (humanness) philosophies are omnipresent throughout the continent. Therefore, the Ubuntu socio-cultural dimensions apply and are considered critical in any organisation operating in Africa (Lutz, 2009; Mangaliso, 2001; Mbigi and Maree 2005).

In the African context, employees' values emanate from African socio-cultural underpinnings. It is important to note the African ideologies and the social obligations that employees are expected to meet. Such perceived social obligations can have a direct impact on corporate performance. The non-fulfilment of perceived obligations (non-monetary) by organisations might cause employees to refrain from deploying their energies effectively in organisational processes. The perceived obligations by organisations can be conceptualised as "intangible liabilities", which represent the non-monetary obligations that an organisation must accept and acknowledge in order to avoid the depreciation of its intangible assets, such as intellectual capital and knowledge (Garcia-Parra et al., 2009). It should also be noted that in an African organisation, efficiency and competitiveness can be achieved by an emphasis on social well-being rather than on purely technical rationality.

Generally, the corporate world can use Africa's uniqueness and social capital to build on corporate performance. Social capital, which constitutes an organisation's emotional and spiritual resources, is a distinctive competitive factor, like intellectual capital (Mbigi, 2000; Ngunjiri, 2010). Social capital affects the impact of any strategic intervention and the ultimate effectiveness of policies, procedures and processes. However, the current corporate practices, management thinking, and literature are weak in managing and using emotional and spiritual resources, which also help to determine the value of an organisation in Africa.

Social linkages (social capital) that affect the intellectual capital are quite pertinent in the corporate world. Cultural and social linkages determine how an organisation interacts with its stakeholders, including customers. For instance, Sussan (2012) established that social interaction with customers through different means including internet adds more explanation to products sales and ultimate corporate financial performance.

Even within the national framework, Klemz et al., (2006) found that in South Africa large multinationals are primarily individualist in their cultural orientation and therefore are more likely to drive what they describe as "non-humanistic" aspects of service delivery to their customers. By contrast, the small black-owned businesses are more collectivist in their cultural orientation and therefore use humanist-type variables as a basis of their competitive strategy. Although black people are employed by large, traditionally white-owned corporations, their work-related behaviour is shaped by the prevailing cultural orientation of the owners and managers of those organisations through training and socialisation.

There is a need for the Africa-based business practices to be consistent with the socio-cultural concepts of the Ubuntu philosophy. In respect of customer care and satisfaction, small retail shops in South Africa are encouraged to supply empathetic and caring service because of its strong influence on black township residents' willingness to buy (Klemz et al., 2006). Within an African context, in the long term, organisational goals and strategies are achieved when a compromise is found between different socio-cultural parameters and that they should be the critical ingredient of organisational frameworks (Khomba and Vermaak, 2012).

Therefore, it is in an organisation's best interest to move beyond just window-dressing and the empty rhetoric of the past towards an approach to management development that reflects Africa's unique context (McFarlin et al., 1999). African organisations and projects need to re-align themselves to the true African context and a not Western setting in order for them to be economically and socially viable.

A CONCEPTUAL FRAMEWORK OF STAKEHOLDER RELATIONSHIPS AND NETWORKS

To give a better picture about the African environment, Khomba (2011) developed a conceptual framework of stakeholder relationships and networks (the *Ubale* Framework – "ubale", a Bantu language, means "relationships"), as depicted in Figure 1, below.

There are four systems layers in the conceptual framework, namely the corporate level, the industry level, the Ubuntu community level, and the ecological (natural environmental) level. On a daily basis, and in a very complex way, different stakeholders interact with an organisation for different business transactions. Generally,

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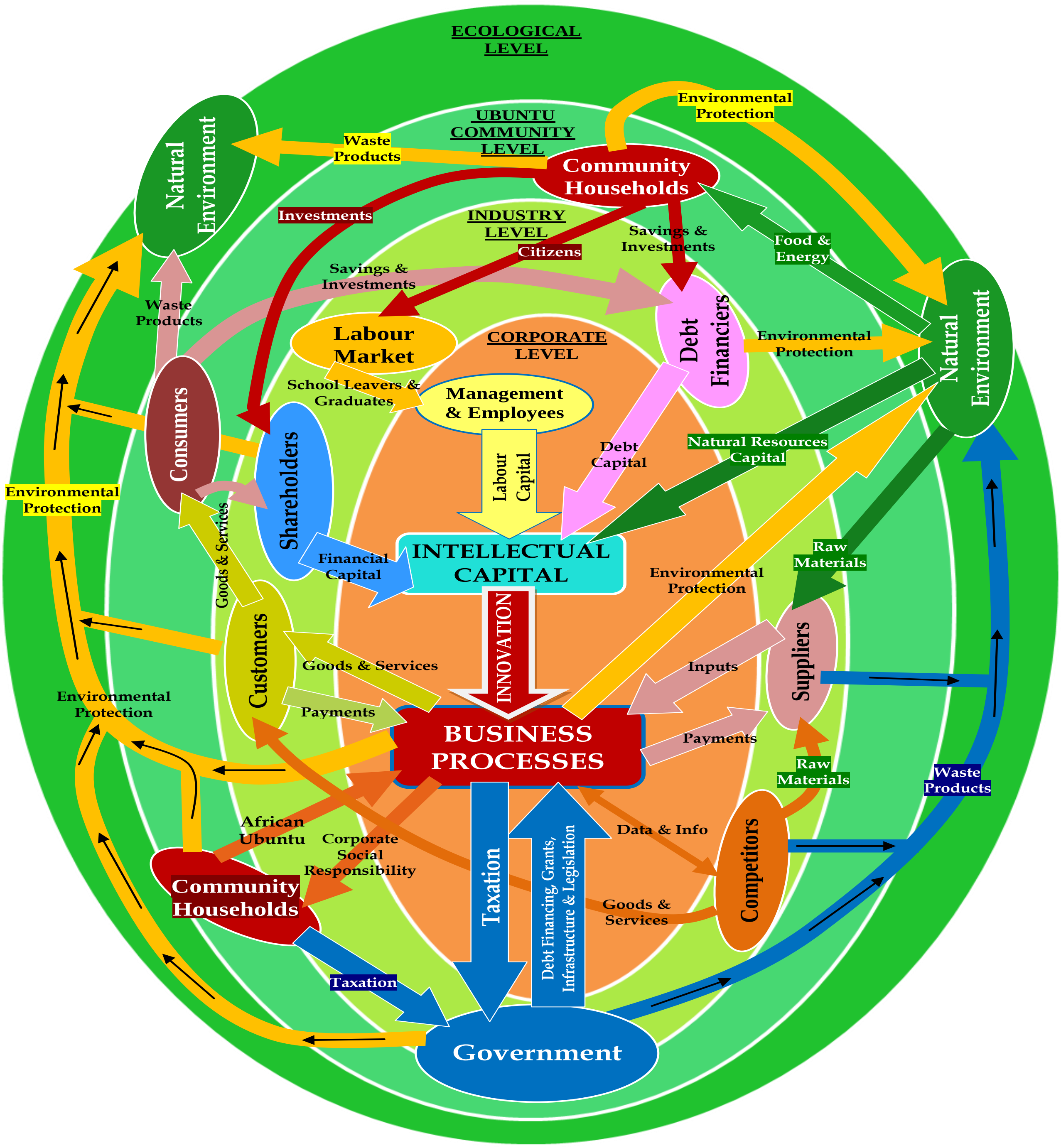
any business comprises complex activities involving different constituents that are linked to take the entity towards organisational success.

Within the corporate level circle, the framework recognises intellectual capital as a hub where all four organisational sources of capital are integrated for the creation of maximum organisational wealth for long-term corporate sustainability. Acording to the above framework, the four integrated sources of capital comprise the financial capital that is acquired from shareholders; debt capital sourced from debt financiers; human resource capital derived from the labour force; and natural resources capital taken from the natural environment.



System Level ▶	Corporate	Industry	Ubuntu Community	Ecological

Figure 1: A conceptual framework of stakeholder relationships and networks (The *Ubale* Framework). Source: Khomba (2011)

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Furthermore, the *Ubale* Framework depicts relationships in respect of intellectual capital attributes and overall corporate performance. The framework also describes the extent to which intellectual capital, which links all other sources of capital, is valued by an organisation as a strategic asset that can assist in its operations. The *Ubale* Framework in Figure 1 recognises this interconnectedness of and relationships between corporate activities, including those associated with the intellectual capital.

RESEARCH METHODOLOGY

The study was conducted through primary research using structured questionnaire. The researchers followed basic procedures that are employed when developing the Likert scale questionnaire to measure different perceptions of managers from the commercial sector. The formulated statements on the structured questionnaire were based on procedures recommended by Saunders et al., (2003). The main steps that were followed when formulating the questionnaire included the identification and generation of understanding of perspectives surrounding intellectual capital and corporate performance, careful review of literature on the topical area, a review of similar questionnaires that were used in prior surveys, and insights gained from an examination of latest information gathered through the internet, newspapers, magazines, TV and radio broadcastings. All these culminated into the formulation of the attitudinal statements that represented the six main variables of the study.

Data collection

Empirical data were collected by means of a survey. The results were used for an empirical analysis of the research findings. A structured questionnaire was designed, guided by the research problem and research objective. The questionnaire focused on variables that would assess the intellectual capital experiences within an African context.

Questionnaire structure

To make the questionnaires user-friendly, the researchers formulated statements whose response would use nominal settings (Middle/Senior Management, Yes/No), ordinal settings such as the rank orders, and interval settings based on the Likert-style rating scales with the rankings signifying the degree of agreement ranging from a scale of “1” referring to “Strongly Disagree” to a scale of “5” referring to “Strongly Agree” on a five-point rating scale of the structured questionnaire. A five-point scale was used to assess validity as to the extent of agreement on each statement.

In Likert scales, it is assumed that all respondents will perceive “Strongly Agree” as expressing greatest favour or agreement towards the attitude statements than “Somehow Agree” and “Strongly Disagree” (Babbie and Mouton, 2007; Saunders et al., 2003; Welman et al., 2005). 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 reporting of the study findings.

Pretesting

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. Pretesting 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 20 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 recommended by Field (2009).

Sampling

The structured questionnaire was administered in both hard copy and an electronic format. 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 after every two weeks for three months of the questionnaire survey.

Large corporations were randomly selected from those that are registered with the registrar of companies or Malawi Stock Exchange in Malawi and those companies that are registered with the Johannesburg Stock Exchange or the Johannesburg Chamber of Commerce in South Africa. Though not in majority, some companies from other countries were reached through their diplomatic missions that are resident in either Malawi or South Africa.

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During data collection, a total of 620 questionnaires were dispatched to various organisations from the commercial sector in Malawi, South Africa and other African countries. Out of the 620 questionnaires, 387 responded to the questionnaire giving a final response rate of 62.4%. The sampling statistics show that the Kaiser-Meyer-Oklin measure of sampling adequacy is 0.856 which is a "great" value for verification of sampling adequacy for the analysis (Field, 2009). Thus, the above analysis confirms the factorability of items and adequacy of the sample for conclusive results (according to Chenhall, 2005; Field, 2009; Hanafizadeh and Sorousha, 2008).

Country of participating organisations

Demographics of participating organisations (N=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 that included Zimbabwe, Mozambique, Lesotho, Botswana and Zambia. As reflected in the statistics, the majority (94.7%) of respondents came from Malawi and South Africa combined with 5.3% from other African countries.

Data reliability and validity

Data reliability as a measure of internal consistency of the data constructs was determined by means of the Cronbach alpha (α) – an α coefficient above 0.7 is considered reliable (Bryman and Bell, 2007; Costello and Osborne, 2005; Field 2009). In this study, the overall α coefficient was α=0.863, which suggests that the internal consistency of the data constructs was excellent.

Further analysis of Cronbach's alpha coefficients of the *Scale if item deleted* gives values that are not significantly different from the original α=0.863. The new values of the *Scale if item deleted* range from α=0.858 to α=0.871 signifying that the questionnaire is reliable and that the deletion of any variable cannot significantly affect the original Cronbach's alpha coefficient of α=0.863.

In terms of data validity, researchers were careful in sampling the targeted population. Though randomly done, the questionnaire was targeted at large corporations by focussing on business executives at senior management (60.7% of respondents) and middle management (37.0% of respondents), and other business executives including the board members (2.3%). Such business executives include the chief executive officers (CEOs), human resources managers (HRMs), management accountants, and company secretaries who are conversant with issues raised under the study; hence maintaining homogeneity of the sample. Still more, a total of 71.3% of the respondents have industrial work experience of more than six years.

The statistics indicate that the Bartlett test of sphericity X^2 (1574)=12365.54, p<0.001 was significant for all factors indicating that we can be confident that multicolinearity does not exist under these survey data and that factor analysis would be appropriate according to Field (2009). Thus, the Bartlett's test of sphericity X^2 (1574)=12365.54, p<0.001 signifies that the study results are valid for any conclusive analysis and discussions, as below.

ANALYSIS AND DISCUSSION OF RESEARCH RESULTS

The study analysed and validated the six formulated statements that formed intellectual capital variables. The statistical analysis was done through the univariate analysis and correlation analysis as discussed below.

Univariate Analysis

Ratings on each statement were done through univariate analysis by using individual rating statistics and frequency tables. Overall, the analysis shows that there were varied responses from participants regarding the extent of their agreement on each of the questionnaire statements. This section reports on the study results and analysis of ratings on the questionnaire statements.

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 of 50.1% agree that intellectual capital is a source of profit, still, some organisations still do not recognise that intellectual capital is a source of profitability as argued by Drucker (1992).

The above ratings signify that the recognition of intellectual capital as another source of value creation is transitional amongst corporate executives in Africa. 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.

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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 which is part of the intellectual capital. Thus, the research findings support the *Ubale* 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) 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 *Ubale* Framework, which recognises intellectual capital and innovation as an important element in business processes and practices.

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). 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; Nussbaum, 2003; Sussan, 2012). 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 research findings confirm the significance of social capital as part of intellectual capital in enhance corporate activities. Further to this, the findings resonate with provisions of the *Ubale* Framework, which recognises the influence of the Africa's socio-cultural framework in the form of the Ubuntu philosophy that is founded by African community, in general.

5) Knowledge about the local culture improves our corporate performance

The statement was aimed at assessing the role that knowledge about local culture, as a social capital, 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 as well as final consumers for corporations operating in Africa.

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.

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The research findings indicate that most organisations recognise the significance of investing in employee knowledge activities that boost innovations and ultimately 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 innovative ideas from employees.

Within an African context, the results reveal that there are still many executive business managers who do not take intellectual capital as the main source of profitability for their companies. However, the above univariate analysis of the six study statements generally supports the *Ubale* Framework and that managers in Africa recognise intellectual capital as one of the strategic pillars for organisational productivity and sustainability. The above statistical results of the research findings are summarised in Table 1, below. Further, the means (averages) on response ratings on each statement are diagrammatically presented in Figure 2, below.

Table 1: Statistical summary of the univariate analysis on statements covering the intellectual

Statement	Rating scale (%)					
	Strongly Disagree	Disagree	Somehow Agree	Agree	Strongly Agree	TOTAL
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

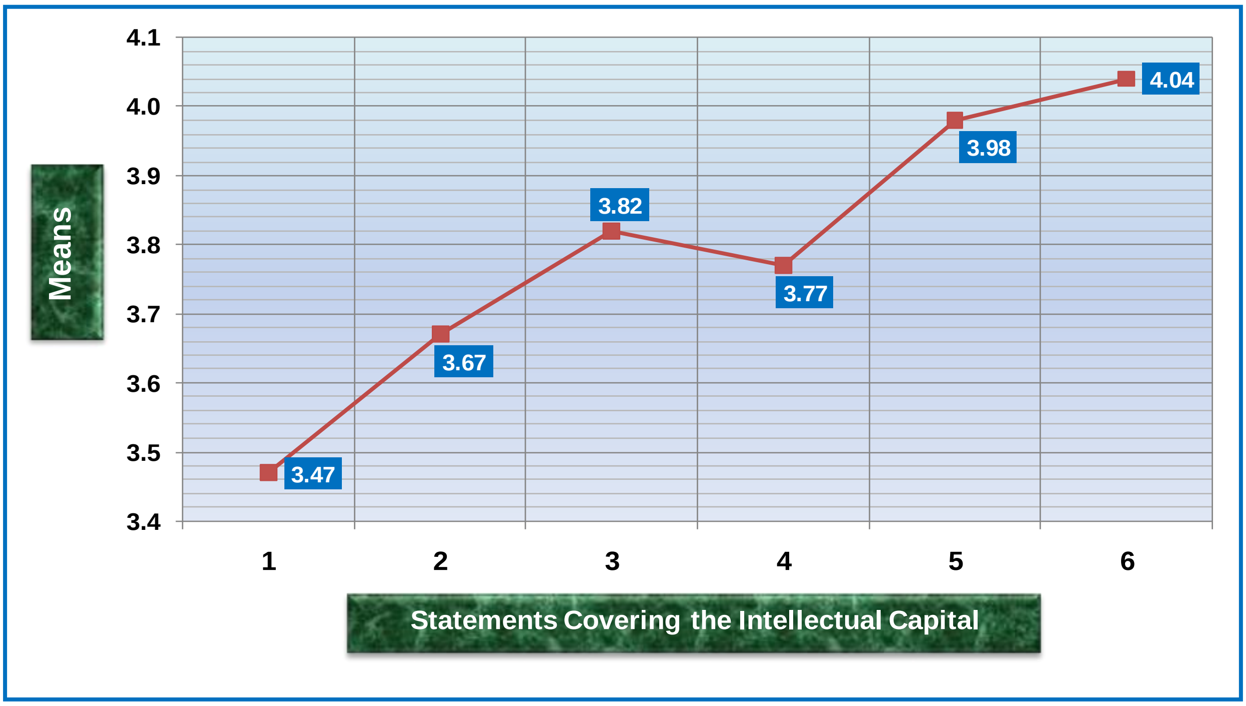

Figure 2: Means of the response ratings on statements covering the intellectual capital. Source: Own Observation

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In summary, the graph in Figure 2 indicates that Statement 1: "Intellectual capital is our main source of profitability" (μ=3.47) registers the lowest mean. As discussed above that only 50.1% agreed with the statement, the lowest rating signifies that still many corporate managers in Africa do not consider intellectual capital to be the primary source of profitability. The above revelation is also indicative that knowledge and recognition of intellectual capital as a main contributor towards corporate performance is still transitional within the African management framework.

Further examination of the graph also shows that Statement 6: "Our organisation invests heavily in supporting employee knowledge" (μ=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 other five study statements, relating to intellectual capital (μ>3.50) - apart from statement 1, as displayed on the above graph in Figure 2.

Correlation Analysis

The assessment of relationships between the six variables on the intellectual capital was aimed at testing the hypothesis (H_1) of the study:

H_1: The relationships between six variables on intellectual are significantly correlated

The intercorrelation between the six variables of the study was determined through computations of scale means that were later subjected to Pearson correlation analysis. This statistical method is adopted from similar studies by Flamholtz & Kannan-Narasimhan (2005)

Under the correlation analysis, a very high correlation coefficients indicate that two variables are strongly related to each other, implying that the variables involved measure almost the same construct (Bryman & Bell, 2007; Field, 2009; Flamholtz, 2005; Saunders *et al.*, 2003). Moderate correlations between different variables would indicate that the variables measure different constructs that are related to one another. Finally, very low correlation coefficients indicate that variables are not much correlated with one another and probably measure unrelated constructs.

The research results of the correlation analysis of intellectual capital variables are shown in Table 2, below.

Table 2: Pearson correlation analysis for the intellectual capital variables

Variables	Means	Variables 1	2	3	4	5
1. Intellectual capital is our main source of profitability	3.47	1				
2. Emphasis on human capital development improves our corporate performance	3.67	0.474**	1			
3. Innovation is promoted through our good knowledge management systems that we pursue	3.82	0.152**	0.425**	1		
4. Knowledge about local culture promotes marketing through customer satisfaction	3.77	0.171**	0.500**	0.463**	1	
5. Knowledge about the local culture improves our corporate performance	3.98	0.172**	0.455**	0.356**	0.756**	1
6. Our organisation invests heavily in supporting employee knowledge	4.04	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 the other variables. Under this analysis, the significant correlations are true at the 0.01 level of significance (** $p<0.01$), as indicated in Table 2, above. Apart from the positive lowest correlation

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of Variables 1 and 6 ($r = 0.072$, $R^2=0.001$, $p<0.01$), 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.

However, Variable 1: "Intellectual capital is our main source of profitability" tends to be the most poorly correlated with the other variables, apart from Variable 2 ($r = 0.474$, $R^2=0.225$, $p<0.01$). These statistics resonate with the study findings that intellectual capital is not regarded as a primary source of profitability by many managers in Africa. This is in disregard to their knowledge and recognition of the other attributes of intellectual capital, such as social capital that come in the form of local and indigenous knowledge that is based on the African Ubuntu philosophy.

Overall, the above analysis indicates that there is significant interconnectedness and interdependence between the six intellectual capital variables. The results also show that the correlation coefficients are moderate. The highest is the correlation between Variables 4 and 5 ($r = 0.756$, $R^2=0.572$, $p<0.01$). Thus, the above correlation analysis supports the study hypothesis (H_1), that the relationships between intellectual capital variables are significantly correlated.

INTELLECTUAL CAPITAL PERFORMANCE INDICATORS

Performance indicators under the intellectual capital discussion focus on activities that are geared towards the creation of organisational wealth through economy, efficiency and effectiveness. Intellectual capital performance indicators are on such activities of innovative business processes and practices and all general activities that hinge on intellectual capital foundation. The following Table 3 summarises such performance indicators which should be used as a guide only; depending on the type, size and complexity of each company in Africa:

Table 3: Performance indicators relating to the intellectual capital

	Activity	Performance Indicators
1	Business processes and practices	• Level of integration of business functions (production & manufacturing, sales & marketing, human resources, purchasing, warehouse, finance, computerised information systems) • Total budget for each function • Total expenses on collaborative commerce (e.g., SCM, CRM, e-business, e-commerce) • Number of new systems on collaborative commerce • Number of new computerises systems • New systems on TQM, JIT, MRPS • Total budget for TQM, JIT, MRPS
2	General intellectual capital	• Total number of creative employees • New innovations • Number of copy rights registered • Number of patents • Number of trademarks • Total value of royalties • Total number of franchisees

To enhance economy, efficiency and effectiveness in order to create wealth for individual companies, the above indicators should be monitored and evaluated accordingly within a stipulated period of time.

CONCLUSION AND RECOMMENDATIONS

The studies and discussion on intellectual capital continue to attract a lot of attention amongst intellectuals and business practitioners. Intellectual capital plays a pivotal role as it tends to integrate all other sources capital that are in the form of financial capital, labour capital, debt capital and natural resources capital. The literature analysis indicates that intellectual capital constitutes the major source of capital that can create productivity and contribute towards profits for corporations; just like the other sources of capital.

However, the study results suggest that some managers in Africa still do not give due recognition of the intellectual capital as a key resource in the creation of organisational value and wealth. Some corporations in

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Africa are not still aware of the importance and necessity of intellectual capital that brings innovation as the most important capital in comparison with the other four sources of capital. This lack of recognition about the significant contribution of intellectual capital towards corporate performance by many organisations in Africa signifies that knowledge and application about intellectual capital is still in the transitional stage in Africa.

The study findings have revealed the significance of socio-cultural settings (social capital) with the African context and how these contribute towards enhancement of intellectual capital. Such social capital attributes revolve around the recognition that knowledge about local culture promotes marketing through customer satisfaction and that it also improves overall corporate performance.

Generally, the research findings will help corporate managers to intensify initiatives to encourage greater understanding and acceptance of the concept of intellectual capital which is the primary source of corporate performance and financial profitability. Intellectual capital can boost corporate competitive advantage position through superior performance. There is a need for more sensitisation and more studies about the significance of intellectual capital towards corporate performance and value creation amongst scholars and corporate managers in Africa.

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