INFLUENCE OF COMPETITIVE INTELLIGENCE ON THE RELATIONSHIP BETWEEN STRATEGY FORMULATION AND PERFORMANCE OF COMPANIES LISTED ON NAIROBI SECURITIES EXCHANGE IN KENYA

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ABSTRACT

The objective of this study is to determine the influence competitive intelligence as a moderating factor in the relationship between strategy formulation and performance of firms listed on Nairobi Securities exchange. The study adopted census method of research design. This study employed both primary and secondary data collection techniques. In addition, questionnaires as tools for information gathering was utilized to gather information. The hypothesis were be tested using Pearson correlation, F-test, t-test and Multiple Regression Analysis with the aid of Statistical Package for Social Science version 22.0. Findings were presented through descriptive statistics by use of mean, median, standard deviation and analysis of variance. Inferential statistics was used to test statistical hypothesis. Regression analysis was applied to estimate the relationship among variables. The study found that there is positive relationship between strategic formulation and firm performance. Arguably, it is important for firms to effectively use their resources and technology to deliver innovative products and services to their customers as this will enable them to achieve and sustain competitive advantage. The study concluded that strategic formulation has effect on company performance.

Key Words: *Strategy Formulation, Company Performance, Competitive Intelligence, NSE*

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INTRODUCTION

Organizations are constantly making efforts to predict how the future may influence their operations and performance. The concept of strategic management process has been embraced worldwide both in private and public sectors as a tool to improve and fast track performance (Arasa & K`obonyo, 2012). Strategic management is a broader term than strategy and is a process which includes environmental analysis of the organisation by the management for strategy formulation. Strategic management is a collection of activities of strategy analysis, strategy creation, implementation and monitoring (Athapathithu, 2016). Strategic management comprises of both strategic planning and management. Strategic management focuses on the issues of creating and sustaining competitive advantage. It is a process and path that guides the actions of the organisation (Fred, 2011). Therefore, strategic management is a comprehensive ongoing process involving determination of mission and objectives of the organisation within internal and external environment. Pearce and Robinson (2011) define strategic management as set of decisions and actions that result in the formulation and implementation of plans designed to achieve a company's objective

Strategic management is the process of which the starting point is the strategic planning. According to Owalabi (2012), strategic planning is part of strategic management. Therefore, strategic planning is an important aspect of strategic management. Strategic planning is about formulating strategies that enhance the competitiveness of each business unit and generate decisions on deployment of resources for sustainable long-term future in a changing environment.

Strategic planning was plausible invention and was received well by business community but subsequent results with strategic planning led to mixed results. This led to development of strategic management process.

Literature reckons that organizations which have embraced strategic planning record better performance as compared to those that have not (Arasa & K`obonyo, 2012). Many of the studies on the relationship between strategic management process and firm performance date back in 1970s and early 1990s in developed economies. Studies by Kotter in early 1990s contend that the primary goal of strategic management process is to guide the organization in setting out its strategic intent and priorities and refocus itself towards the same. Zandi et al. (2013) describe strategic planning as a process of setting objectives, analysing the situation, developing ideas to deal with the emerging situation in addition to achieving and implementing those objectives. Strategic management process is about where the organization would like to be in the future (Raczynki, 2008). This involves putting resources, assets and personnel together. In determining the future of the organization, external forces are likely to and do influence the vision. The author further argues that these forces include actions of the competitors, technical breakthroughs and threats from changes in the business environment. According to Shah (2013) the purpose of strategic planning is to enable a business gain competitive edge over its competitors. Strategic management scholars have supported strategic management process in relation to performance (Mitchelmore, 2013; Shah, 2013).

Economic global trends accelerate technological changes and information explosion are some of the factors making organisations remain competitive in the world (Mojarad, 2014). David (2012) contends that when companies are able to obtain information about competing firms, they are to implement effective and successful strategies. Gatsoris (2012) defined competitive intelligence a process of gathering information about the competitors and competitive environment and using the same for decision making and strategic management process. The purpose of competitive intelligence is to contribute to the level of

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competitiveness while reducing competitive advantage of the competitor (Zangereh, 2014).

The history of Nairobi Securities Exchange dates back to 1920s when Kenya was still a British Colony. It was informal market place for local stocks and shares. The Nairobi Securities Exchange was officially recognized by London Stock Exchange in 1954 as on overseas stock exchange. The NSE has been modernized and adapted automated trading system. There are currently 66 listed businesses and companies in the Nairobi Securities Exchange. Nairobi Securities Exchange is one of the most vital components of the liberalized economy as it provides opportunity for companies to raise capital as well as providing potential investors with opportunities to invest and own companies. In the early 1980`s Kenyan Government realized the need to have efficient and stable financial system to spear head economic development.

World Bank records show that between 1990 and 2005 world stock market capitalization grew from $9 trillion to $43 trillion. Similarly, the number of companies listed globally doubled reaching 50,000 companies (Maxfield, 2012). Studies in Central and Eastern Europe (Kominek, 2013) concluded that stock market development and economic growth are highly interdependent. Data from the World Bank indicates a growth of market capitalization of US $ 4.7 billion in 2005. This was mainly in low- and middle-income countries. Stock markets are undergoing changes as a result of many forces like technology and globalization. This means that the stock exchanges have to adapt to serving markets beyond borders. Africa has not been spared the effects of globalization and rapid technological integration including diffusion of technology and increased cross-border transactions. Stock markets form the centre of the global financial system. Businesses require stock markets to raise capital for expansion and growth of businesses.

Statement of the Problem

Recent developments in the business environment have imposed and forced adaptation and change to ensure continuity in a highly competitive environment. In 2012, 10 companies issued profit warning (Business Daily, December 12, 2012). In 2012 and 2013, 23 companies issued profit warning citing tough business environment and global challenges. Similar warnings were experienced in 2015 with 18 companies signalling decline in profits (Juma, 2014). In 2015 NSE returns fell by 20.97 percent. In the same year only 13 out of 65 companies listed in the NSE posted gains. Statistics by NSE show decline in capitalization by Ksh 250 billion in 2014 to Ksh 2.05 trillion in 2015 (Mwita,2016). Similarly, due to competition from cheap imports battery maker Eveready listed in 2006, closed down as a part of strategic plan meant to change its business model (Daily Nation 2014: 4). Aosa (2011) investigated strategic management practices within private manufacturing companies in Kenya. Out of 73 companies only one third had written mission statements.

There is evidence to show that a small proportion of companies had strategic plans and even those with strategic plans were foreign based. Most of the studies concentrated on the relationship between strategic planning and firm performance but limited on strategic management process.

Majority of listed companies frequently engage in strategic management and spend time and resources, yet performance cannot be tied on the resources spent in the exercise (Taiwoand Idunnu, 2010). The same argument was advanced by Chavunduka (2013), Chimuhu (2015). Today environment shaking changes are taking place affecting how businesses are being conducted. Globalisation, internationalisation of markets and corporations has totally changed the way of modern organisations. With rapid globalization of more industries and increased competition strategic management is becoming increasingly important (Guo and Wang, 2014). As organisations grow and diversify environmental turbulence increases and strategic issues continue to emerge challenging the way organisations formulate and implement strategies and this therefore forces management to set future directions and strategies (Perrot,2011).

Although studies by Aduda, Omoro and Okiro (2015) investigated the effect corporate governance and capital structure on performance of firms listed on East African Community Securities Exchange, they failed to address the value of strategic management process and performance of listed companies. Strategic management process in a turbulent environment is a major concern to practising managers in general and in particular managers of listed companies on Nairobi Security Exchange. Globalisation, changes in customer needs, competition as well as legal and political changes (De Marchi Grandinetti, 2014). This study sought to examine the influence of competitive intelligence on the relationship between strategy formulation and performance of listed companies on Nairobi Securities Exchange in Kenya.

Objectives of the Study

The objective was to determine the influence of competitive intelligence on the relationship between strategy formulation and performance of companies listed on Nairobi Securities Exchange in Kenya. The specific objectives were:-

- To find out the relationship between strategy formulation and performance of companies listed on Nairobi Securities Exchange in Kenya.
- To establish the influence of competitive intelligence on the relationship between Strategy formulation and performance of companies listed on the Nairobi Securities Exchange in Kenya.

Research Hypotheses

$H0_1$: There is no significant relationship between strategy formulation and performance of companies listed on the Nairobi Securities in Kenya.

$H0_2$: Competitive intelligence has no significant influence on the relationship strategy formulation and performance of companies listed on the Nairobi Securities Exchange in Kenya.

LITERATURE REVIEW

Theoretical Framework

Michael Porter's Five Forces Model

This is a model used to explore the environment in which a product or an organization operates to generate competitive advantage. The model published in 1980 has become an important method for analysing organizations' structure in a competitive environment. Michael Porter's five forces model is premised on the fact that an organization should maximize the opportunities understand the threats. Porter's Five Forces model analysis looks at five key areas mainly; the threat of entry, the power of buyers, the power of suppliers, the threat of substitutes and competitive rivalry (Mathooko & Ogutu, 2013). In his works Porter took perspective of scanning the external environment to gather intelligence on competitors. He further developed the Five Forces that shape competitions in the industry. The framework is critical to managers to analyse their operating environment. Porter's model is essential to determine actions by competitors in response to the firm's strategy (SCIP, 2010).

Organisations occasionally use Porter's five forces framework in making qualitative evaluation of a firm's strategic position (Tang, 2014). Porter's generic strategies describe how a company pursues competitive advantage across its chosen market scope (Mathooko and Ogutu, 2011). Further, he suggests that the essence of strategy is choosing to implement mission and vision differently from its rivals. It's necessary to analyse environment in which the organisation is active in to be successful in formulation of strategies (Achor, 2011). By developing competitive intelligence organisations combine external facts regarding their competitors with internal facts (Johnson, 2014). According to Porter (2011) organisations recognise strengths in order to overcome threats from competitors and capture opportunities as well as weaknesses. Competitive intelligence makes use of SWOT matrix more useful and the strategic options more reliable and feasible to achieve competitive strategy. The

model forms the basis of importance of competitive intelligence and firm's strategic management and this underpins objective (v) of the study. Michael Porter's proposed five forces model of analysing industries is anchored on analysing competitor behaviour and internal processes of the organisation.

Conceptual Framework

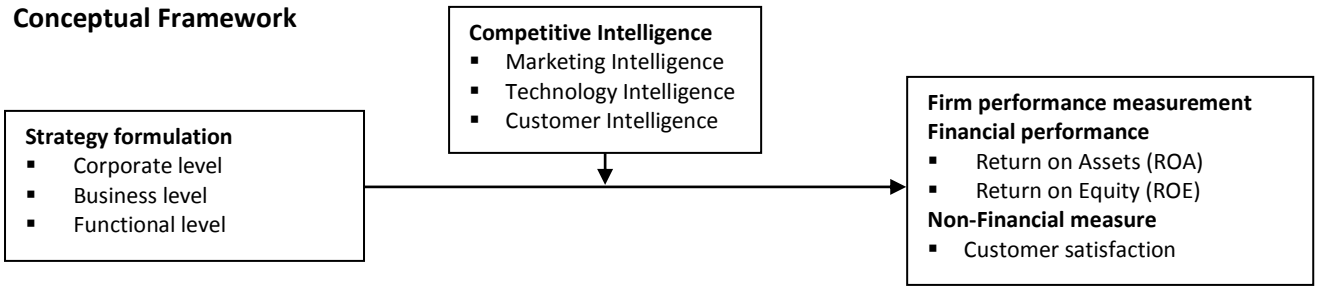

Figure 1: Conceptual Framework
Source: Author (2019)

Strategy Formulation

Business environment both locally and internationally has become complex and uncertain (Francis, 2011). In this regard business ability to survive depends on its ability to anticipate change and take appropriate strategy before crafting strategy (Zhang, 2011). Karami and Chen (2010) argue that the need to identify and react to external changes in the business environment lies on the environmental scanning. Strategy formulation is the overall master plan of the organisation and states how the organisation will achieve its objectives so that it can realise the mission. It maximises the competitive advantage and minimizes competitive disadvantage (Wheelen and Hunger, 2010). This strategy is divided into three levels, corporate, business and functional strategies. Corporate strategy is the overall direction of the organisation and management of its business. Business strategy is the competitive and cooperative strategies of the organisation.

Functional strategy concerns maximizing resource productivity.Ayand and Oyinlola (2014) contend that organizations are continuously facing challenges of exercising choice among alternatives. Strategy formulation is part of the decision making process. Elbanna (2010) postulate two models; rational planning and logical incrementalism.

Competitive Intelligence

Information about competitors is critical for decision making of every company (Saban, 2015). The challenge to many organizations is how to collect quality and useful information. High quality information about competition that companies are likely to have depends on intelligent system (Dejan, 2015). Edin (2014) argue that CI provides critical information support to both tactical and strategic decision making and is becoming irreplaceable tool in the modern competitive struggle. CI enables managers in organizations of all sizes to take decisions on marketing research and development, investments and long-term business strategies. The basic task of modern strategic management is designing and implementation of winning strategies (Saban, 2015). Porter argues that analysis of competition is a major challenge in strategy definition. Without information, companies find it difficult to position themselves within the market in a manner different from the competitors is the foundation for future strategies (Porter as cited by Kalac, 2015). Competitive intelligence is most often used in strategic management process by operating managers within strategic business units (SBUs).

Firm Performance

Performance measurement refers to the process of measuring the firm's efficiency and effectiveness (Maltase, 2014). Firm's value can be described as the benefits streaming from the firm's shares by

shareholders (Rwouf, 2011). The company's performance is viewed from the financial statement reported by the company. Therefore, a good performing company reinforces management and quality of disclosure (Helly, 2011). The firm's success is explained by the performance over a certain period of time. Firm performance is therefore a subset of organizational effectiveness that covers operational and financial outcomes. Mondi and Matura (2013) argue that performance is the ability of the organisation to prudently manage resources in ways to develop competitive advantage.

Adhikira (2010) contend that performance management significantly contributes to individual and organizational learning. This helps to raise organizational efficiency and promote growth.A common universal performance management system has not yet been agreed upon more so for both local and foreign firms (Nacum, 2010). Figuiredo (2011) explores performance across variety of subsidiaries and concluded that firms which had developed linkages with specified internal and external counterparts based on continually increased frequency of linkages had shown improved quality and improved performance.

Empirical Studies

Strategy Formulation and firm Performance

Jeevanda (2014) studied strategy formulation and implementation in Zimbabwean food manufacturing industry. The sample size of the study was chief executive officers in Harare. Zimbabwe. They used self-administered questionnaires. The results revealed that strategy formulation and implementation if fully applied in food manufacturing enhances efficiency, profitability and competitive advantage in a dynamic environment. It recommended a conceptual model for strategy formulation and implementation for competitive advantage. This involves gathering information and utilizing the same to manage business. Lyndon and Simkin (2012) contend that companies' leadership are making efforts to understand changing market dynamics as revenue streams are continuously being threatened. Adoeye and Elegunde (2012) in studying food and beverage industry in Nigeria found that external business environment impacted organizational performance. Boyne, Law and Walker (2010) tested the independent effects of strategy formulation and strategy content organization performance. The study was conducted on 47 service departments in Welsh local government.

The results of the research imply that strategic management in public organization has clear direction for service performance. The results show that strategy formulation and lack of clear strategy processes are harmful for organizational performance. The evidence in this study leads to conclude that strategic management is one of the critical areas of public management research.

METHODOLOGY

This study adopted a cross-sectional descriptive survey in collecting data. A cross- sectional survey aims at determining the frequency or levels of a particular attributes in a defined population at a particular point in time. The target population for this study was clearly defined and identified as 65 companies and businesses listed on Nairobi Security Exchange. The study utilized both open and closed ended questionnaires as well as secondary sources of information for data collection. Data for this study was collected from both primary and secondary sources. Both descriptive and inferential statistics were employed to analyse data and test research hypothesis. Data analysis on the role of competitive intelligence on the relationship between strategy formulation and firm performance involved descriptive statistics including measures of central tendency, the mean, median and mode of likert-scale variables in the questionnaire. The data was analysed by use of Statistical Package for Social Science (SPPS) version 20. To understand the data obtained descriptive statistics was employed.

FINDINGS

Descriptive Analysis for Strategy Formulation

Strategic formulation was the main aspect of this study where the researcher investigated the level of agreement of respondents to specific questions on strategy formulation.

Diagnostic Test

Normal Q-Q Plot of Strategy Formulation (SF)

For Strategy Formulation, from the Q-Q plots there no much were departure from normality as could be seen from the approximation to the line of fit. This showed that the data was near normal distribution and could therefore be used in a regression analysis.

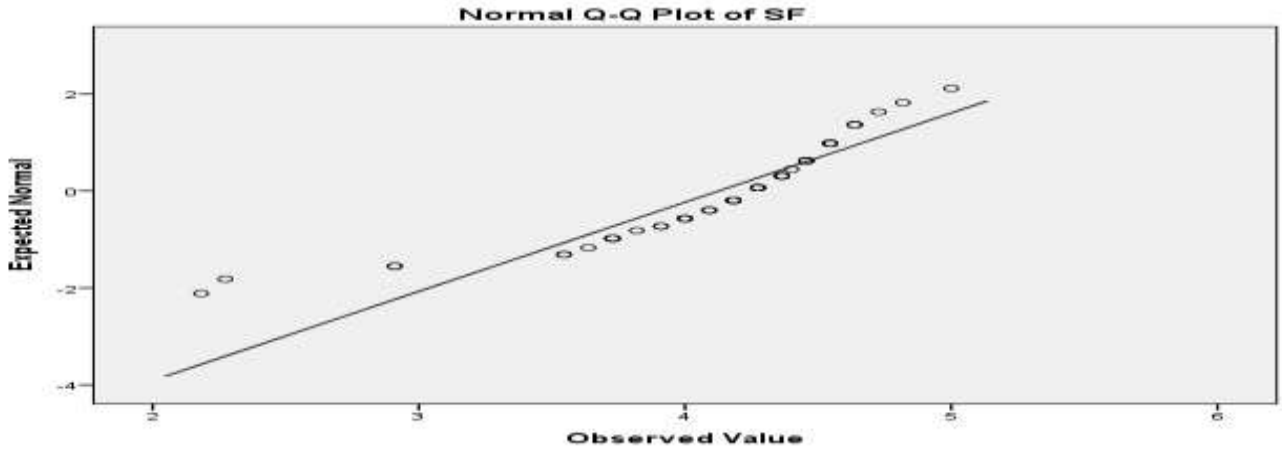

Figure 2: Normal Q-Q Plot of Strategy Formulation (SF)

Normal Q-Q Plot of Competitive Intelligence (CI)

For Competitive Intelligence, from the Q-Q plots depicted the departure from normality was not evidently much as could be seen from the approximation to the line of fit. This meant that the data was near normal distribution and could therefore be used in a regression analysis.

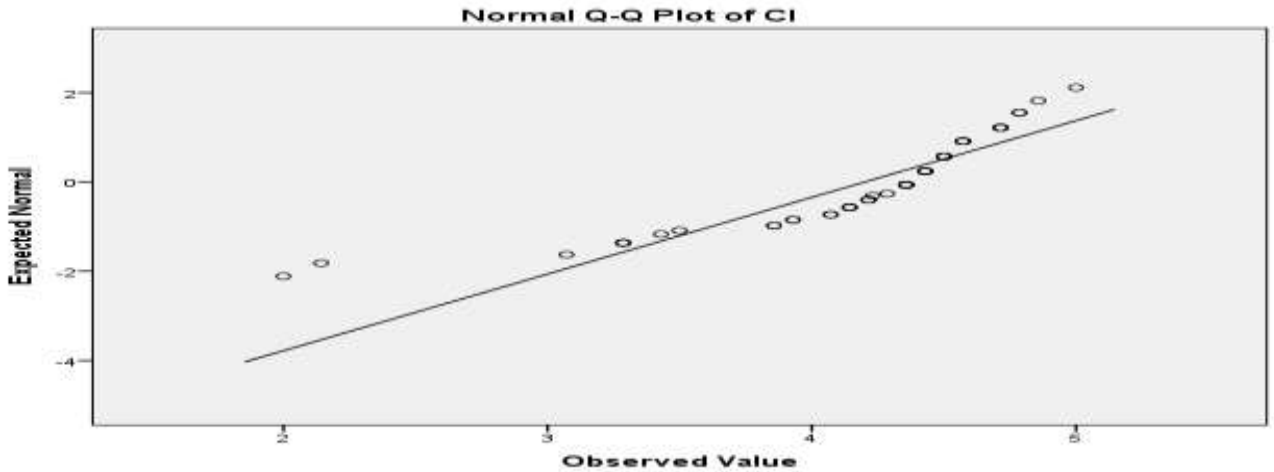

Figure 3: Normal Q-Q Plot of Competitive Intelligence (CI)

Normal Q-Q Plot of Return on Equity (ROE)

For Return on Equity, the Q-Q plots showed no a pronounced departure from normality and that was evident from the approximation to the line of fit. This showed that the data was near normal distribution and could therefore be used in a regression analysis.

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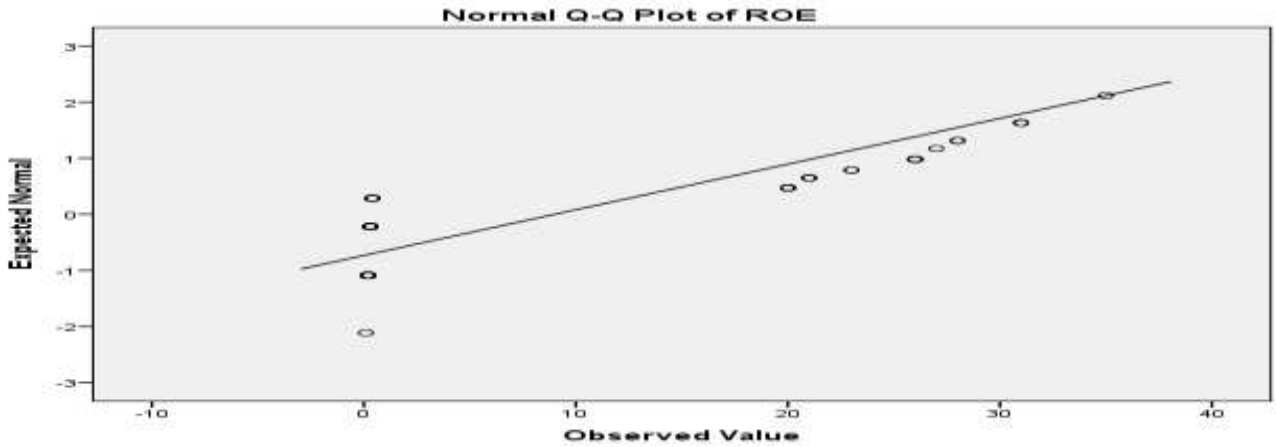

Figure 4: Normal Q-Q Plot of Return on Equity (ROE)

Normal Q-Q Plot of Return on Asset (ROA)

For Return on Asset, from the Q-Q plots shown there was no much departure from normality as seen from the approximation to the line of fit. Therefore, the data exhibited a near normal distribution and could therefore be used in a regression analysis.

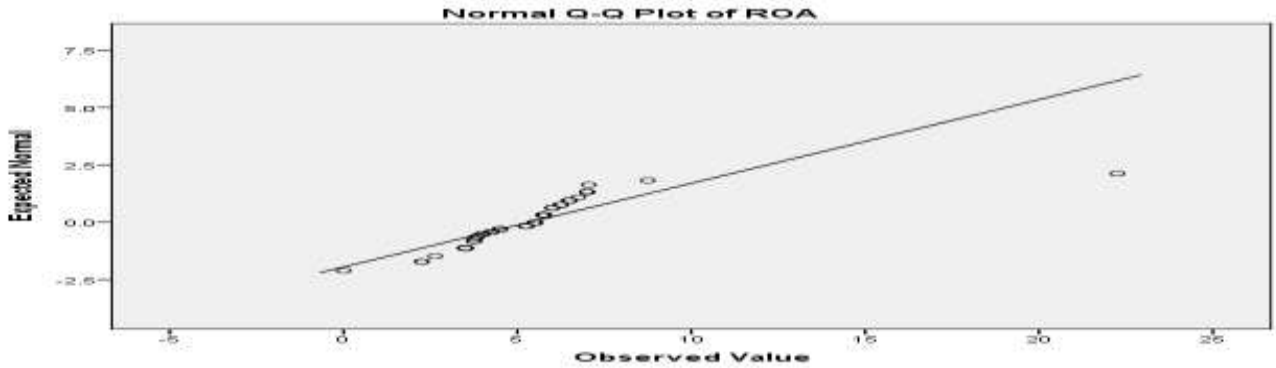

Figure 5: Normal Q-Q Plot of Return on Asset (ROA)

Figure 6: Normal Q-Q Plot of Customer Satisfaction (CS)

Test of Outliers in Strategy Formulation

In statistics, an outlier is an observation point that is distant from other observations. An outlier may be due to variability in the measurement or it may indicate experimental error; the latter are sometimes excluded from the data set. An outlier can cause serious problems in statistical analyses. It has been pointed out that most of the statistical techniques are sensitive to outliers. SPSS consider points as outliers if they extend more than 1.5 box-lengths from the box's edge. The extreme points (shown by an asterisk *)

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are the cases which extend beyond 3 box-lengths from the box's edge (Pallant, 2005).

For strategy formulation, the results demonstrated that there were no extreme points in the cases, with the observed extreme values falling within the 5-point Likert scale (1-5) used. This was further confirmed by the results of the descriptive statistics. Furthermore, there was no significant difference between the mean and the 5% trimmed mean for each of the strategy formulation. Skewness and Kurtosis are also within the range of -1.96, +1.96 hence the data is normal.

Table 1: Descriptive statistics for strategy formulation

			Statistic	Std. Error
SF	Mean		4.1266	.07206
	95% Confidence Interval for Mean	Lower Bound	3.9823	
		Upper Bound	4.2710	
	5% Trimmed Mean		4.1804	
	Median		4.2727	
	Variance		.296	
	Std. Deviation		.54407	
	Minimum		2.18	
	Maximum		5.00	
	Range		2.82	
	Interquartile Range		.50	
	Skewness		-1.815	.316
	Kurtosis		1.168	.623

Table 2: Extreme Value for Strategy formulation

		Case Number	Value
SF	Highest 1	32	5.00
	2	31	4.82
	3	41	4.73
	4	3	4.64
	5	18	4.64[c]
	Lowest 1	26	2.18
	2	28	2.27
	3	54	2.91
	4	13	2.91
	5	25	3.55[d]

The absence of outliers in the data set was further illustrated by the results of the box plots, as shown in the figure 7.

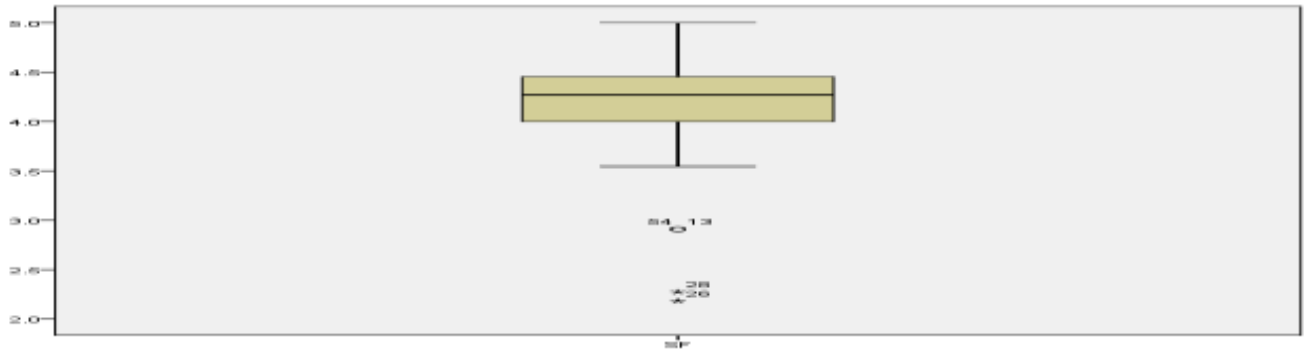

Figure 7: Box plot for strategy formulation

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Competitive Intelligence

For competitive intelligence, the results demonstrated that there were no extreme points in the cases, with the observed extreme values falling within the 5-point Likert scale (1-5) used. This was further confirmed by the results of the descriptive statistics. Furthermore, there was no significant difference between the mean and the 5% trimmed mean for each of the competitive intelligence.

Table 3: Descriptive statistics for Competitive Intelligence

		Statistic	Std. Error
CI	Mean	4.2008	.07710
	95% Confidence Interval for Mean — Lower Bound	4.0463	
	95% Confidence Interval for Mean — Upper Bound	4.3552	
	5% Trimmed Mean	4.2645	
	Median	4.3571	
	Variance	.339	
	Std. Deviation	.58209	
	Minimum	2.00	
	Maximum	5.00	
	Range	3.00	
	Interquartile Range	.39	
	Skewness	-1.045	.316
	Kurtosis	1.945	.623

Extreme values further supported by the findings

Table 4: Extreme values for Competitive Intelligence

		Case Number	Value
CI	Highest 1	11	5.00
	2	23	4.86
	3	39	4.79
	4	41	4.79
	5	3	4.71[e]
	Lowest 1	26	2.00
	2	28	2.14
	3	9	3.07
	4	56	3.29
	5	27	3.29

The absence of outliers in the data set was illustrated by the results of the box plots, as shown in the figure 8.

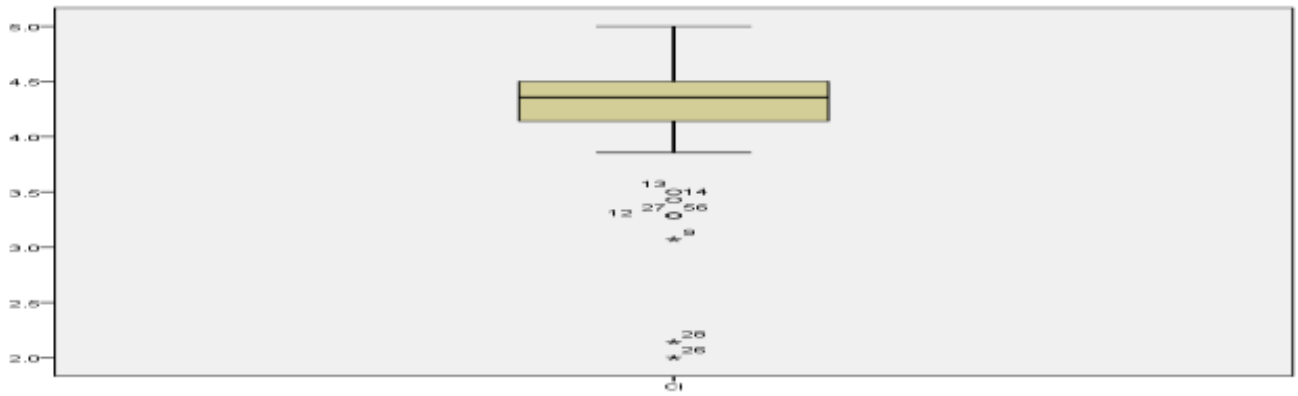

Figure 8: Box plot for Competitive Intelligence

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Inferential Analysis

Single Equation with one IV on DV with a Moderator

In order to establish the relationship between the independent variables and independent variable with the effect of moderator, simple linear regression was carried out using the model:

Y= β0+βiXi+e (i=1, 2 3, 4);

Y= β0 + βiXi + βmM+e;

Y= β0 + βiXi + βmM+ βmiXiM+e

Table 5: Model Summary of Strategy Formulation and Return on Equity with moderator

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.596[a]	.355	.305	0.76532	.989

Predictors: (Constant), SF_Moderator, Strategy Formulation); Competitive Intelligence

Table 6: ANOVA of Strategy Formulation and Return on Equity with moderator

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.920	3	6.307	7.153	.001[b]
	Residual	34.387	39	.882		
	Total	53.307	42			

Table 7: Coefficient of Strategy Formulation and Return on Equity with moderator

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.588	.160		22.474	.000
	Strategy Formulation)	-.816	.228	-.725	-3.581	.001
	Competitive Intelligence	-.191	.229	-.170	-.832	.410
	SF_Moderator	-.205	.102	-.422	-2.004	.052

Table 8: Model Summary of Strategy Formulation and Return on Asset with Moderator

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.609	.579	.59307	1.635

Predictors: (Constant), SF_Moderator, and Strategic Formulation), Competitive Intelligence; Dependent Variable: Return on Asset

Table 9: ANOVA of Strategic Formulation and Return on Asset with moderator

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.399	3	7.133	20.279	.000[b]
	Residual	13.718	39	.352		
	Total	35.116	42			

Table 10: Coefficient of Strategy Formulation and Return on Asset with moderator

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.420	.101		43.834	.000
	Strategic Formulation)	-.255	.144	-.279	-1.773	.084
	Competitive Intelligence	.229	.145	.250	1.578	.123
	SF_Moderator	-.305	.065	-.774	-4.726	.000

Table 11: Model Summary of Strategy Formulation and Customer satisfaction with moderator

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.752[a]	.566	.533	.61201	1.578

Predictors: (Constant), SF_Moderator, and Strategic Formulation), Competitive Intelligence; Dependent Variable: Customer Satisfaction

Table 12: ANOVA of Strategy Formulation and Customer satisfaction with moderator

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.066	3	6.355	16.968	.000
	Residual	14.608	39	.375		
	Total	33.674	42			

Table 13: Coefficient of Strategy Formulation and Customer satisfaction with moderator

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.231	.104		40.659	.000
	Strategic Formulation)	.123	.149	.137	.824	.415
	Competitive Intelligence	.586	.150	.654	3.919	.000
	SF_Moderator	.002	.067	.006	.037	.970

DISCUSSION

Tables above showed the model summary results of moderating effect of competitive intelligence on the relationship between strategy formulation on return on equity, strategic formulation on return on assets and strategy formulation on customer satisfaction. Value of R-square was given as 0.355 and adjusted R-square as 0.305. This indicated that 35.5% of the variable return on equity was explained by the independent variables. It therefore suggested that the model was quite significant in explaining the variances. The significance result at $p < 0.05$ provided support for the relationship

The value of R-squared was given as 0.609 and adjusted R-squared as 0.579 showing that 60.9% of the variable return on assets is explained by independent variables suggesting that the model is quite significant in explaining the variance at the significance result of $p<0.05$ supporting the relationship between the variables.

In the table above R-squared was given as 0.566 and adjusted R-squared was given at 0.533. This showed that 56.6% of the customer satisfaction was explained by the independent variables indicating that the model was significant. Adjusted R^2 is an adjustment of the R-squared that penalized the addition of extraneous predictors to the model. Adjusted R^2 gives an idea of how well the proposed model generalizes and ideally, we would like its value to be the same, or very close to, the value of R^2**.** The adjusted R^2 was a standard, arbitrary downward adjustment to determine for the possibility that, with many independents, some of the variance may be due to chance. The more the number of independents, the more the adjustment. Here the adjusted R square was 0.305. In this case, in table above, the difference for the final model was 0.05 (0.355- 0.305) or 5%. This reduction meant that if the model were derived from the population rather than a sample, it would account for approximately 5% less variance in the outcome. In table above the difference for the final model was 0.03 (0.609-0.579) or 3%. This shrinkage meant that if the model were derived from the population rather than the sample it would account approximately 3% less variance in the outcome. In

table above the difference for the final model was 0.033 (0.566-0.533) or 3.3%. This also meant that approximately 3.3% less variance in the outcome on the third model.

Durbin-Watson statistic tests for serial correlation of error terms for adjacent cases. Durbin-Watson statistic informed about whether the assumption of independent errors was tenable. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated. A value greater than 2 indicates a negative correlation between adjacent residuals whereas a value below 2 indicates a positive correlation. As a conservative rule of thumb, Field (2000) suggests that the value less than 1 and greater than 3 are definitely cause for concern. The Durbin-Watson value in table above was 0.989 which is a cause of concern. However, it has positive correlation between residuals. In table the table, the Durbin-Watson 1.635, which is approaching 2, hence, it is good and positively correlated with independent variables. In table above, the Durbin-Watson is 0.852, which is less than one, indicating positive correlation.

Table above, 4.30 and 4.33 reports the analysis of the variance (ANOVA), which assessesed the overall significance of the model. The table showed the value of the sum of squares, degree of freedom, mean square value, F value and its associated significance value. The dependent value is performance improvement.

Looking at the breakdown of the variance in the outcome variable, there are three categories to be examined: Regression, Residual, and Total.

The total variance was partitioned into variance which was explained by the independent variables (regression) and the variance which is not explained by the independent variables (Residual). Sum of Squares is associated with the three sources of variance: Regression, Residual, and Total. First is df, the degree of freedom associated with the sources of variance and F-statistic, being the mean square (regression) divided by the mean square (residual). The p-value is compared to some alpha level in testing the null hypothesis that all of the model coefficients are 0.

ANOVA was conducted to compare the effect of strategic formulation, competitive intelligence and moderator effect on Return on Equity, Return on assets and Customer satisfaction level. The table above showed effect on return on equity and indicated that there was significant effect of independent variables and moderator on return on equity at $p< 0.05(.001)$ level [$F (3, 42) = 7.153$, $p=0.001$]. The table above compared the effect of strategy formulation, competitive intelligence and moderator effect on Return on Assets. It also indicated significant effect of independent variable on return on assets at $p <0.05$ (0.000) level [$F (3, 42) = 20. 279$, $p= 0.000$. Lastly, the table gave statistical significant model at $p <0.05$ level [$F (3, 42) = 16.968$, $p=0.000$ showing that the model is fit.

The ANOVA table tests whether the model was significantly better at predicting the outcome than using the mean as a "best guess". Specifically, the F-ratio represents the ratio of the improvement in prediction that results from fitting the model (labelled 'Regression' in the table), relative to the inaccuracy that still exists in the model (labelled 'Residual' in the table). If the improvement due to fitting the regression model was much greater than the inaccuracy within the model, then the value of F will be greater than 1 and SPSS calculated the exact probability of obtaining the value of F by chance. For the initial model the F-ratio table was 7.153, the F-ratio was 20.279 and 16.968, which was very unlikely to have happened by chance ($p<0.000$). This result showed that the final model significantly improves our ability to predict the outcome variable hence the model is significant.

The table above gave the coefficient of strategic formulation and that of moderator on the effect of return on equity. The constant α =3.588 with P=0.000, strategic formulation β = -0.816, p = 0.001, competitive intelligence β = -0.191, p= 0.410, moderator effect coefficient β = -0.025 p=0.052. Table above gave coefficient of strategy formulation and moderator effect on Return on Assets.

The coefficient for β = 4.420 with p= 0.000, coefficient for strategic formulation β=-.255, p=.084>0.05, coefficient for competitive intelligence β=.229, p=0.123>0.05, coefficient for Moderator effect β=-.305, p=0.000<0.05. Table above gave the coefficient of strategic formulation and that of moderators on effect on customer satisfaction. From the table coefficient of the constant α= 4.231 with p=0.000, the coefficient of strategic formulation β= 0.123, p=.415>0.05, the coefficient for competitive intelligence β= 0.586, p=0.000<0.05, the coefficient of the moderator effect β=.002, p=.970. Each of these β values had an associated standard error indicating to what extent these values would vary across different samples, and these standard errors are used to determine whether or not the β value differs significantly from zero (using the t-statistics). Therefore, if the t-test associated with a β value was significant (i.e., p < .001) then that predictor was making a significant contribution to the model. For instance, the three models which had impact included:-

Return on Equity = 3.588-0.816 Strategy Formulation + ε…… (i)

Return on Assets = 4.420 - 0.305SF_Moderator + ε…… (ii)

Customer satisfaction = 4.231 + 0.586 Competitive intelligence + ε…… (iii)

When moderator was included in the model with only one dependent variables, it was only strategic information that influence return on equity and the relationship was negative (-0.816), the second model, the moderator effect is negatively influencing return on assets and competitive intelligence positively influencing customer satisfaction. The study findings indicated that managers need to pay attention to strategy formulation and prioritize the implementation of strategies to enhance organizational competitive performance. The findings in this study indicated that environment moderates the relationships between strategy formulation and performance especially financial performance. The findings resonated well with the findings by Fadeye (2016) who examined the link between strategy formulation process and innovation performance indicators in microfinance banks in Nigeria, they found close relationship between strategic formulation and firm financial performance.

SUMMARY

The study found that there is positive relationship between strategic formulation and firm performance. Arguably, it is important for firms to effectively use their resources and technology to deliver innovative products and services to their customers as this will enable them to achieve and sustain competitive advantage. Most of the respondents strongly agree that strategy formulation enhances better organizational development, growth and productivity, as this also constituted part of the hypotheses used for this study. Few agree while just a little of the respondents were undecided. Hence, it can be deduced from the above responses that strategy formulation has effect on customer satisfaction, return on asset and on equity, its productivity, and its growth cum development. It can be summarized that it enhances better organizational performance. The study further revealed that moderator brings about financial changes to organization. This may be as a result of external environment factors like government policy.

The findings showed close relationship between competitive intelligence on strategic management process. The study findings found positive relationship between the two elements. In testing firm financial performance, we accept null hypothesis and reject null hypothesis when it is regressed against non-financial performance. Competitive intelligence is most often used in strategic management process by operating managers within strategic business units (SBUs). In most cases, it improves the customer perception on the product as opposed to the financial performance of the product.

CONCLUSION

The study concluded that strategic formulation has positive relationship with financial performance.

This implied that managers involved in strategy formulation for their businesses have a competitive edge over others. The management especially top management must ensure that the strategic formulation is emphasized in all parts of the organization. This ensures that the decisions which are being taken are strategically formulated in the organization. Further, by involving all employees of the organization there is synergy and goals of the organization are likely to gain support.

The study findings concluded that there was very little impact of competitive intelligence on strategy formulation. This implied that competitive intelligence is most often used in strategic formulation by operating managers within Strategic Business Units (SBUs). In most cases it improves the customer perception on the product as opposed to the financial performance of the product. In overall it should be considered by the top management to improve overall management process in listed firms in Nairobi Securities Exchange. The study provided a synthesis of the literature pertaining to competitive intelligence processes and activities. The competitive intelligence was limited to industry and product value chain analysis. It was concluded that competitive intelligence cannot supply the final judgements on strategic formulation and firm performance.

RECOMMENDATION

Strategy formulation is one of the integral part of strategic management process and should be embraced by management. Appropriate and effective strategic formulation help in ensuring that both financial and non-financial performance are achieved. The management should concentrate on the strategic formulation to help the organization to achieve desired results.

Areas of further Research

This study focuses on the influence of Competitive Intelligence on the Relationship between strategic formulation and Performance of Companies listed on Nairobi Securities Exchange in Kenya. It is essential for the same study to be done using other specific financial variables to establish whether they are likely to yield same results. It will be useful for other researcher to look at the strategic planning process and performance dichotomy with other moderators such as firm level characteristics such as firm types, ownership types, managerial characteristics, firm age and cultural diversity among others. The same research can be replicated to other areas or listed firms in other countries to establish whether they give similar results or not. This will help in making a more inclusive and conclusive statement on the relationship between strategic management process and firm performance.

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