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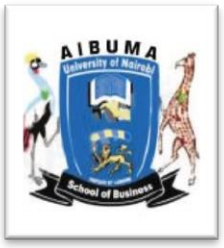

THE EFFECT OF CORPORATE INFORMATION TECHNOLOGY STRATEGY ON SERVICE DELIVERY OF STATE CORPORATIONS IN KENYA

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Abstract

This study endeavored to establish how corporate IT strategy influence service delivery of state corporations in Kenya. State owned entities are formed to meet regulatory objectives and exploit political and social objectives, correct market and economic failures, provide health and education advisory services. There are a number of state corporations existing for various economic reasons however this study focused 178 state corporations that are operationally vibrant. This study was anchored on the Fourth Industrial Revolution Theory which explains how the advent of technological and economic developments is key factors to organizational efficiency and effectiveness. Independent Factual knowledge was obtained using positivism approach through administering of self-designed structured questionnaires to acquire first hand data as well as secondary data on service delivery was collected from annual performance contract reports. Response was rated at 67.4% since out of the 178 questionnaires distributed only 120 were positively filled and returned. Analysis outcome revealed that the effect of corporate IT strategy on service delivery of state corporations in Kenya is a statistically significant. That is 58.7% variations in the service delivery are accounted for by the changes in corporate IT strategy. The findings contributes in the study of corporate IT strategy and service delivery by decomposing corporate IT strategy into indexes of Implementation of Service Delivery Charter, Service Delivery Innovations, Resolution of customer Complaints and Customer satisfaction index which were found to have statistically significant effects. Based on the results of this study, the government through relevant ministries and other stakeholders in the state corporations sector should develop appropriate policies in an attempt to organize the IT applications to enable investors and regulatory bodies get access to information pertaining how to improve their ability to perform as well as give quality services. The study concurred with the fourth industrial revolution theory that firms need to embrace technological advancements by strategically investing on superior IT strategies, resources and competencies to enable them add value to service delivery processes.The study shall guide managerial practitioners in the state firms to appreciate the integration of corporate IT strategy into to the various service delivery improvements in the face of a challenging economic environment and management of core processes for valued added customer needs.

***Key words**: Corporate Information Technology Strategy, Service Delivery, State Corporations, Kenya.*

Introduction

The rapid economic and technological advancements, remains a major reason for business entities to heavily depend on responsive and efficient information technology (IT) for excellent customized outcomes (Abdi, Mohammed & Dominic, 2010). For organizations to realize quality outputs they need to integrate corporate IT strategy as an overarching comprehensive plan designed by top leadership to provide a roadmap on how to invest and utilize IT to attain business objectives and strategies (Thompson, 2007). Business entities prudently utilize IT strategy at the corporate and competitive levels as a tool for creating value and governing ideas that allow managers to identify opportunities by the use of IT to support organizational processes and goals (Kräftner, 2006). Valuable IT investment requires IT knowledgeable top management to enable them understand the role of IT strategy and implementing processes and the degree of cascading IT- related decisions, competencies and organizational goals (Yayla &Hu, 2014). Not only that but also corporate IT strategy outlines the need for top management to closely work with IT leaders in aligning their core business processes to IT for enhanced strategic planning, decision-making processes, value creation and competitive advantage (Arvidsson, Holmström, & Lyytinen,2014). Overly, most of prior empirical literatures have depicted that many organizations deploy corporate IT strategy to support core organizational processes, strategic planning, decision making process and value creation so as to attain competitive advantage. It was therefore necessary for this study to assess how corporate IT strategy overly supports organizations' service delivery.

The study was conducted on state entities that are owned, financed and regulated by Kenya government (GoK, 2003). The corporations play a greater role in ensuring customized services that fosters livelihood of citizens; among others some of the services include energy, manufacturing, agriculture, transport, infrastructure, health and education (Muthaura, 2007). Apart from that the parastatals also are highly regarded as major contributors of employment, innovation, value addition and growth of the economy (Mirungu & Muoria, 2012).

Research Problem

Corporate IT strategy provides a blue print for effective communication on IT projects, targets and configuration of IT resources in accordance to expectations of stakeholders for responsive problem solving, innovative solutions, operational excellence and credible performance (Abdi, Mohammed & Dominic, 2010). Prior empirical investigations have revealed that technological innovations and economic advancements require organizations to be flexible when embracing corporate IT strategy towards competitive positioning. There is also need for organizations to often monitor, evaluate and aligned their corporate IT strategy to tactical plans and organizational goals (Peppard, Galliers & Thorogood, 2014). Quite evident that firms deploy corporate IT strategy to enhance productivity, profitability, growth and increased market share notwithstanding value on customer requirements and satisfaction

Despite the fact that the Government of Kenya has tried to establish the various public entities purposely to foster crucial functions and policies that are geared towards value addition there is much needed to be done to realize the same (Mirungu & Muoria, 2012). Notably, there is discontentment from citizen due to perennial poor services rendered which is equally detrimental to the core mandates of state organizations (Mulili & Wong, 2011). These shortcomings can be associated to human capita incompetency, inadequate or lack of IT resources, poor risk mitigation, corruption

and mismanagement of funds, weak strategies, biased promotions to compromised procurement procedures (Kashorda et al., 2007; Muthaura, 2007). As a result the public firms to need embrace a strong corporate IT strategy to address customer demands, sophistication and changing needs in order to fit into local and global competition.

The study addressed a number of conceptual and contextual gaps that previous studies partly and scantly addressed. Firstly, studies on how corporate IT strategy influence service delivery has not been well addressed, however studies on the benefits of IT strategies on net worthy organizational processes are many. For instance McAfee and Brynjolfsson (2008) established that corporate IT strategy is a recent management practice that organizations have not fully exploited and adopted fully to realize optimal service delivery improvements. Further, Arvidsson et al. (2014) and Thompson (2007) noted that organizations align corporate IT strategy and business processes to enhance, decision making process, value creation and delivery towards gaining competitive advantage. However, Danjum and Rasli, (2012); Abiodun, (2008) asserts that effective service delivery of firms is an outcome of top management participation and motivated workers which is a contradiction to McAfee and Brynjolfsson (2008); Arvidsson et al. (2014) and Thompson (2007) whose empirical reviews alluded that organizations embrace corporate IT strategy so as to enhance their value creation, decision making, strategic standing, operational excellence and superior performance.

Contextually, gaps on how corporate IT strategy can influence service delivery of State Corporation in Kenya are not elaborate. Nevertheless, various Studies have been conducted on other fields to illustrate how public organizations strive to enhance service related practices. For instance, Kashorda et al. (2007) and Magutu et al. (2010) asserted that many corporations in Kenya have developed information systems to monitor and control service provision. Waruinge, (2008) indicated that the government of Kenya has embraced other categories of systems like Integrated Financial Management Information System to support the management, planning, budgeting of finances in public institution to curb fund misappropriation and embezzlement. Njuru (2012) adduced that Kenyan government has embraced innovations by adopting E-government programs to enhance free flow of information, citizen participation in public policy, and improving the delivery of services. Further, Ndonga (2015) asserted that the government has also employed The Kenya Electronic Single Window System to facilitate clearance of goods at point of entries. Besides that, Bomett (2015) indicated that corporations are embracing performance contracting to improve governance and accountability towards improved performance and sustainable growth. Ochieng (2010) adduced that performance contracting strategy can lead to improved leadership, accountability and quality services that will in turn support growth, survival and profitability of public organizations. All these studies conducted within the Kenyan context reveals on what the government has initiated to facilitate corporate governance.

Empirical Literature *and Theoretical Review*

This study was anchored on The Fourth Industrial Revolution Theory, which explains that there is growth in technology and economy due to the shift from mechanical to digital production (Frey & Osborne, 2013). For timely and customized service delivery, firms need to revert to pedigree technologies that outwit manual systems that are costly, slow and unreliable (Schwab, 2016). Therefore, firms need to embrace technological advancements by strategically investing on superior IT resources and competencies to enable them add value to service delivery processes

(Brynjolfsson & McAfee, 2014). Not only that but also management processes should be well coordinated with superior quality technologies to support service delivery improvements (Ford, 2015).

Studies on the relationship between corporate IT strategy and service delivery have varying conclusions with either positive, negative or no relationship at all or carried out in different contexts and regions. For instance, Peppard et al., (2014) that many organizations are highly striving to excel by properly deploying and aligning IT function and business strategy in their operations and processes. Arvidsson et al., (2014) also discussed that firms felt the need to strategically align IT and organizational processes to enhance strategic planning, decision-making processes, value creation and competitive advantage. Owing to the crucial role of corporate IT strategy in enhanced organizational processes, it is not clear how it directly supports service delivery. However, Khalid, (2010) identified that new technologies can continuously enhance customer focused services at an effective cost.

A study by Beatson and Coote (2007) advanced that the advent and utilization of IT has shown that service delivery processes can be influenced by the involvement of top management and continuous use of new technologies. They further argue that the need for the management to embrace IT has led to service-driven Strategic decisions that are likely to foster a successful economic management excellence and attainable strategies. This has made organizations to develop a corporate IT strategy in response to corporate business initiative towards achieving competitive advantage by delivering innovative and differentiated services at a low cost (Kräftner, 2006).

The argument of Toomey, (2009); Yayla and Hu, (2014) also asserts that corporate IT strategy play a major role in organizational changes through enhancing business processes that leads to value creation that spin around cost reduction, efficient and effective business processes thus improved firm performance and competitive edge. This depicts that much emphasize is on how corporate IT strategy spurs firm performance with little said on how it specifically improves service delivery The current study therefore presumes that the use of new user friendly technologies, involving motivated employees and top management leads to improved service delivery.

The specific research objective was to establish the effect of corporate IT strategy on service delivery of state corporations in Kenya.

This study took keen interest of this objective and thus presented a comprehensive conceptual model in Figure 1.

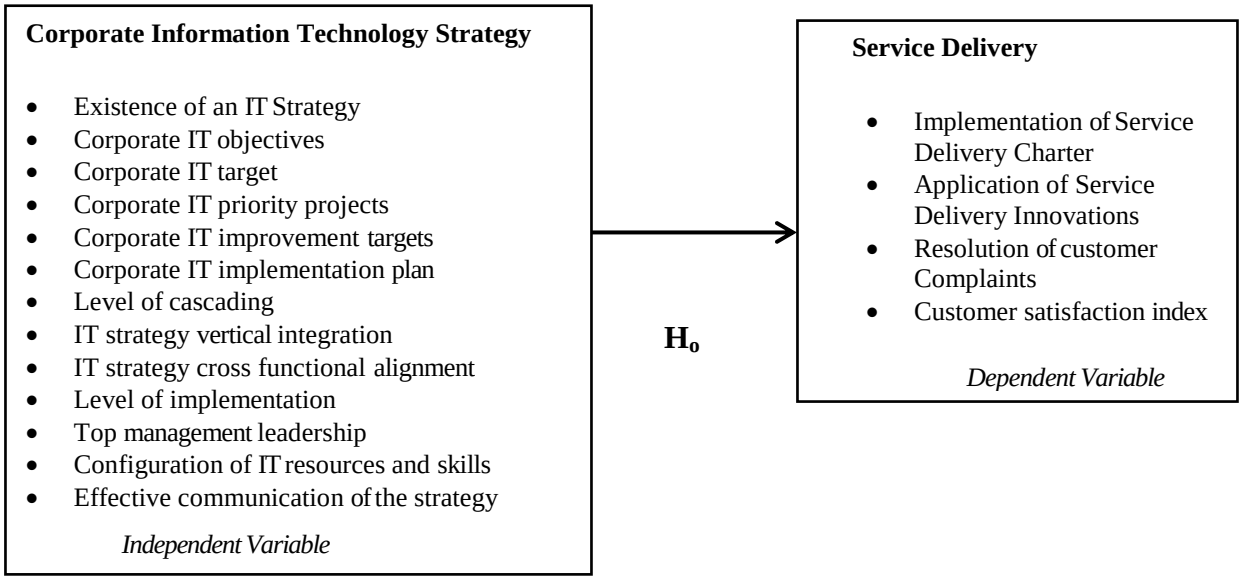

Figure 1: Conceptual Framework

Methodology of Research

The study was embedded on the positivist orientation since only facts and data gained through observation and measurement was used to empirically and objectively analyze the relationships existing among the variables in question and the hypothesis drawn from the theories (Collins, 2010). Research associated with this particular school differentiates the researcher from the subjects as independent and cannot influence each other's outcome or results. The positivist orientation also enabled hypotheses testing, acceptance or rejection based on the tested results. As opposed to epistemology approach that is concerned with theory building, positivism focusses on properties and relations of natural phenomenon as informed by sensory experience of reason and logic (Hjørland, 2005).

Descriptive technique was used to gather information that is doing on about the subject of study at a given period of time (Mugenda & Mugenda, 2003). This design offered the researcher an opportunity to collect data across different SCs and empirically test the relationship of the constructs along its conceptualization. In view of the breath of the study, the design affords the researcher the opportunity to capture data on corporate IT strategy, IT governance, information quality and their individual and joint influence on service delivery. Thus, the design also enables the researcher to establish if significant relationships among variables exist and the strength of these relationships (Creswell & Clark, 2013).

A census survey was conducted since complete information from all participants in the population was required (Parahoo 2014). The unit of analysis was 178 state corporations in Kenya corporations spread across the twenty ministries (Appendix II). They are classified into eight main operation classes based on their mandate and core functions. These include; Financial,

Commercial, manufacturing, Regulatory, Public Universities, Training and Research, Service, Regional Development Authorities, Tertiary Education and Training. Taskforce on Parastatals Reform Report (2013) observed that due to the dynamism and environmental changes as influenced by the government decisions to review, merge or discontinue some state corporations, the number is likely to keep changing as new ones are created and others merged or discontinued altogether depending on their purpose, performance and government development agenda. One of the respondent from the SC will be either the chief executive officer (CEOs), IT, human resource officer or in charge corporate planning. A census survey will be conducted in order to get complete information from all participants in the population used to inclusively obtain better coverage than sample surveys (Saunders, Lewis & Thornhill, 2012). Thus, the study established and maintains a complete list of the primary unit of 178 state corporations in Kenya as indicated below.

Table 1: Population Distribution

S/No	State Corporation Category	Corporations
1	Financial	18
2	Commercial & Manufacturing	34
3	Public Universities	32
4	Training and Research	14
5	Service Corporations	26
6	Regional Development	12
7	Tertiary Education & Training	11
8	Regulatory	31
	Total	**178**

Source: Researcher, 2019

Data Collection

Data was chronologically gathered and quantified in line with study variables for a complete and accurate picture of the area of study. According to Bryman and Bell (2011), data collection is the chronological mechanism of gathering and quantifying information on targeted variables in an established system to get complete and accurate picture of the area of research. Since the data collected enabled the researcher answer relevant questions and evaluate outcomes, both first hand and documented data was gathered because they reinforce each other (Saunders et al., 2012). Primary data was collected with the help of through

administering structured questionnaire that comprised of closed and open-ended questions designed in line with the research objectives, hypothesis, empirical literature and theories. This approach is best suited because of its ability to maximize the benefit of standard and descriptive data that the interviews generate (Creswell & Clark, 2014).

Reliability Test

This test was done to determine the tool used in data collection provided stable and consistency results on trials made repeatedly under constant conditions (Huck, 2007). The Cronbach Alpha coefficient is an appropriate measure of internal consistency when making use of Likert scales and it normally falls in the range of zero and one (Robinson, 2009). However, no absolute rules exist for internal consistencies, nevertheless, most agree on a minimum internal consistency coefficient of .70 or should be equal to or above 0.60. Besides that, there are other four cut-off points for reliability: (0.90 and above) excellent, (0.7-0.9) high, (0.5-0.7) moderate and (0.5 and below) low reliability (Straub, Boudreau & Gefen, 2004). Reliability alone is not sufficient without conducting validity tests to ensure an instrument is both reliable and valid (Wilson, 2010).

Validity Test

This test is conducted to determine to what extent data collected is the representation of the phenomenon of the study supposed to be measured (Ghauri & Gronhaug, 2005). Therefore, validity test depicts the level to which information gathered accurately measures what the researcher anticipates to measure (Field, 2005). It represents the argument that an instrument should yield results precisely to measure the intended objective by enabling the researcher to hit a bulls' eye of the objective in the interest of the population of the study in general (Mugenda & Mugenda, 2003).

Both construct validity and content validity will be used in adapting the measures for the variables in this study (Straub et al. 2004). The questionnaire was pre-tested to ascertain their relevance to the study in production of accurate results. Content validity will be done by testing and retesting the questionnaire that covered all the four main areas of the study. Construct validity on the other hand was attained through variable operationalization in line with the hypotheses that underpin the conceptual model of this study.

Operationalization of Study Variables

Variables of the study were operationalized as shown in the table 3.2 below.

Table 2: Operationalization of Study Variables

Variable	**Operational Indicators**	**Operational Definition**	**Supporting Literature**	**Rating measure**
Corporate IT Strategy *(Independent Variable)*	Existence of an IT Strategy	It's a comprehensive plan put in place to guide state corporations on the use of IT to achieve their objectives and strategies	Arvidsson et al., (2014)	5-point Likert type scale
	Existence of corporate IT objectives	This is clear definition of corporate IT objectives	Arvidsson et al., (2014)	5-point Likert type scale
	Corporate IT target	These are short term IT objects	Abdi et al.,(	5-point

Variable	Operational Indicators	Operational Definition	Supporting Literature	Rating measure
		that are derived from main IT objectives which are meant to be achieved within a short period.	2010)	Likert type scale
	Corporate IT priority projects	These are endeavors undertaken by the corporate on IT investment, development, operation and maintenance, service delivery and organization development	Abdi et al., (2010)	5-point Likert type scale
	Corporate IT improvement targets	These are mechanisms put in place to support corporate IT improvement targets like training staffs on ICT, regular ICT and information security controls	Abdi et al., (2010)	5-point Likert type scale
	Corporate IT implementation plan	This is a roadmap put in place to guide ideal execution of IT strategic plan to achieve overall goals and strategies	Thompson, (2007)	5-point Likert type scale
	Level of cascading IT strategy	This is a strong and consistent leadership on the follow through of the IT strategy	Arvidsson et al., (2014)	5-point Likert type scale
	IT strategy vertical integration	This is IT strategy put in place by top leadership to support control of IT value chains	Yayla & Hu, (2014)	5-point Likert type scale
	IT strategy cross functional alignment	This is collaborating IT strategy across functional planning processes	Yayla & Hu, (2014)	5-point Likert type scale
	Level of implementation	This defines turning IT strategy into actions at all levels of management to accomplish overall goals and objectives.	Peppard et al. (2014)	5-point Likert type scale
	Top management leadership	These are the overall management team that are deeply committed to the purpose, strategies, objectives and goals of state corporations	Peppard et al. (2014)	5-point Likert type scale
	Configuration of IT	This a process of establishing		5-point

Variable	Operational Indicators	Operational Definition	Supporting Literature	Rating measure
	resources and skills	and maintaining consistency performance of IT resources and skills throughout the SCs in Kenya		Likert type scale
	Effective communication corporate IT strategy	This implies whether better systems are put in place to effectively communicate the IT strategy to all stakeholders	Peppard et al. (2014)	5-point Likert type scale
Service Delivery *(Dependent variable)*	Customer satisfaction index	This a measure to what extent services offered meet and surpass customer expectation	Chen and Tsou (2012)	Ratio
	Implementation of Service Delivery Charter	This is putting into action what is documented on the customer service charter in all levels of management	Miremadi et al. (2011)	Ratio
	Application of Service delivery Innovation	Is the process of putting resources into innovative services that will enhance customer satisfaction	Ochieng (2010).	Ratio
	Resolution of customer Complaints	This is how state corporations handle customer complaints to avoid shattering growth and profitability of the SCs	Chen and Tsou (2012)	Ratio

Source: Researcher, 2019

Diagnostic Tests

Since this study is a social science based, the probability of non-linear relationships is likely to be high, thus it is essential to test for linearity between the dependent and independent variables (Burns & Burns, 2008). The study tested for linear relationship using scatter plots that require an assumption of linearity of data taken from the outcome and independent. Saunders et al., (2012) indicated that since neither the numerical nor graphics can individually provide conclusive evidence of normality. Therefore, the study established normality of the data for each independent variable both numerically and graphically. Descriptive statistics were performed to present the data in more simpler and meaningful manner. Means, median, standard deviations, skewness and kurtosis for describing normality of the data are conducted.

Multi-collinearity was tested to establish the highly linearly related independent variables to reduce their individual's effects on the dependent variable. Thus, Condition Index (CI), Variance Inflation Factors (VIF) and tolerance were used to test for the unacceptable correlation. Small values for

tolerance and large VIF values show the presence of multi-collinearity. The acceptable range of CI<30, VIF<5, and tolerance >0.2 was applied to test multi-collinearity (Bilge, Gulsen, Senay, and Savas, 2011). The study tested for homoscedasticity by use of Levene's test of homogeneity of variance at p<0.05 significance level. The violation of homoscedasticity is present when the size of the error term differs across values of an independent variable. Low heteroscedasticity has little effect on significance tests but high heteroscedasticity weakens and distorts the analysis thus increasing possibility of committing type I error (Jensen &Ramirez, 2012)

Data Analysis

Both descriptive and inferential statistics were adopted to deduce the underlying features of the study variables (Saunders et al., 2012). Before regression analysis was done, the composite score of the dependent variable was computed. Thereafter a composite service delivery index (Y) will also be computed as follows:

First, the weights were assigned as follows based on the GoK, (2018) guidelines on performance contracting.

Step 1: $Average_{1-4}$ = (achievement of Y1+Y2+Y3+Y4+Y5)/5

Table 3: Service Delivery Composite Index

Service Delivery Criteria Category	**Unit of measure**	**Weight**	**5 Year Achievements**					**Average**
			2014	**2015**	**2016**	**2017**	**2018**	
Customer satisfaction index	%	0.3						***Av1***
Implementation of' Service Delivery Charter	%	0.3						***Av2***
Application of Service delivery Innovation	%	0.2						***Av3***
Resolution of Public Complaints	%	0.2						***Av4***

Step 2: Multiply the weights with the averages for each Service Delivery Criteria Category i.e Customer satisfaction index (0.3*Av1); Implementation of Citizens' Service Delivery Charter (0.3*Av2); Application of Service delivery Innovation (0.2*Av3); Resolution of Public Complaints (0.2*Av4).

Step3: Composite Score = *(0.3*Av1 +0.3*Av2+0.2*Av3+0.2*Av4)*

After computing the composite score for the Service Delivery Index, inferential statistical tests will be conducted at 95 percent level of confidence to establish the relationship among the variables. This included Person's product moment coefficient correlation (r) and simple linear regression. Simple regression method was used to establish the effect of corporate IT strategy on service delivery of state corporations in Kenya

Table 4: Summary of Objectives, Hypotheses and Analytical Model

Objective	Hypothesis	Analytical model	Interpretation
To establish the effect of corporate IT strategy on service delivery of state corporations in Kenya;	H_1: There is no significant effect of corporate IT strategy on service delivery of state corporations in Kenya;	Simple Regression analysis $Y= \alpha +\beta_1 X_1 + \varepsilon$ Y= Service delivery α= constant (intercept) β_1= Coefficient parameters to be determined X= (Corporate IT strategy (Strategic alignment, Value creation, IT capability, Organizational efficiency and Competitive advantage), ε = Error term	R^2 depicts model fitness and explains the changes in dependent variable. $\beta_{1:}$ coefficient explaining the influence of a unit change in each of the corporate IT strategy constructs and on the service delivery. P-value, F-ratio and t-statistic explains the significance of the model constructs.

Source: Researcher, 2020

Discussion of the Results of Research and Findings

The state corporations that were studied manifested demographic profiles. The profile demographics that were considered in the study include category of State Corporation in terms of which sector it operates in, number of permanent and pensionable employees and year's organization has been in operation. These organization characteristics established in the study are given in subsequent sections.

Pre-testing for validity of the questionnaire initially involved a few respondents from the study population to improve the instrument. Randomly pilot testing eight managers from different departments of the firms to establish if the respondents could answer the responses carried out construct and criterion validity on the instrument. The final survey did not consider these pilot groups.

The study population comprised all 178 state corporations. These 178 institutions formed the target population for the study spread across the twenty ministries. The researcher distributed 178 questionnaires, out of which 120 responded positively by filling and returning the questionnaires. This represented an overall positive response rate of 67.4%. Table 5 give results for the response rate.

Table 5: Response Rate

Category	Questionnaires distributed	Questionnaires filled and returned	Percentage %
Respondents	178	120	67.4%

Source: Research Data, 2020

Response rate was 67.4%an outcome of 120 questionnaires filled and returned out of the 178 distributed. Mugenda and Mugenda (2003) and Saunders et al. (2007) suggest a 50% response rate is adequate, 60% good and above 70% very good.

Hypothesis Testing

This subsection presents the results of the tests for the hypothesis of the study which was formulated from the main research objective that sought to establish the effect of corporate IT strategy on service delivery of state corporations in Kenya. This objective was tested for through this hypothesis: H_1: There is no significant effect of corporate IT strategy on service delivery of state corporations in Kenya. Overall composite service delivery index was derived from the four perspectives of: implementation of service delivery charter, application of service delivery innovations, resolution of customer complaints and customer satisfactory index that were used to measure service delivery.

Table 6: Variables Entered/Removed on effect of corporate IT strategy on service delivery of state corporations in Kenya

Model	Variables Entered	Variables Removed	Method
	Effective Communication of the Corporate IT Strategy, Corporate IT Annual Implementation Plans, Existence of Corporate IT Strategy, Corporate IT Targets, Corporate IT Strategy Cross Functional Alignment, Corporate IT Target Improvements, Top Management Leadership, Level of Cascading of Corporate IT Strategy, Corporate IT Strategy Vertical Integration, Corporate IT Objectives, Configuration of IT Resources and Skills, Level of implementation of Corporate IT strategy	Nil.	Enter
a. Dependent Variable: Service Delivery			
b. All requested variables entered.			

Source: Research Data (2020)

From the findings on table 6, all the thirteen indictors of corporate IT strategy were included in the multiple regression analysis testing the effect of corporate IT strategy on service delivery of state corporations in Kenya. Further the model goodness of fit using the adjusted R^2 (coefficient of determinations) done in the next table.

Table 7: Model Goodness of Fit of on effect of corporate IT strategy on service delivery of state corporations in Kenya

Model	R	R2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
	.793[a]	.629	.587	2.71033	1.894
a. Predictors: (Constant), Effective Communication of the Corporate IT Strategy, Corporate IT Annual Implementation Plans, Existence of Corporate IT Strategy, Corporate IT Targets, Corporate IT Strategy Cross Functional Alignment, Corporate IT Target Improvements, Top Management Leadership, Level of Cascading of Corporate IT Strategy, Corporate IT Strategy Vertical Integration, Corporate IT Objectives, Configuration of IT Resources and Skills, Level of implementation of Corporate IT strategy					
b. Dependent Variable: Service Delivery					

Source: Research Data (2020)

As presented in Table 7, 58.7% (Adjusted R^2 = 0. 587) of variations in the service delivery is explained by variations in corporate IT strategy namely Effective Communication of the Corporate IT Strategy, Corporate IT Annual Implementation Plans, Existence of Corporate IT Strategy, Corporate IT Targets, Corporate IT Strategy Cross Functional Alignment, Corporate IT Target Improvements, Top Management Leadership, Level of Cascading of Corporate IT Strategy, Corporate IT Strategy Vertical Integration, Corporate IT Objectives, Configuration of IT Resources and Skills and Level of implementation of Corporate IT strategy. Thus, corporate IT strategy is a good predicator of service delivery of state corporations in Kenya.

Table 8 presents that the model is statistically significant in explaining the effect of corporate IT strategy on service delivery of state corporations in Kenya, F (12, 107) = 15.121, P=0.000.

Table 8: Model Overall Significance (ANOVA[a]) on effect of corporate IT strategy on service delivery of state corporations in Kenya

Regression Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1332.917	12	111.076	15.121	.000[b]
	Residual	786.009	107	7.346		
	Total	2118.926	119			
. Dependent Variable: Service Delivery						
b. Predictors: (Constant), Effective Communication of the Corporate IT Strategy, Corporate IT Annual Implementation Plans, Existence of Corporate IT Strategy, Corporate IT Targets, Corporate IT Strategy Cross Functional Alignment, Corporate IT Target Improvements, Top Management Leadership, Level of Cascading of Corporate IT Strategy, Corporate IT Strategy Vertical Integration, Corporate IT						

Objectives, Configuration of IT Resources and Skills, Level of implementation of Corporate IT strategy

Source: Research Data (2020)

As presented in Table 8, using standardized coefficients: existence of corporate IT strategy has a weak positive effect on service delivery (β= 0.097, t= 1.227, P=0.223>0.05); corporate IT objectives has a weak positive effect on service delivery (β= 0.093, t= 1.151, P=0.252>0.05); corporate IT targets has a weak positive effect on service delivery (β= 0.065, t=.831, P=0.408>0.05); corporate IT target improvements has a weak positive effect on service delivery (β= 0.159, t= 2.099, P=0.038<0.05); corporate IT annual implementation plans has a strong positive effect on service delivery (β= 0.024, t=.321, P=0.749>0.05); level of cascading of corporate IT strategy has a weak positive effect on service delivery (β= 0.242, t= 3.173, P=0.002<0.05); corporate IT strategy vertical integration has a strong positive effect on service delivery (β= 0.023, t=0.292, P=0.771>0.05); corporate IT strategy cross functional alignment has a weak negative effect on service delivery (β= -0.069, t= -0.800, P=0.425>0.05); level of implementation of corporate IT strategy has a strong positive effect on service delivery (β= 0.232, t= 2.621, P=0.010<0.05); top management leadership has a weak negative effect on service delivery (β= -0.035, t= -0.409, P=0.683>0.05); configuration of IT resources and skills has a strong positive effect on service delivery (β= 0.245, t= 2.987, P=0.003<0.05); and effective communication of the corporate IT strategy has a weak positive effect on service delivery (β= 0.081, t= 1.064, P=0.290>0.05).

Table 9: Regression Coefficients of the effect of corporate IT strategy on service delivery of state corporations in Kenya Model coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	39.398	2.048		19.238	000	35.338	43.457		
Existence of Corporate IT Strategy	.728	.593	.097	1.227	223	-.448	1.903	.553	1.807
Corporate IT Objectives	.702	.610	.093	1.151	252	-.507	1.910	.528	1.894
Corporate IT Targets	.406	.488	.065	.831	408	-.562	1.373	.558	1.793
Corporate IT Target	1.088	.518	.159	2.099	038	.061	2.115	.602	1.661

Improvements									
Corporate IT Annual Implementation Plans	.168	.524	.024	.321	749	-.871	1.208	.611	1.637
Level of Cascading of Corporate IT Strategy	1.903	.600	.242	3.173	002	.714	3.091	.597	1.675
Corporate IT Strategy Vertical Integration	.164	.562	.023	.292	771	-.949	1.278	.581	1.721
Corporate IT Strategy Cross Functional Alignment	-.524	.655	-.069	-.800	425	-1.822	.774	.472	2.119
Level of implementation of Corporate IT strategy	1.742	.665	.232	2.621	010	.424	3.059	.442	2.264
Top Management Leadership	-.247	.603	-.035	-.409	683	-1.443	.949	.475	2.105
Configuration of IT Resources and Skills	1.916	.641	.245	2.987	003	.644	3.187	.513	1.948
Effective Communication of the Corporate IT Strategy	.579	.544	.081	1.064	290	-.499	1.656	.600	1.668
. Dependent Variable: Service Delivery									

Source: Research Data (2020)

The relationship derived on the effect of corporate IT strategy on service delivery of state corporations in Kenya is statistically significant.

The regression equation derived was thus as follows:

Service Delivery (Y) = 0.097 *Existence of Corporate IT Strategy* + 0.093 *Corporate IT Objectives* + 0.065 *Corporate IT Targets* + 0.159 *Corporate IT Target Improvements*

+ 0.024 *Corporate IT Annual Implementation Plans* + 0.242 *Level of Cascading of Corporate IT Strategy* + 0.023 *Corporate IT Strategy Vertical Integration* - 0.069 *Corporate IT Strategy Cross Functional Alignment* + 0.232 *Level of implementation of Corporate IT strategy* - 0.035 *Top Management Leadership* + 0.245 *Configuration of IT Resources and Skills* + 0.081 *Effective Communication of the Corporate IT Strategy*

The results of the beta coefficient showed that a unit increase in the existence of corporate IT strategy will cause a 0.097 positive effect on service delivery (β= 0.097, t= 1.227, P>0.223); a unit increase in corporate IT objectives will cause a 0.093 positive effect on service delivery (β= 0.093, t= 1.151, P>0.252); a unit increase in

corporate IT targets will cause a 0.065 positive effect on service delivery (β= 0.065, t=.831, P>0.408); a unit increase in corporate IT target improvements will cause a 0.159 positive effect on service delivery (β= 0.159, t= 2.099, P>0.038); a unit increase in corporate IT annual implementation plans will cause a 0.024 positive effect on service delivery (β= 0.024, t=.321, P>0.749); a unit increase in level of cascading of corporate IT strategy will cause a 0.242 positive effect on service delivery (β= 0.242, t= 3.173, P>0.002); corporate IT strategy vertical integration will cause a 0.023 positive effect on service delivery (β= 0.023, t=0.292, P>0.771); a unit increase in corporate IT strategy cross functional alignment will cause a 0.800 negative effect on service delivery (β= -0.069, t= -0.800, P>0.425); a unit increase in level of implementation of corporate IT strategy will cause a 0.232 positive effect on service delivery (β= 0.232, t= 2.621, P>0.010); a unit increase in top management leadership will cause a 0..35 negative effect on service delivery (β= -0.035, t= -0.409, P>0.683); a unit increase in configuration of IT resources and skills will cause a 0.245 positive effect on service delivery (β= 0.245, t= 2.987, P>0.003); and a unit increase in effective communication of the corporate IT strategy will cause a 0.081 positive effect on service delivery (β= 0.081, t= 1.064, P>0.290).

Moreover, the effect of corporate IT strategy on service delivery of state corporations in Kenya was statistically significant. This implies, overall, effect of corporate IT strategy is a good predictor of service delivery in state corporations in Kenya. The findings therefore confirms alternate hypothesis one (i) that there is a significant effect of corporate IT strategy on service delivery of state corporations in Kenya. The null hypothesis H_{O1} is therefore rejected.

Discussion

Objective sought to establish the effect of corporate IT strategy on service delivery of state corporations in Kenya. The results indicate that there is a strong association between corporate IT strategy and service delivery. The overall model was statistically significant suggesting that the influence of corporate IT strategy on service delivery of state corporations in Kenya was statistically significant. This implies, overall, corporate IT strategy is a good predictor of service delivery.

The study findings supports Fourth Industrial Revolution Theory which argues that strategic technological improvements cannot prevail without incorporating quality user-friendly technologies and well IT versed management team to support the diffusion of service delivery oriented ideas and that the use of IT and innovation in organizational processes has been felt by improved firm performance characterized with customer value creation and better competitive service delivery processes (Bon & Mustafa, 2013; Chou, Chuang & Shao, 2014; Valentine & Stewart, 2013). As result of this competitive edge, service innovation, superior customer satisfaction and retention can be enhanced by applying radical use of intangible resources to ensure modern based service delivery (Blazevic & Lievens, 2008; Danjum & Rasli, 2012; Verma & Jayasimha, 2014).

Other empirical studies are also supported by the findings of this study. Yayla and Hu, (2014) concludes that corporate IT strategy play a major role in organizational changes through enhancing business processes that leads to lead to value creation that spin around cost reduction, efficient and effective business processes thus improved firm performance and competitive edge. Arvidsson et al., (2014) also discussed that

firms felt the need to strategically align IT and organizational processes to enhance strategic planning, decision- making processes, value creation and competitive advantage. Owing to the crucial role of corporate IT strategy in enhanced organizational processes, it is not clear how it directly supports service delivery.

Further to that, Khalid, (2010) identified that new technologies can continuously enhance customer focused services at an effective cost. A study by Beatson and Coote (2007) advanced that the advent and utilization of IT has shown that service delivery processes can be influenced by the involvement of top management and continuous use of new technologies. They further argue that the need for the management to embrace IT has led to service-driven Strategic decisions that are likely to foster a successful economic management excellence and attainable strategies.

Conclusions

The study concludes that there is a statistically significant effect of corporate IT strategy on service delivery of state corporations in Kenya, $F(12, 107) = 15.121$, $P<0.05$; (Adjusted $R^2 = 0.587$) 58.7% of variations in the service delivery is explained by variations in corporate IT strategy.

Contributions of the Study Findings

The findings contributes in the study of corporate IT strategy and service delivery by decomposing corporate IT strategy into indexes of Implementation of Service Delivery Charter, Service Delivery Innovations, Resolution of customer Complaints and Customer satisfaction index which were found to have statistically significant effects. Based on the results of this study, the government through relevant ministries and other stakeholders in the state corporations sector should develop appropriate policies in an attempt to organize the IT applications to enable investor's and regulatory bodies get access to information pertaining how to improve their ability to perform as well as give quality services. The study concurred with the diffusion of innovation theory and fourth industrial revolution theory in that firms need to embrace technological advancements by strategically investing on superior IT strategies, resources and competencies to enable them add value to service delivery processes.The study shall guide managerial practitioners in the state firms to appreciate the integration of the various service delivery factors in the face of a challenging economic environment, and management of firm core processes in order to support the economy.

Limitations of the Study

The unit of analysis was 178 operational state corporations which are unevenly distributed all over the nation thus made the research cumbersome. Not only that but also the regular and continuous merging of the corporations to suit the emerging dynamic customer needs also delayed responses. Also, distributing one questionnaire in each corporation didn’t capture rich knowledge from diverse experiences on IT strategies and service delivery practices and processes.

Suggestions for Further Studies

Future researchers could consider using other popular measures of service delivery like availability of services and improved processes.This study can be replicated in other sectors like private or even corporations listed at NSE. Further, it would be of value for the study to be done on factors influencing service delivery like organizational efficiency may also be important to evaluate the effect of the regulator's potential to give regulations that enhance efficiently.

References

Abdi, Mohammed & Dominic P.D.D. (2010). "Strategic IT Alignment with Business Strategy: *Service Oriented Architecture Approach*." IEEE 579-1-5844.5873.

Abiodun, A. J. (2008). Customer service in the retention of mobile phone users in Nigeria. *African Journal of Business Management*, 2(2), 26-31.

Arvidsson, V., Holmström, J., & Lyytinen, K. (2014). Information systems use as strategy practice: A multi-dimensional view of strategic information system implementation and use. *The Journal of Strategic Information Systems*, 23(1), 45-61.

Beatson A, Lee N & Coote LV. (2007). Self-Service Technology and the Service Encounter. *ServiceIndustries Journal* 27(1): 75-89.

Bilge, O., Gulsen, A. K., Senay, C. D., & Savas, A., (2011), Multivariate methods for ground-level ozone modeling. *Atmospheric Research*. 102, 57-65.

Blazevic, V., & Lievens, A. (2008). Managing innovation through customer coproduced knowledge in electronic services: an exploratory study. *Journal of the Academy of Marketing Science*, 36(1), 138-151.

Bomett, E. J. (2015). Performance Contracting in Kenyan Public Universities; Implementation issues and strategies. *British Journal of Education.*

Bon, A. T., & Mustafa, E. (2013). Impact of Total Quality Management on Innovation in Service Organizations: Literature Review and New Conceptual Framework. *Procedia Engineering*, 53, 516-529.

Bryman, A. & Bell, E. (2011) *Business Research Methods.* 3rd ed. Oxford et al.: Oxford University Press.

Brynjolfsson, E., & McAfee, A. (2014). *The second machine age*: work, progress, and prosperity in a time of brilliant technologies. New York: W. W. Norton & Company Burns, R. P., & Burns, R. (2008). *Business Research Methods and Statistics Using SPSS*: SAGE Publications.

Chou, Y.-C., Chuang, H. H.-C., & Shao, B. B. M. (2014). The impacts of information technology on total factor productivity: A look at externalities and innovations. *International Journal of Production Economics*, 158, 290-299.

Collins, H. (2010) "Creative Research: The Theory and Practice of Research for the Creative Industries" *AVA Publications*.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.

Danjum, I., & Rasli, A. (2012). Imperatives of service innovation and service quality for customer satisfaction: Perspective on higher education. *Procedia-Social and Behavioral Sciences*, 40, 347-352.

Field, A. P. (2005). *Discovering Statistics Using SPSS*, Sage Publications Inc.

Ford, M. (2015). *Rise of the robots technology and the threat of a jobless future*. New York: Basic Books.

Frey, C. B., & Osborne, M. A. (2013). *The future of employment: How susceptible are jobs to computerization?* Oxford Martin School. Oxford, UK.

GoK, (2003). Economic Recovery Strategy for Wealth and Employment Creation. Nairobi: *Government Printer*. *Higher education institutions in Kenya*, Kenya Education Network (KENET).

Hjørland, B. (2005). Empiricism, rationalism and positivism in library and information science. *Journal of Documentation*, *61*(1), 130-155.

Huck, S. W. (2007). *Reading Statistics and Research*, United States of America, Allyn & Bacon

Jensen D.R., & Ramirez, D.E. (2013). *Revision: Variance inflation in regression*, Advances in Decision Sciences. 2013, 1–15.

Kamel, M., & Lloyd, C., (2015). Response Rates in Business and Management Research: An Overview of Current Practice and Suggestions for Future Direction. *British Journal of Management*, Vol. 27, 426–437.

Kashorda, M., Waema, T.M., Omosa, M., and Kyalo, V. (2007), *E-readiness survey of*

Khalid, S. A. (2010). Improving the Service Delivery: A Case Study of a Local Authority in Malaysia. *Global Business Review*, 11 (1), 65-77.

Kräftner, D., (2006). *Information System Strategy*-Bournemouth University.

Magutu, P. O., Lelei, J. K., & Borura, C. M. (2010), *Information Systems Implementation in State Corporations*: A Critical Evaluation of the Process and Challenges in Kenyan Parastatals.

McAfee, A.,& Brynjolfsson, E. (2008).Investing in the IT that makes a competitive difference. Harvard Business review, July-August, 1-11.

Miring'u, R. & Muoria. E T. (2012). An analysis of the effect of Corporate Governance onPerformance of Commercial State Corporations in Kenya. *International Journal of Business and Public Management*, 1(1): 36-41.

Mugenda, O. M & Mugenda, A.G. (2003). *Research methods: Qualitative and qualitative approaches*. African Centre for Technology Studies Nairobi, Kenya.

Mulili,B.M & Wong,P.(2011). Corporate governance practices in developing countries: The case for Kenya. *International Journal of Business Administration*, vol 2(1).

Muthaura, F. (2007). *Performance Contracting in Kenya; Restoring Faith in Government through Innovation to Promote Quality of Public Service.* Nairobi, Government Printer.

Ndonga, D., (2015), *Single Windows and Trade Facilitation*: *A Tool for Development*, Wolters Kluwer.

Njuru, J. (2011). Implication of e-government on public policy and challenges of adopting technology: the case of Kenya. *Journal of Global Affairs and Public Policy* 1(1) (pp. 2-20).

Ochieng, E. O. (2010). *Public Sector Reforms & Performance Contracting*: A Case study of Kenya.

Parahoo, K. (2014). *Nursing research: principles, process and issues:* Palgrave Macmillan.

Peppard, J., Galliers, R. & Thorogood, A.(2014). Information systems strategy as practice: Micro strategy and strategizing for IS. *Journal of Strategic Information Systems*, 23(1), 1-10.

Robinson, J. (2009). *Triandis theory of interpersonal behaviour in understanding software privace behaviour in the South African context*. Master‟s degree, University of the Witwatersrand

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students* (6 ed.): Pearson

Schwab, K. (2016). *The fourth industrial revolution*. New York: Crown Business.

Straub, D., Boudreau, M.-C. & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13, 380-427.

Thompson, H. (2007), Crafting and Executing Strategy: Text and Readings. 15th edition, McGraw Hill Companies, New York.

Toomey, M. (2009).Waltzing with the Elephant: *A comprehensive guide to directing and controlling information technology*. Australia: Infonomics.

Valentine, E. L. H.,& Stewart.(2013).The emerging role of the Board of directors in enterprise business technology governance. *International Journal of Disclosure and Governance*, 10(4), 346-362.

Verma, R., & Jayasimha, K. R. (2014). Service delivery innovation architecture: An empirical study of antecedents and outcomes. *IIMB Management Review*.

Yayla, A. A., & Hu, Q. (2014).The effect of Board of directors‟ IT awareness on CIO compensation and firm performance. *Decision Sciences*, 45(3), 401-435.