INFLUENCE OF INTELLECTUAL CAPITAL ON ORGANIZATIONS COMPETITIVE ADVANTAGE A SURVEY OF INSURANCE COMPANIES IN MERU COUNTY

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Abstract:

This study sought to analyze the influence of intellectual capital on competitive advantage. The specific objectives were to determine the influence of innovation capital, human capital, on competitive advantage. The main challenge facing the intellectual capital in Kenya, is most organization putting more infancy on the intellectual capital of the management and unwillingness to change even though it can give the organization a better competitive edge in the already flooded market. The study employed descriptive research design and the target population consisted of 115 departmental heads in the insurance companies in Meru. The sample size was determined by calculating 50% of the number of departmental heads in each Insurance Company resulting to a sample size of 55 respondents. Primary data was collected using open ended and close ended questions. Descriptive statistics and multiple linear regression was used to analyze the data which was presented in the form of frequency tables and percentages. The output given from the findings indicate that there is a significant positive relationship between innovation capital, human capital and competitive advantage of insurance companies. It was recommended that: Understanding of customer is a key ingredient of intellectual capital to creating a solid relationship between an enterprise and its customers. Employees of insurance companies should possess technical, interpersonal, and conceptual skills to effectively plan, lead, organize and control the enterprise effectively leading to increased performance and consequently competitive advantage.

Keywords:- *Intellectual Capital, Human Capital, Competitive Advantage*

BACKGROUND

In the past years, intellectual capital and its measurement was a subject of the researches only in developed countries. However, nowadays it is a subject of interest in all over the world (Ahagarzadeh, 2010). In today's business environment with characteristics like globalization, competition and high rate of changes in technology, tangible assets such as capital, land and raw material do not create competitive advantage for organizations and they must set intangible assets as a base for sustainable competitive advantage (Shafiezadeh, 2007. Intellectual capital management is set in the context of a changing model of management and organization structures. It is said that organizations are moving from command and control to delegation, empowerment and coaching. Through this, everyone in the organization has an opportunity to shape the way it works. It is clear that managers who want to grow their organization's intellectual capital must be able to expand intelligence, encourage innovation and exercise integrity (Antonio et al., 2008; Ahangar, 2011).

According to the insurance act of Kenya cap 487, (2013) insurance business is the business of undertaking liability by way of insurance including reinsurance in respect of any loss of life and personal injury and any loss or damage, including liability to pay damage or compensation, contingent upon the happening of a specified event. According to AKI (Association of Kenya Insurers) annual report (2012), there are 46 operating insurance companies as at the end of 2012.

Research Objectives
i. To establish the influence of innovation capital on competitive advantage of insurance companies in Meru County.
ii. To determine the influence of human capital on competitive advantage of insurance companies in Meru County.

1.5 Research Hypotheses
i. H_0: There is no significant relationship between innovation capital and competitive advantage in insurance companies
H_1: There is a significant relationship between innovation capital and competitive advantage in insurance companies

ii. H_0: There is no significant relationship between human capital and competitive advantage in insurance companies
H_1: There is a significant relationship between human capital and competitive advantage

Literature review
Resource Based Theory
The Resource- Based theory argues that competitive advantage lies in the resources an organization can access and exploit, not in its ability to manage the environment (David 2007). The Resource-Based theory maintains that firms possess a bundle of resources in the form of assets, competencies, processes, skills and knowledge; and it is their value, rarity, difficulty to imitate and substitute that provides the organization with a competitive advantage (Dess et al., 2007). These attributes explain organizational differences and performance, since each organization possesses a different bundle of resources from its competitors.

An organization possesses three types of resources: tangible, intangible and organizational capabilities. Tangible resources include financial, physical, technological and organizational assets, which can be easily identified. Intangible assets are more difficult to identify and more difficult for competitors to copy. These are practices that the organization develops over time and lead to improved results, for instance the development of reputation and the emergence of a brand. Finally, organizational capabilities are competences and skills, which the organization combines to transform tangible and intangible resources into outputs, for example outstanding customer service. These resources possess the durability, rarity, inimitability, and non-substitutability attributes so that an organization can be able to sustain a competitive advantage, as long as other firms are unable to duplicate these attributes (David 2007). A key view of resource based theory is that resources exist as bundles and are interdependent (Marr, 2005).

Human Capital Theory
The concept of human capital views workers as key resource managers used to achieve competitive advantage for their companies (Wu, 2008). Human capital theory considers labor as a commodity that can be traded in terms of purchase and sale. This theory focuses on the exploitation of labor by capital. However, unlike the meaning traditionally associated with the term labor, human capital refers to the knowledge, expertise, and skill one accumulates through education and training.

Empirical Review
Innovation capital asserts that structural capital includes the intangible assets that form a part of the structural design of the company, facilitating the flow of knowledge and bringing as consequence an improvement in the effectiveness of the organization and by which cause to provide proper vision and obtain competitive advantage for new product (Alama, 2008). Organizational flexibility, the presence of information centers, the general usage of information technology and organizational learning capacity like organizational routines, systems, cultures and databases creates structural capital. Some of these can be protected legally and may become a legal intellectual wealth (Salleh and Selamat, 2007)

Research Design

The study employed descriptive research design. Descriptive survey design was used since it provides insights into the research problem by describing the variables of interest. It was used for defining, estimating, predicting and examining associative relationships. This helped in providing useful and accurate information to answer the questions based on who, what, when, and how. Descriptive research is concerned with describing the characteristics of particular individuals or group by extracting information from the respondent. The researcher will major on questionnaire.
Descriptive research determines and reports the way things are.

Target Population

The study targeted 23 insurance companies. The respondents consisted of 23 life insurance managers, 23 general insurance managers, 23 pension insurance managers, 23 medical insurance managers and 23 branch managers of the 23 insurance companies in Meru making the total population to be 115 employees

Sample design and size

The sample size was determined by calculating 50% of the number of departmental heads in each Insurance Company. This resulted to a total sample size of 55 respondents. At least 30% of the total population is representative (Borg & Gall, 2003). Simple random sampling was applied to select the respondents. The respondents were issued with questionnaires.

Sample Size

Departmental Heads	No. of Employees	Percent	Sample Size
Life insurance managers	23	50%	11
General Insurance Managers	23	50%	11
Medical Insurance Manager	23	50%	11
Pension Insurance Manager	23	50%	11
Branch Manager	23	50%	11
Total	**115**		**55**

Data Collection Instrument

Primary data was collected using open ended and close ended questionnaire. Secondary data was collected from the journals of bodies regulating insurance.

Data analysis and interpretation

Descriptive statistics was used to analyze the data. Data was edited, coded, classified and summarized into categories. Multiple linear regression was also used to link the relationship between independent variables and dependent variable and to test the hypothesis. This helped to indicate strength and direction of the relationship between the variables. A mathematical model describing the relationship between independent variables and dependent variable was formulated based on the regression coefficient. The multiple linear regression is expressed as $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_k X_k + \varepsilon$)
Y is the utility function of the event expressed as a linear combination of independent variables $X_1, X_2, X_3, X_4 ...X_k$ β_0 is the intercept i.e. $Y = \beta_0$ when $X_{1,2, 3, 4,...... k} = 0$ $\beta_1, \beta_2, \beta_3, \beta_4...\beta_k$ are the regression coefficient the contribution of each independent variables (innovation capital, human capital, structural capital, relation capital) to competitive advantage.
Analyzed data was presented in the form of frequency tables and percentages.

Reliability Statistics

The consistency of measure for this study was done by use of Cronbach's Alpha, a reliability coefficient that indicated how well the items in the data collection instruments were positively correlated to one another. According to Sakaran (2001), testing goodness of data by testing the reliability and validity of the measures is a pre-requisite for data analysis. The study had a 0.971 value which is considered high on a scale of 0.00-1.00 as it tends to 1.00 on attitudinal measurement scales.

Reliability Statistics

Cronbach's Alpha Cronbach's Alpha Based on Standardized Items N of Items

0.969	0.971	15

Response Rate of Respondents

The research distributed a total of 55 questionnaires which was the sample size of the study, the number of those who participated and returned the questionnaires were 46 (84 %) and 9 (16%) did not return the questionnaires. 84% responses were found to be very significant to carry out the study by the researcher.

Respondents' Description
Competitive Advantage
The research sought to find out how important a strong market share was to the insurance companies in Meru County. 66.4% of the respondents were of the view that attaining a strong market share to their organization was very important while 32.6 % of the respondents said that it was important. 76.1% of the respondents agreed that there has been a market share improvement in their organization for the last five years while 23.9% were uncertain. Majority of the respondents rated their organizational market share as being strong (52.2%), 17.4% as being very strong and 30.4% as being average.

Market Share

	Frequency	Percent
Average	14	30.4
Strong	24	52.2
Very strong	8	17.4

Innovation Capital
Innovation capital is the ability to build on previous knowledge and generate new knowledge (Holden and El-Bannany, 2004). The researcher sought to establish measures taken to encourage employees come up with new ideas in the organization. Tseng and Goo (2005) found that innovation capital includes the ability of a company to develop new products, as well as any innovative ideas. The researcher established 67.4% of the respondents stated that their organization gives awards to innovative employees. 100% of the respondents said that they use departmental discussions to come up with new ideas. Majority of the respondents (71.7%) rated the effect of innovation capital on competitive advantage as being high, 15.2% as moderate while 13% rated the effect as being low.

Rating Innovation Capital on Competitive Advantage

	Frequency	Percent
High	33	71.7
Moderate	7	15.2
Low	6	13.0

Human Capital
The research intended to establish the level of education of majority of the employees in the insurance companies in Meru County. Majority of the respondents i.e. 78.3 said that majority of the employees in their organization had a diploma while 21.7% said they had a certificate. In addition to the academic qualification the employees of the insurance companies in Meru County were found to have a certificate of proficiency which is a professional qualification. Majority of the employees were found to have been in the insurance industry for 5 to 10 years with 71.7% of the respondents saying so while 28.3% of the respondents said that their employees had been in the insurance industry for less than 5 years. The researcher found that the level of education as being important with 63% of the respondents stating so while 37% said it was very important. 100% of the respondents said that skills of an employee was very important to their organization. Majority of the respondents (89.1%) rated the effect of human capital on competitive advantage as being high while 10.9% rated the effect as being moderate.

Rating Human Capital on Competitive Advantage

	Frequency	Percent
High	41	89.1
Moderate	5	10.9

Regression analysis
The research conducted a multiple linear regression analysis. This was done to test relationship among independent variables on the influence of intellectual capital on competitive advantage a survey of insurance companies in Meru County. The statistical package for social sciences (SPSS) was applied to compute the measurements of the multiple regressions for the study. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (competitive advantage) that is explained by all the four independent variables (innovation capital, human capital, structural capital and relation capital).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.914[a]	0.835	0.819	0.292

The four independent variables that were studied, explain only 81.9% of intellectual capital on competitive advantage of insurance companies in Meru County as represented by the R^2. This therefore means that other factors not studied in this research contribute 18.1% of the intellectual capital on competitive advantage of insurance companies in Meru County. Therefore, further research should be conducted to investigate the other influences (18.1%) of intellectual capital on competitive advantage of insurance companies in Meru County.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.715	4	4.429	51.839	0.000[a]
	Residual	3.503	41	0.085		
	Total	21.217	45			

The significance value is 0.000 which is less that 0.05 thus the model is statistically significance in predicting how innovation capital, human capital, structural capital and relation capital influences the competitive advantage of insurance companies in Meru County. The F critical at 5% level of significance was 2.32. Since F calculated is greater than the F critical (value = 51.839), this shows that the overall model was significant.

Coefficients

Model	Unstandardized Coefficients			95% Confidence for B Interval	
	B	Std. Error	Sig.	Lower Bound	Upper Bound
1 (Constant)	2.089	0.222	0.000	1.641	2.538
Innovation Capital	0.283	0.100	0.007	0.080	0.486
Human Capital	0.523	0.117	0.000	0.286	0.759
Structural Capital	-0.237	0.161	0.149	-0.562	0.088
Relation Capital	0.386	0.146	0.012	0.091	0.682

The research conducted a multiple regression analysis so as to explain the intellectual capitals influence on competitive advantage. And the three variables as per the SPSS generated, the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) which results to: $Y = 0.283X_1 + 0.523X_2 - 0.237X_3 + 0.386X_4 + (2.089)$. Where Y is the dependent variable (competitive advantage), X1 is the innovation capital variable, X2 is human capital variable X3 is the structural capital variable and X4 is relation capital variable. This infers that human capital influence contribute more to competitive advantage of insurance companies followed by relation capital. At 5% level of significance and 95% level of confidence, human capital had a 0.523 level of significance; relation capital showed a 0.386 level of significant, innovation capital showed a 0.283 level of significant and structural capital showed a 0.237 level of significant hence the most significant influence is human capital.

Hypothesis Testing
Critical values of the normal distribution can either be positive or negative. This depends on the alternative hypothesis. If the alternative hypothesis states that the expected mean is greater than critical value, the region of rejection will have a positive sign. Since the relevant critical value or region is in the upper tail of the normal distribution, the null hypothesis is only rejected if critical value is greater than the p-value of 0.05 ($p \geq 0.05$)

H_0: There is no significant relationship between innovation capital and competitive advantage of insurance companies in Meru County. The Null hypothesis was rejected because $0.05 \leq p$ ($0.050 \geq 0.007$), therefore the study rejects the null

hypothesis in favor of alternative hypothesis. The study concludes that there is a significant relationship between innovation capital and competitive advantage of insurance companies in Meru County. This is in agreement with Chen et al., (2004) in their study of measuring intellectual capital who said that in order for a company to retain its competitive advantage, innovation should play a significant role for the company.

H_0: There is no significant relationship between human capital and competitive advantage of insurance companies in Meru County. The Null hypothesis was rejected because $0.05 \geq P$ $(0.05 \geq 0.000)$, therefore the study reject null hypothesis in favor of an alternative hypothesis. The study concludes that there is a significant relationship between human capital and competitive advantage of insurance companies in Meru County.

Summary, conclusion and recommendations
Innovation Capital
The research sought to establish measures taken to encourage employees come up with new ideas in the organization. Tseng and Goo (2005) found that innovation capital includes the ability of a company to develop new products, as well as any innovative ideas. The researcher established 67.4% of the respondents stated that their organization gives awards to innovative employees. 100% of the respondents said that they use departmental discussions to come up with new ideas. Majority of the respondents (71.7%) rated the effect of innovation capital on competitive advantage as being high, 15.2% as moderate while 13% rated the effect as being low. After testing the hypothesis the study concluded that there is a significant relationship between innovation capital and competitive advantage of insurance companies in Meru County.

Human Capital
The research intended to establish the level of education of majority of the employees in the insurance companies in Meru County. Majority of the respondents i.e. 78.3 said that majority of the employees in their organization had a diploma while 21.7% said they had a certificate. In addition to the academic qualification the employees of the insurance companies in Meru County were found to have a professional qualification. Majority of the employees were found to have been in the insurance industry for 5 to 10 years with 71.7% of the respondents saying so while 28.3% of the respondents said that their employees had been in the insurance industry for less than 5 years. The researcher found that the level of education as being important with 63% of the respondents stating so while 37% said it was very important. 100% of the respondents said that skills of an employee was very important to their organization. Majority of the respondents (89.1%) rated the effect of human capital on competitive advantage as being high while 10.9% rated the effect as being moderate. After testing the hypothesis the study concluded that there is a significant relationship between human capital and competitive advantage of insurance companies in Meru County.

Conclusion
The output given from the findings indicate that there is a significant positive relationship between the components of intellectual capital namely innovation capital, human capital and competitive advantage of insurance companies. The findings also indicated that human capital is a major contributor towards the competitive advantage of insurance companies. This indicated that intellectual capital can be used to mobilize, assemble, and manage all intangible resources in order to enhance competitive advantage of insurance companies in Meru County.

Recommedations
Understanding of customer is a key ingredient of intellectual capital to creating a solid relationship between an enterprise and its customers. Organization's should therefore seek to understand their clients' background, discover their priorities, know their tastes and likes to ensure they serve them well thus creating a long term business relationship with them, culminating in the insurance companies' competitive advantage.

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