INFLUENCE OF INFORMATION TECHNOLOGY CAPABILITIES ON PERFORMANCE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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ABSTRACT

The main objective of the study was to establish the influence of Information Technology Capabilities on the performance of firms listed at NSE. Previous studies have demonstrated that the ability of firms to sustain performance, remain competitive and to overcome challenges arising from environmental dynamism, is largely driven by firm level factors and Information Technology is one of these factors. This study sought to fill that scholarly gap existing on the influence of information technology as a firm level factor on performance of listed firms at NSE. The study adopted a descriptive research design and the target population comprised of all actively trading listed firms in the Nairobi Securities Exchange as at December 2017. The main data collection instrument for primary data was a structured questionnaire while a secondary data collection sheet was used to collect publicly available firm performance data. To accommodate economic cycles, the study reviewed firm performance covering a period of 10 years (2007-2017). A pilot study was carried out to test the reliability and validity of the questionnaire. Data analysis was done using descriptive statistics where frequencies, percentages mean and standard deviation were computed based on the research questions. Using SPSS and AMOS (Analysis of Moment Structures), a model was specified to extract the relationship between the independent variables with firm performance. Results of the analysis were presented in tables, charts and graphs. The findings from the study revealed that information technology significantly and positively influenced firm performance. The study further established that through employee training on ICT skills and investing in ICT infrastructure were key aspects in promoting use of ICT which translated to enhanced operation efficiency and performance. The study concluded that ICT was a key aspect in promoting firm performance through enhanced operational effectiveness and cost saving. A recommendation was drawn that modern organizations should adopt ICT by ensuring that their staff are equipped with ICT skills and proper ICT infrastructure put in place.

Key Words: Information Technology, ICT Competencies, Firm performance, Nairobi Stocks Exchange
1.0 INTRODUCTION

1.1 Background of the Study

Firm level aspects remain to be key pillars of firm performance especially in the 21st century where businesses are faced with tremendous dynamics. According to Zou and Stan (1998), firm level factors are the controllable internal resources that provide a firm with competitive advantages for engaging in its respective core activities with the aim of achieving particular goals and objectives. In other words, they are the exploitation of internal resources that help create idiosyncratic capabilities that culminate in the development of competitive capabilities that are difficult to replicate by rival firms.

Information technology is one of the major firm level factors that plays a critical role in promoting firm performance and competitiveness. A review of studies of IT capabilities in creating competitiveness or business value indicate that most studies seek to examine the impact of IT investment on organizational performance, primarily at the firm level (Melville, Kraemer & Gurbaxani, 2004). Many of these studies rely on the traditional production function approach or black box approach in which a mathematical specification is defined based on microeconomic theory, and utilized to link production inputs (labor and capital) and outputs (quality and quantity) directly (Brynjolfsson & Hitt, 1996). On the other hand, empirical studies that rely on the black box approach lack consistency in explaining the association between IT investment and organizational performance and in the process setting off the controversy of the IT productivity paradox (Brynjolfsson, 1993).

To tackle the productivity paradox problem, arguments have been made that research on IT business value should investigate the effects of IT on business processes (Ray, Barney, & Muhanna, 2005). It is the process (a better way of doing things) rather than the product where IT makes a true impact (McAfee & Brynjolfsson, 2008). Reliance on the black box–product approach means a loss of statistical power in determining the meaningful relationship between IT investment and organizational performance because of the large distance (i.e., temporal gap) between them (Barua, Kriebel & Mukhopadhyay, 1995). Studies grounded on the process model have shown more consistent and explanatory results (Ravichandran & Lertwongsatien, 2005).
The corporate world continues to be vulnerable to major global challenges with far reaching negative influence on business survival. The 2008-2009 global financial crisis, global insecurity and terror threats, new technology and the constant turbulence of oil prices, are just but recent cases of changes impacting performance of entities at the global level. According to Teece and Pisano (1990), the changing nature of the environment demands new ways of strategic thinking and management for organizations to survive. The new strategic approach is principally about adapting, integrating and reconfiguring internal and external organizational skills, resources and operational competencies to overcome the changing environment. Contemporary arguments by strategic management thinkers are based on the realization that many successful and hitherto dominant firms are struggling to survive or have indeed failed as their environments continue to change and these organization are unable to adapt successfully (Harreld, O Reilly & Tushman, 2007).

The main goal of every organization is to maximize the shareholders wealth through revenues and this explains why many firms struggle to capture more market and sustain their operations in the existing markets. In this study, the performance construct is grounded on the stakeholder theory (Freeman, 1984) where it is defined as simply the satisfaction of shareholders by creating sufficient return for their investment (Connolly, Conlon & Deustch, 1980; Hitt, 1988; Zammuto, 1984). Superior financial performance is a way to satisfy investors (Chakravarthy, 1986) and can be represented by profitability, growth in asset size and market value (Cho & Pucik, 2005; Venkatraman & Ramanujam, 1986). These three aspects complement each other. Profitability measures a firm’s ability to generate returns (Miller, Washburn & Glick, 2013), growth in asset size demonstrates a firm’s ability to increase revenue generation (Whetten, 1987). Increasing in size and profitability level, indicates increase in absolute profit and cash generation capacity. In addition, a large-sized entity precipitates economies of scale and market power, leading to enhanced future profitability.

Listed firms in Kenya are companies whose shares are traded in the Nairobi Securities Exchange (NSE) and operate as public companies incorporated and registered under the Companies Act Cap 486, Laws of Kenya. The NSE is Africa's fifth largest securities exchange in terms of market capitalization as a percentage of Gross Domestic Product (GDP); which stood at 25% as at 2009 and 31% in 2012; Kenya was ranked seventh behind South Africa (212%), Ghana (61%), Morocco
(59%), Egypt (53%), Mauritius (55%) and Botswana (32%), (CMA Report 2008-2009, 2012). The country was placed fourth largest in terms of trading volumes in Africa (World Bank, 2012). The NSE facilitates the Kenyan economy by creating an enabling environment for intermediation of scarce financial resources to investment in productive enterprises, assisting in the rational and efficient allocation of capital and improves the access to finance by different types of users by providing opportunities and avenues for investments.

1.2 Statement of the Problem
A review of performance of firms listed at NSE indicates that in the period 2012-2015, at least twenty (20) companies, representing 28% of firms listed at the NSE, issued profit warnings occasioned by decline in profits (Komen, 2014; NSE, 2015). The same trend was even more evident in 2015 and 2016 where nineteen (19) firms issued profit warnings after undergoing significant losses.

Inability of firms to sustain performance poses a number of challenges: One, these firms inevitably find it difficult to grow and become bigger (European Firm in Global Economy Report, 2011) therefore denying the economy the benefits accruing from having big entities. Two, poor performance has a negative impact on investor confidence leading to capital flight. These two challenges are possible barriers to the achievement of financial and economic stability as envisioned in Vision 2030.

The current study sought to empirically investigate information technology capability as a firm level factor and a key driver of firm performance. Kenya was ranked the 3rd fastest growing economy globally (Bloomberg Business, 2015), how come these firms are not taking advantage of this growing economy to deliver above average performance in tandem with the growing economy? Generally the study sought to answer the strategic question why some firms operating within the same industry, facing similar competition, having access to the same resources, operating under the same regulatory framework and having access to a similar talent pool perform better than others.

1.3 Research Objective
The study sought to establish the information technology as a firm level factor on performance of firms listed at Nairobi Securities Exchange.
2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Rogers Innovation Diffusion Theory

Diffusion of Innovations theory seeks to explain how innovations are taken up by consumers of a particular product or service. An innovation is an idea, behaviour, or object that is perceived as new by its users. Innovation diffusion theory provides well-developed concepts and a large body of empirical results applicable to the study of technology evaluation, adoption and implementation. Diffusion theory provides tools, both quantitative and qualitative, for assessing the likely rate of diffusion of a technology, and additionally, identifies numerous factors that facilitate or hinder technology adoption and implementation. These factors include characteristics of the technology, characteristics of adopters, and the means by which adopters learn about and are persuaded to adopt the technology (Rogers, 1983).

Innovation diffusion has become an increasingly popular reference theory for studies of information technologies (IT) driven innovations. According to Fitchman (1992) numerous factors facilitate or hinder technology adoption and implementation. These factors include characteristics of the technology, characteristics of adopters, and the means by which adopters learn about and are persuaded to adopt the technology (Rogers, 1983).

2.2 Conceptual Framework

![Conceptual Framework Diagram]

Figure 2.1: Conceptual Framework
2.3 Empirical Review

The empirical review is as summarized in the table below.

<table>
<thead>
<tr>
<th>Related Studies</th>
<th>Study Type</th>
<th>Linkage between IT Capabilities and Firm Performance</th>
<th>Statistical Significance of Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tippins and Sohi (2003)</td>
<td>Empirical</td>
<td>Indirect</td>
<td>IT competency influence on organizational learning (o), influence on firm performance (o)</td>
</tr>
<tr>
<td>Ravichandran and Lertwongsatien (2005)</td>
<td>Empirical</td>
<td>Indirect</td>
<td>IT capabilities influence on IT support for core competencies (o) influence on firm performance (o)</td>
</tr>
<tr>
<td>Pavlou and El-Sawy (2006)</td>
<td>Empirical</td>
<td>Indirect</td>
<td>IT leveraging competence influence on process capabilities (dynamic and functional) (o) and on competitive advantage (o)</td>
</tr>
</tbody>
</table>

Note: (o) significant link, (x) insignificant link

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a combination of descriptive and exploratory research designs to relate relationships between the identified independent variables with the dependent variable. Kothari and Garg (2014) opine that descriptive research studies are those studies which are concerned with describing the characteristics of an individual or of a group.

3.2 Target Population

The target population for this study was firms listed at the NSE and were actively trading as at December 31st, 2017. The choice of NSE listed firms was informed by two main reasons one, there
is a positive correlation between performance of listed firms and the performance of a national economy (Levine, 2005), therefore studying listed firms offers a subtle way of establishing how the national economy is performing (performance of the capital market can be used as proxy to assess the performance of the national economy); two, publicly quoted firms operate in all key sectors of the economy, which include agriculture, commercial and services, financial and investment and industry and allied. Agriculture, industrial and service sectors accounted for 22%, 15% and 62% of GDP respectively in 2009 (World Bank, 2010). Using listed firms therefore enables the researcher to achieve holistic view of key sectors within the economy.

3.3 Sampling

This was a census study on the publicly quoted firms in the Nairobi Securities Exchange. A principal informant research approach was used in data collection (Campbell, 1955). Extant literature on strategy and business research has highlighted that people have different perspectives on the boundary of an organization (Dillman, 2000). For the purposes of this study, the unit of study/analysis was firms listed on the NSE that were actively trading as at 31st December 2017. According to the NSE Handbook, out of the 64 listed firms at the NSE only 58 were actively trading as at December 2017. These 58 firms formed units of analysis for this study.

3.4 Data Collection

In this study, primary data was collected using a questionnaire that was designed with both structured and unstructured questions. The questionnaire contained Likert scale type of questions where the respondents was required to indicate their level of agreement with the statements that express a favourable or unfavourable opinion towards the variables of the study.

3.5 Data Analysis and Presentation

Descriptive statistical technique was used to analyze data. This consists of graphical and numerical techniques for summarizing data, thus reducing a large mass of data to simpler, more understandable terms. The Statistical Package for Social Sciences (SPSS 2017 Version) which is computer software was used for the purpose of analyzing the data. The data was presented in figures, tables, charts and graphs. The multiple regression model in this study is derived from the conceptual frame and is as shown below:

\[ Y = \beta_0 + \beta_1X_1 + e \]
Where:
Y = represents the dependent variable, employee turnover
β₀ = Constant
X₁ = IT Capabilities
β₁…β₄ are the regression coefficients
e = the residual in the equation
AMOS (a statistical analysis tool) was also used as the primary tool to carry out the specification of the SEM model.

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate
A response rate of 75% (180 respondents) was achieved and the data used for analysis. This therefore makes the study appropriate to make conclusions and recommendations since according to Creswell (2005) and Kingslay (2012) a response rate of 30-60% in a study is adequate for making conclusions and recommendations.

4.2 Descriptive Analysis of Information Technology Capabilities
In the modern World, information technology plays a very significant role in firm performance and competitiveness. Through better and well improvised technological systems, organizations integrate their operations through which they save on costs while maximizing their profit. The study sought to find out the influence of information technology capabilities on performance of firms listed at NSE. The findings from the study are as herein presented based on the specific measures of information technology.

Expenditure on Information Technology

The study sought to find out the expenditure that organizations spent on IT related investments for a period of 10 years prior to the time of the study. The findings as shown in figure 4.1 revealed that 27% of the respondents indicated that their respective organizations spent below 10% of their investments on IT, 8% spent between 10 and 20%, 43% spend 20 to 50% on IT while 22% spent above 50% of their capital investment on IT and IT related activities. McAfee and Brynjolfsson (2008) contended that in the modern day market, organizations cannot overlook the power of ICT
in their operations and performance in general due to its risks and wide range of opportunities it opens the firm to.

![Figure 4.1: Expenditure on IT](image1)

**Staff Members dedicated to IT related Activities**

The study sought to find out the rate of employees that were purely dedicated to information technology. The findings as shown in figure 4.2 portray that 36% of the respondents indicated that their respective organizations had 10% of staff dedicated to IT activities, 16% indicated 10 to 15%, 33% indicated 15 to 20% while 16% said that they had 20% of the staff dedicated to IT related activities.

![Figure 4.2: Staff dedicated to IT Activities](image2)
Describing the Role of IT in the Organizations

The respondents’ views on the best way to which they described the role of IT in their respective firms were sought. The findings as shown in table 4.1 revealed that 14.4% of the respondents described the role of IT in their organization as a traditional role, 36.1% described it as an evolving role while 49.4% described the role of IT in their organization as an integral role. Ray et al. (2005) described the role of IT as an integral role that keeps on improving and require much attention and research for it to be successful in enhancing firm performance.

Table 4.1: Best Description of role of IT

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional role</td>
<td>26</td>
<td>14.4%</td>
</tr>
<tr>
<td>Evolving role</td>
<td>65</td>
<td>36.1%</td>
</tr>
<tr>
<td>Integral role</td>
<td>89</td>
<td>49.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Reason for continuous Investment in IT

The respondents were asked to indicate the reasons as to why their respective firms would continue investing in IT. The findings as shown in figure 4.3 reveal that 26% of the respondents considered transaction role to be the key influencing factor for continued investing in IT, 70% indicated strategic role while 2% indicated informational role and threshold role.

The findings implied that information technology was key to firm performance. Through investing in technology by acquiring modern IT infrastructure, training employees and ensure frequent update of software keeps the organization up on toes to any changes and thus enhancing competitiveness and performance. Moreover, having more members of the staff dedicated to IT operations keeps them aware of the use of IT as well as improving their innovativeness which is essential to firm performance.
4.3 Firm Performance

Firm Profitability

The study sought views from respondents on various metrics traditionally used to measure firm profitability. The views were gathered regarding opinion on average profit growth during the period under study, average return on assets and return on equity, average market growth and market capitalization. The findings are as enumerated in the next sub-sections

Average Return on Equity (ROE) and Return on Assets (ROA)

The study sought to establish the performance of the firms in terms of ROA and ROE. The study found that majority of the firms (43.3%) had more than 25% growth rate of the Return on Equity while 13.9% of the respondents had below 5% growth rate in the ROE. On the other hand, majority of the firms (56.7%) had between 5 and 10% growth rate in the Return on Assets while 7.2% of the firms had a growth rate on ROA below 5%.

Table 4.2: Average Return on Equity and Return on Assets

<table>
<thead>
<tr>
<th>ROE</th>
<th>Frequency</th>
<th>Percentage</th>
<th>ROA</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 10%</td>
<td>16</td>
<td>8.9%</td>
<td>Below 5%</td>
<td>13</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
**Firm Average Market Growth**

The study sought to find out the Market share of the firms listed at the NSE. To address this, the respondents were asked to indicate the average growth in market share and number of times their respective companies carried out market research to ascertain the market share. The findings as shown in table 4.3 revealed that majority of the firms (62.2%) had a market share growth rate of between 3 and 10%. The findings showed that majority (52.8%) of the firms carried out market research to ascertain market share after every 5 years. The findings compare with those of Chong (2014) who found that market growth among modern organization is mainly below 10% especially in the already developed markets whereby aspects such as competition and increased costs of operation and new entrants make the market hard to capture.

<table>
<thead>
<tr>
<th>Average Market Growth</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Period of ascertaining Market Share Growth</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 3%</td>
<td>11</td>
<td>6.1%</td>
<td>Every Year</td>
<td>24</td>
<td>13.3%</td>
</tr>
<tr>
<td>3%-10%</td>
<td>112</td>
<td>62.2%</td>
<td>After 3 Years</td>
<td>61</td>
<td>33.9%</td>
</tr>
<tr>
<td>Above 10%</td>
<td>57</td>
<td>31.7%</td>
<td>After 5 Years</td>
<td>95</td>
<td>52.8%</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100%</td>
<td>Total</td>
<td>180</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Market Capitalization**

The respondents’ views on market capitalization (market value) of their respective firms were sought. The findings revealed that majority (52.2%) of the firms had a growth rate in the market.
capitalization of between 3% and 10% while 42.8% had an average growth rate in the market
capitalization above 10%. On the other hand, majority of the firms (79.4%) had dividend yield of
between 3% and 10% as opposed to 8.9% who had a dividend yield of less than 3%. On the average
growth of shareholders, the study revealed that majority of the firms (61.1%) had a growth rate
above 5% of the shareholders while 8.3% had a shareholder growth rate below 3%.

Table 4.4: Market Capitalization

<table>
<thead>
<tr>
<th>Market Capitalization</th>
<th>Freq.</th>
<th>Percent</th>
<th>Dividend Yield</th>
<th>Freq.</th>
<th>Percent</th>
<th>Shareholder</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 3%</td>
<td>9</td>
<td>5.0%</td>
<td></td>
<td>16</td>
<td>8.9%</td>
<td></td>
<td>15</td>
<td>8.3%</td>
</tr>
<tr>
<td>3%-10(5)%</td>
<td>94</td>
<td>52.2%</td>
<td>143</td>
<td>79.4%</td>
<td>55</td>
<td>30.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 10(5)%</td>
<td>77</td>
<td>42.8%</td>
<td>21</td>
<td>11.7%</td>
<td>110</td>
<td>61.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100%</td>
<td>180</td>
<td>100%</td>
<td>180</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4 Confirmatory Factor Analysis using SEM

_Model fit for Information Technology Capabilities_

The results as shown in table 4.5 revealed that the observable measures of information technology
capabilities adopted in the study had an acceptable fit with a P-value of 0.160 which is greater than
the standard p-value of 0.05. This implies that the sub-constructs of organizational competence;
ethics and culture, managerial competence and organizational governance structure were viable in
explaining organizational competence

Table 4.5: Fitness Statistics for Measurement Model of IT Capabilities

<table>
<thead>
<tr>
<th>Fit Statistics</th>
<th>Cut off Value</th>
<th>Model Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square</td>
<td>Small</td>
<td>3.662</td>
</tr>
<tr>
<td>P value for Chi Square</td>
<td>≥ 0.05</td>
<td>0.160</td>
</tr>
<tr>
<td>CFI</td>
<td>0.8 ≤ CFI ≤ 1</td>
<td>0.990</td>
</tr>
<tr>
<td>NFI</td>
<td>≥ 0.8</td>
<td>0.979</td>
</tr>
<tr>
<td>RMSE</td>
<td>≤ 0.08</td>
<td>0.068</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.9</td>
<td>0.990</td>
</tr>
</tbody>
</table>

http://www.ijsse.org   ISSN 2307-6305   Page | 13
AGFI ≥ 0.9 0.949

A summary of other fitness statistics is summarized in Table 4.6 indicated an acceptable model between constructs of Information technology capabilities and Information technology capabilities amongst companies listed in NSE. The model achieved an RMSEA of 0.068 slightly below the recommended threshold of less than 0.08, a GFI and AGFI of 0.990 and 0.949 respectively which were greater than the threshold of 0.9, an NFI of 0.979 greater than the recommended threshold of greater than 0.8, and a CFI of 0.990 which was with the recommended range of between 0.8 and 1. All the indices indicated good model fit.

**Structural Model for Information Technology Capabilities**

A structural equation model on information capability was defined. The findings as shown in figure 4.4 revealed that IT competence had a coefficient value of 0.29 when structured against firm performance and indication that a unit change in IT competence influenced up to 29% increase in firm performance.

Figure 4.4: Structural Model on Information Technology Capabilities
4.5 Influence of Information Technology Capability on Firm Performance

\( H_0: \) There is no significant relationship between Information Technology capability and performance of firms listed at the NSE

The fourth objective of the study was to establish the influence of information technology capability on performance of firms listed at the NSE. The study sought to statistically establish the relationship between the information technology (independent variable) and the performance of firms listed at the NSE (dependent variable). This was done using the ANOVA test, the regression coefficients and the scatter plot diagram. This enabled the researcher to identify whether to accept the null hypothesis for the variable or not. The model equation used for the variable was of the form; \( Y = \beta_0 + \beta_4X_4 \).

The model summary results shown in table 4.6 revealed that the R value was 0.310 while the \( R^2 \) was 0.096 which indicated that the variability of the information technology competency and the performance of the firms listed at the NSE could be explained by up to 9.6% of the model. This implies that the model was fit to determine the relationship between the two variables and therein make conclusions and recommendations.

Table 4.6: Model Summary; Information Technology Competency

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.310*</td>
<td>.096</td>
<td>.091</td>
<td>.32035</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Information Technology competency

b. Dependent Variable: Performance of firms listed at the NSE

The ANOVA results are as shown on table 4.7. The results revealed that the F-calculated for the variable was 18.920 which is greater than the F-critical while the mean was 1.942 all implying that the model was significant. The P-value was 0.000<0.05 an additional prove that the model was significant.

Table 4.7: ANOVA; Information Technology Competency
Table 4.8: Regression Coefficients; Information Technology

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.639</td>
<td>.084</td>
<td></td>
<td>31.583</td>
</tr>
<tr>
<td>Information Technology</td>
<td>.154</td>
<td>.035</td>
<td>.310</td>
<td>4.350</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of firms listed at NSE

The results of the inferential statistics analysis therefore infer that the null hypothesis that there is no significant relationship between information technology capability and firm performance is rejected in the study. These findings compliments previous findings that had argued that IT-based capabilities or assets IT assets (e.g., IT investments, IT applications) affect various measures of firm performance, such as productivity, profitability, risk, and shareholder value, and intangibles, such as customer satisfaction (Bharadwaj, 2000; Brynjolfsson and Hitt, 2000; Dewan, Shi & Gurbaxani, 2007; Mithas et al., 2012). The same findings agree with the findings of Mithas, Ramasubbu, and Sambamurthy (2011), whose findings highlighted the role and importance of IT-enabled information management capability in enabling business excellence that creates and sustains a competitive advantage. From these findings, it can therefore be argued that information
technology capability is an enabler of organizational capability which in turn is a key driver of firm performance.

CONCLUSION

Information technology capabilities is key driver of performance among the firms listed at the NSE. The study concluded that IT capability was a key performance differentiator among the firms at the NSE. However, it is noted that some firms did not dedicate a resolute number of staff to IT a move that can negatively affect the effectiveness of the latter. The study concluded that firms at the NSE majorly adopted and invested in IT for its strategic role but not for other major purposes such as information role, transaction and threshold role. This could mean that apart from strategy, IT could not be of much importance to firms thus limiting the benefit of the latter to the firms’ performance.

RECOMMENDATION

Information technology is critical capability required of any firm that wishes to excel and remain competitive in the market place. The firms listed at the NSE have to effectively adopt IT in their operations not only for the sake of strategy but to enhance their efficiency through information sharing and transactional purposes. To make IT effective, the firms should invest more funds and man power towards ICT tools and operatives.

REFERENCES


