

THE EFFECT OF INFORMATION QUALITY ON THE RELATIONSHIP BETWEEN CORPORATE INFORMATION TECHNOLOGY STRATEGY AND SERVICE DELIVERY OF STATE CORPORATIONS IN KENYA

¹Kepha Nyakora Getembe, ²Peterson Obara Magutu, ³Kate O. Litondo

¹ Postgraduate Student, Department of Management Science, University of Nairobi, Nairobi, Kenya - kgetembe@yahoo.com
^{2 &3}Department of Management Science, University of Nairobi, Nairobi, Kenya

Date Received	Date Accepted
29/09/2023	05/02/2024

Abstract

The study sought to establish the moderating effect of information quality on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The unit of analysis was 178 state corporations in Kenya. Descriptive methods were used to collect and analyze data on the study variables. Structured questionnaire was used to collect primary data while secondary data was collected from annual performance reports of the state corporations. Out of 178targeted response only 120 positively responded making an adequate response rate of 67.4% for investigation. The analysis established that 68.2% of changes in service delivery were accounted for the changes in information quality, corporate IT strategy and interaction term. In conclusion this study found statistically significant effect of information quality on the relationship between corporate information Technology and service delivery of state corporations in Kenya. The findings of this study added to the body of knowledge in the area of service delivery of state corporations by emphasizing on information quality and corporate IT strategy. On the basis of these findings it is important that national government to develop appropriate policies to support corporate information quality that is embedded on new technologies to foster customized services for profitability and growth.

Keywords: Corporate Information Technology strategy, Information Quality, Service Delivery, State Corporations and Kenya:

Introduction

Organizations in the global market have realized that credible internal operations are likely to prosper if the senior leadership unconditionally adopts competitive а corporate IT strategy. The rapid economic and technological advancements, remains major reason business entities heavily depend on responsive and efficient information technology (IT) for excellent customized outcomes [1]. Organizational systems and all activities undertaken interlink with a reliable system and knowledgeable human IT resources to facilitate efficient processing and sharing quality information with their clients. The establishment of a lean and effective communication in any given organization requires a well-interrelated and inseparable information quality and systems towards service delivery improvements [2]. The study was anchored in the Fourth Industrial Revolution Theory and Diffusion of Innovation Theory. The fourth industrial revolution theory, explains that there is growth in technology and economy due to the shift from mechanical to digital production and this has led to timely and efficient outputs [3]. On the hand diffusion of Innovation (DoI) Theory, compliments same proposition that all new innovations and ideologies penetrates through various parts of an organization over a particular period of time through systemized communication [4]. Quality and friendly technologies, has made organizations to aim at value added services for competitive positioning against rivalry firms in the same business.

The study was carried out in state corporations regulated by the government of Kenya [5]. State corporations in manufacturing, energy, health, education, transport, infrastructure and agriculture plays a significant role in improving the livelihood of Kenyan citizens [6]. Further the corporations act as source of employment, innovation hubs as well value adder in the economic growth of the country [7]. Key roles of state corporations require that effective application of corporate IT strategy, ITG and information quality for efficient service delivery. Enormous losses, corruption and misuse of public resources has resulted from lack of sufficient IT strategies, insufficient funding of the state corporations [7].

Research Problem

The value of corporate IT strategy has been magnified in line with the need for digitalization of organizational processes and creating new business models that can enable customized commodities and services [8]. It is also a sound concern that an effective corporate IT strategy enables profitability, growth, networking and competitive

sustainability of organizations [9]. Successful firms that enjoy operation excellence and superior performance have integrated and interconnected their processes with a formidable IT strategy [1]. However, the quest for quality and satisfactory services by clients from state corporations remains complex issue which continues to preoccupy scholars and practitioners globally. Service delivery is key to any sector which aspires to be competitive. To achieve this, corporate governance leadership must devise IT strategy and service delivery enhancement techniques with customer friendly environment [10]. Kenyan state corporations are created with the vital role of fulfilling government responsibilities and designing policies on how to enhance service delivery to the public [7]. However, [11] noted that citizens are more concerned with the poor services and performance they get from state corporations. This failure can be attributed to using incompetent human resource, scarce IT resources, poor risk mitigation, corruption and mismanagement of funds. unfair promotions procurement to flawed

procedures [6]. Further, the potential of state corporations in Kenya in spurring the economy to greater levels has not been exploited since there are weak business models and strategies to enhance and implement quality products and services [12]. Consequently, there is need for an integrative knowledge model on how the government will turn the state corporations into innovation centers of economic and financial buoyancy by ensuring citizenry services.

This study strives to address a number of conceptual and contextual gaps that previous studies partly and scantly addressed. Conceptual gap on the effect of information quality on the association between corporate IT strategy and service delivery is not profound. Empirical review by, [13], [2] establishes that information quality is a major factor that defines the credibility of information systems that support informed organizational processes. Further. investigations by [14] adduced that information quality reflects IT leadership competency on valuable use of information systems for firm transformation and market leadership. [1], [15] noted that organizations align corporate IT strategy and business processes to enhance value delivery and competitive advantage. Other assertions depicts that service delivery is an outcome of higher management participation and motivated workers [16]. Besides that, studies have not shown the moderating effect of information quality on the relationship between corporate IT strategy and service delivery. On the contextual aspect, on the effect of information quality on the relationship between corporate IT strategy and service delivery of State Corporations in Kenya is not elaborate. Nevertheless, various Studies have been conducted on other fields to illustrate how public organizations strive to enhance service related practices. For

instance, Studies conducted by [11], [17] adduced that many corporations in Kenya have developed information systems to monitor and control service provision. Kenvan government had implemented some categories of systems such as Integrated Financial Management Information System support the management, planning, to budgeting of finances in public institution and eradicate funds misappropriation and embezzlement [18]. In addition, [19] indicated that in the last decade, Kenyan government has followed the innovation trends towards adopting E-government programs with the objective of enhancing free flow of information, enabling citizen to participate in public policy endeavors, promoting productivity among the civil servants, and improving the delivery of services to the public.

As a result of this, the current study sought to establish the effect of information quality on the relationship between corporate information technology strategy and service delivery of state corporations in Kenya. Thus, the study was directed by the following research question; Does information quality has an effect on the relationship between corporate IT strategy and service delivery of state corporations in Kenya?

Research Objectives

Specific objective of the study was to establish the effect of information quality on the relationship between corporate information technology strategy and service delivery of state corporations in Kenya.

Literature Review

Many studies have been conducted on information quality and how they can be conceptualized to realize organizational objectives however, on how information quality influences the relationship between corporate IT strategy and service delivery is not elaborate. For instance [13] in his study

that manv organizations found out continuously depend on information quality by deploying quality information systems and IT skilled human capita to hasten decision making processes, information sharing and effective strategic planning. The deploying of quality systems and IT leaders to enhance information quality has made organizations to reengineer their processes towards organizational transformation and superior competitive positioning [2]. Moreover, the critical role information quality plays to streamline organizational demands based on economic revolution, innovation and customer trends trigger the necessity for investing on credible and tailor made information technology [20].

Firms embrace corporate IT strategy to assess and make strategic decisions on benefits, cost implications, business risks and new opportunities arising from IT investments [20]. Corporate management level needs to provide profound mechanisms that integrate organizational strategies and objectives with processes, resources and information for achievable direction [21]. The complex operations of organizations call for overall alignment of management and governance processes with IT for efficiency and superior performance that is marked with minimal risks and costs [22].

Corporate IT strategy provides a road map on the use of IT in monitoring, evaluation and implementation of organizational plans and strategies by involving employees, IT and business executives [9]. As a matter of fact entities need to own meaningful communication of their IT strategy within and outside for informed and wellcoordinated processes and in time attainment of key objectives and goals [23]. Apart from that a usable information system should be in place to ensure crucial information is generated to foster decision making process on tactical planning towards friendly and acceptable services. The empirical literature reviews have varying discussions which dictates for a further probe on how information quality can moderate the relations between IT strategy and services offered in public organizations.

Proposition 1: The effect of information quality on the relationship between corporate IT strategy and service delivery

Autho r/Year	Focus	Findings	Research Gaps	Proposed Remedy
[9]	Information systems strategy, Journal of Strategic Information Systems	Strategic information technology support organizational efficiency and competitive advantage.	Much emphasis on competitive age as focus of corporate IT strategy but not on Service delivery.	There is need to empirically test the effect of information quality on the association between corporate IT strategy and service delivery.
[2]	Overview and framework for data and	Information quality enhances sharing of information , decision making	Not clear how information quality influences relationship between corporate IT	There is need to empirically test how information quality informs relationship between

 TABLE 1: Summary of Knowledge Gaps

	information quality research	process an networking	dstrategy delivery.	and service	corporate IT strategy and service delivery
[15]	Key issues for IT executives.	Corporate I strategy largel supports firr processes an strategies towards competitive positioning	Teffect yquality n n Id	of information ot emphasized	There is need to empirically test the effect of information quality on the relationship between corporate IT strategy and information quality
[10]	Empirical examination on Service quality in higher education	Service qualit measures information quality. H emphasized tha for qualit outputs to b realized, information systems need t be of value.	y Corporat which i consider at y e	te IT strategy s critical is not ed in the study	There is need to empirically test the link between corporate IT strategy and information quality

conceptual model that clearly show link of key study variables in a diagrammatic manner showing the presumed relationships that may exist from the review of literature and empirical reviews was established [24]. The above literature review leads to the conceptual framework as captured on the figure 1 below showing how information quality moderates between corporate IT strategy and service delivery.



Fig.1. Conceptual Model

Research Methodology

This chapter discussed the methodology that was used in the study. It covered research philosophy, research design, study population, data collection techniques, reliability and validitv measures. operationalization of the variables, analytical models and diagnostic tested employed.

The study adopted positivist approach as it allows for collection of quantitative data as well as testing the hypothesis formulated from the theories used [25]. Positivist approach allows researchers to be independent and cannot influence the study outcomes. Further, positivism allows for hypothesis testing and making independent conclusions based on the results of the study as opposed to epistemology approach which is concerned with building of theories [26]

The study used descriptive cross-sectional design since it allows the researcher to collect data across many variables at one point in time [27]. This design enabled the researcher to collect data on corporate IT strategy, IT governance, information quality and their individual and joint influence on service delivery of state corporations in Kenya. The design further enables the researcher to test the direction and magnitude of the association between the study variables [28].

Getembe et al

Due to the small size of the population, the study adopted a census survey [29]. In this research the unit of analysis was 178 State Corporations in Kenya drawn from 20 ministries (Appendix II). Presidential taskforce on state corporations reforms which was done in the year 2013 observed that economic dynamism and changes influenced government decisions to review, merge or

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

discontinue some corporations. A questionnaire was presented to every state corporation and it remained the prerogative role of the concerned to delegate or consult and provide relevant information [30]. Distribution of state corporations is presented in Table 2.

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

Table 2: Operational Classes of State Corporations

Data collection is the sequential method of gathering information on study variables in an established system to get complete and accurate picture of the area of research [31]. Collected data allows the researcher to evaluate results and answer research questions. Both first hand and documented data was gathered because they reinforce each other [30]. Primary data was collected with the help of research assistants by drop and pick method through administering structured questionnaire that comprised of closed and open-ended questions selfdesigned 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 [28].

Secondary data was collected for the financial periods 2013/14, 2014/15, 2015/16, 2016/17 1nd 2017/18 were from state corporation's annual evaluation reports and annual performance contract reports.

Reliability test was conducted to measure the consistencv internal of the research instrument [32]. The study used Cronbach alpha coefficient with a range of zero to one, that is, below 0.5 to be low, 0.5- 0.7 moderate, 0.7-0.9 high and \geq 0.9 as excellent [33], [34]. This study adopted a Cronbach alpha coefficient of ≥ 0.7 . The study further conducted validity test to ensure that the research instrument was both reliable and valid [35]. Validity test ensured that the research instrument measured what it was intended to measure [36]. Validity test

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

indicates the level of accuracy the researcher anticipates from the measurements [37]. It epitomizes the view that an instrument should provide results precisely to measure the intended objective, thus, enables the researcher to hit a bulls' eye of the objective in the interest of the population of the study in general [27].

Validity test measured both content and construct validity for the variables in the study [38]. Pretest was done to ensure that the

questionnaire was relevant and respondents understood the questions as they were intended to. This test was further done to improve on the accuracy of the results. The questionnaire was pre-tested to ascertain their relevance to the study to ensure accurate results. The study tested and retested the questionnaire to achieve content validity while construct validity was done through the operationalization of the study variables.

Variable	Operational Indicators	Operational Definition	Supporting Literature	Rating measure
Corporate IT Strategy	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	[1]	5-point Likert type scale
ent Variable)	Existence of corporate IT objectives	This is clear definition of corporate IT objectives	[1]	5-point Likert type scale
	Corporate IT target	These are short term IT objects that are derived from main IT objectives which are meant to be achieved within a short period , like	[8]	5-point 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	[8]	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	[8]	5-point Likert type scale
	Corporate IT implementation plan	This is a roadmap put in place to guide ideal execution of IT	[15]	5-point Likert type scale

TABLE 3: operationalized Study variables

Variable	Operational Indicators	Operational Definition	Supporting Literature	Rating measure
		strategic plan to achieve overall goals and strategies		
	Level of cascading IT strategy	This is a strong and consistent leadership on the follow through of the IT strategy	[1]	5-point Likert type scale
IT strategy vertical integration IT strategy cross functional alignment Level of implementation Top management leadership		This is IT strategy in place by top leadership to support control of IT value chains	[23]	5-point Likert type scale
		This is collaborating IT strategy across functional planning processes	[23]	5-point Likert type scale
		This defines turning IT strategy into actions at all levels of management to accomplish overall goals and objectives.	[9]	5-point Likert type scale
		These are the overall management team that are deeply committed to the purpose, strategies, objectives and goals of state corporations	[9]	5-point Likert type scale
	Configuration of IT resources and skills	This a process of establishing and maintaining consistency performance of IT resources and skills throughout the SCs in Kenya	[9]	5-point 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	[9]	5-point Likert type scale
Informatio n Quality (Moderati	Contextualizing information quality; (reliability, usability, correctness, appropriate	This is the process of putting into use meaningful information based on that is complete, worthy, enough and easily interpreted for useful strategic results.	[2]	5-point Likert type scale

Variable	Operational	Operational Definition	Supporting	Rating
	Indicators		Literature	measure
ng Variable)	amount, understandable, safety)			
	Operationalizing data quality;(Complete ness, Timeliness, Accuracy, Consistency)	This is the processes of collecting and defining data quality that will be used to timely produce accurate, complete and uniform data information fit for use	[15]	5-point Likert type scale
Information quality rating – based on assessment of		This is the measure of the value of information in relation to available information systems	[15]	5-point Likert type scale
	information systems			
Service Delivery	Customer satisfaction index	This a measure to what extent services offered meet and surpass customer expectation	[16]	Ratio
(Dependen t variable) Implementation of Service Delivery Charter		This is putting into action what is documented on the customer service charter in all levels of management	[10]	Ratio
	Application of Service delivery Innovation	Is the process of putting resources into innovative services that will enhance customer satisfaction	[16]	Ratio
	Resolution of customer Complaints	Means by which SC manage customer complaints to mitigate shattering growth and profitability of the SCs	[10]	Ratio

This study is social science based, thus, there are high changes of nonlinear relationship amongst the variables [39]. The study therefore tested the assumption of linearity using scatter plot. [40] Showed that both numerical and graphics could on its own provide decisive evidence of normality. It was on this basis that the study carried out both graphical and numerical tests (skewness and kurtosis) of the data for each variable to evaluate the assumption of normality. The study used descriptive analysis such as mean

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

and standard deviation to present the data in meaningful way.

High correlation between independent variables causes the results of the model to be either over estimated or under estimated. Assumption of multi-collinearity was conducted using variance inflation factor (VIF), tolerance and condition index (CI). The bench marks used were VIF<5, tolerance >0.2 and CI>30 for non-existence of multicollinearity. Homoscedasticity which refers to constant variance of error was tested using Levene's test. The study adopted Pvalue>0.05 to indicate homoscedasticity, otherwise p-value <0.05 would result in heteroscedasticity. Existence of heteroscedasticity weakens the analysis with the end results being type I error [41]

The study used descriptive and inferential statistic in carrying out the analysis [42]. Descriptive statistics were used to present the basic outcomes of the variables in terms of frequencies, mean and standard deviation. Inferential statistics was used to carrying out regression analysis and testing of the hypothesis. Composite indices (average) for each variable were computed to allow for the running of regression models. For service delivery, composite index was calculated in three steps as indicated in table 4.

Service Delivery Crite	eriaUnit of	Unit of Weigh 5 Year Achievements				Average		
Category	measur e	t	2014	2015	2016	2017	2018	-
Customer Satisfaction Inc	lex %	0.3						Av1
Implementation of" Serv Delivery Charter	vice%	0.3						Av2
Application of Serv delivery Innovation	vice%	0.2						Av3
Resolution of Pul Complaints	olic%	0.2						Av4

TABLE 4: C	Composite	Index for	Service	Delivery

In step one; the five financial years achievement were added together for each indicated and the sum divide by five to get the average

In step two; the weight for each indicator was multiplied by the corresponding average obtained in step one, that is, 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

In step three; composite index was computed by summing the results obtained in step two composite index = 0.3*AV1 + 0.3*AV2 +0.2*AV3 + 0.2*AV4

The study used the composite index to conduct the test at 5 percent significance

level (95 percent confidence level). Step wise regression analysis was conducted to test the moderating effect of information quality on the relationship between corporate IT and service delivery amongst state corporations in Kenya.

Objective	Hypothesis	Analytical model	Interpretation
To establish the	H ₁ : Information	Stepwise Regression Analysis	R ² for goodness of fit
effect of	quality has no	$Y_{r} = \alpha + \beta_1 X_1 + \epsilon$	of the model.
information	significant		β_1 β_2 & β_3 are
quality on the	moderating effect	$W = \alpha + \beta_1 X_1 + \varepsilon$	regression coefficient
relationship	on the relationship	$Y_6 = \alpha + \beta_1 W + \epsilon$	(elasticity).
between	between Corporate	$V_{7} = \alpha + \beta 1 X_{1} + \beta_{2} W + \beta_{2} X W$	Eratio for overall
Corporate 11	11 strategy and	$+\epsilon$	significance
sualegy and	state corporations		Significance
of state	in Kenva	α =constant (intercept)	t-test for individual
corporations in	in renyu	$\beta_{1,}\beta_{2,}$ = coefficients	significance
Kenva		X ₁ = corporate IT strategy Y ₅	P-value<0.05 depict
5		Y_6 and $Y_{7=}$ service delivery	significance
		M = information quality	relationship
		vv – mormaton quanty,	
		ε= Error term	

Data Analysis And Findings Table 6: Target Population

State Corporations Category	Target	Response/ Frequency	Percentage	Rank
Public Universities	32	28	23	1
Commercial & Manufacturing	34	24	20	2
Regulatory	31	21	18	3
Financial	18	13	11	4
Service Corporations	26	11	9	5
Tertiary Education & Training	11	9	8	6

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

Regional	12	6	5	7
Development				
Training and Research	14	8	7	8
Total	178	120	100	

Target population for the study was made up of 178 state corporations distributed across the twenty ministries in the national government of Kenya. Out of 178 questionnaires distributed, 120 were returned representing a response rate of 67.4 percent. [27], [30] suggested that a response rate of 50 percent is adequate, 60 percent good and above 70 percent very good. A response rate above 50 percent is acceptable for social science studies [36].

Thus, the study response rate of 67.4 percent was considered good and adequate for further analysis

Years in Operations	Descriptive	Descriptive				
	Frequency (N)	Percentage (%)				
50 years and above	28	23.3	1			
41-50 years	20	16.7	2			
31-40years	19	15.8	3			
21-30 years	19	15.8	4			
11-20 years	18	15.1	5			
6-10 years	16	13.3	6			
Total	120	100				

Table 7: Years in Operations

As shown in table 7, most (23.3 percent) of the state corporations have been in operations for more than 50 years. This was followed by 16.7 percent having been in operation for 41-50 years, 15.8 percent in operation for 31-40 years and the least at 13.3 percent having been in operation for a period of 6-10 years. Most SC with longer years of operations implied that they have embraced information technology as a cost cutting measures due to the changes in the business environment and thus, have put in place IT strategies to enhance service delivery.

Classification on area of operation is important in this study as it shows the linkage between area of operation and IT strategy. Respondents were required to indicate their respective areas of operations. The results are presented in in the table below.

Table 8: Operational Area

Operational Area	Frequen	Percentage	Rank
	cy (N)	(%)	
Customer Care Service Department	27	22.5	1
ICT Department	24	20.0	2
Finance and Accounting Department	22	18.3	3
Risk Management Department	18	15.0	4
Sales and Marketing	17	14.2	5
Operations Department	12	10.0	6
Total	361	100	

Table 9: Level of Management

Management Level	Descriptive		Rank
	Frequency (N)	Percentag e (%)	
Middle Management	65	54.2	1
Top Management	32	26.7	2
Cadre Staff	23	19.2	3
Total	120	100	

As indicated in table 8, majority of the respondents works in customer care service department, followed by ICT department at 20 percent, finance and accounting department at 18.3 percent, risk management department at 15 percent, sales and marketing at 14.2 percent and operations department at 10 percent respectively. This shows that all the departments SC were represented in the study. It further calls for the analysis of the influence of IT strategies in the departments and how it improves service delivery.

The study further required respondents to indicate their level of management in their respective organizations on the categories of top management, middle management and cadre staff. Results are presented in Table 9. The findings in table IX showed that middle level management were the highest in the SC at 54.2 percent followed by top management at 26.7 percent and cadre staff at 19.2 percent amongst the respondents. The findings are in line with the strategic management thinking which put more emphasis on top and middle level management in terms of strategic making and implementation decisions of which service delivery is key.

This section presents the results of the study hypothesis in line with the study objective. The objective of the study was to establish the effect of information quality on the relationship between corporate IT strategy and service delivery of state corporations in

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

Kenya. The following hypothesis was formulated and tested;

between corporate IT strategy and service delivery of state corporations in Kenya.

Ho: Information quality does not significantly moderate the relationship

Table 10: Results of Moderating Effect of Information Quality on the Relationship BetweenCorporate IT Strategy and Service Delivery

Model	Variables Entered	Method
1	Configuration of IT Resources / Skills*Correctness of Information	
2	Corporate IT Targets	Stenwise (Criteria:
3	Level of cascading of Corporate IT Strategy	Probability-of-F-to-
4	Level of implementation of Corporate IT strategy	enter <= .050, Probability-of-F-to- remove >= 100)
5	Existence of Corporate IT Strategy	100).
6	Completeness of data	
7	Correctness of Information	

Table 10 indicated stepwise regression model best predicts the effect of information quality on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The model goodness of fit (Adjusted R2) are presented in Table11

Table 11: Goodness of Fit of Moderating Effect of Information Quality on the Relationship
between Corporate IT Strategy and Service Delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.658ª	.433	.428	3.19163	
2	.749 ^b	.561	.554	2.81892	
3	.787 ^c	.620	.610	2.63577	
4	.812 ^d	.659	.647	2.50786	
5	.823 ^e	.678	.663	2.44807	
6	.831 ^f	.691	.674	2.40906	
7	.837 ^g	.701	.682	2.37834	1.820
a. 1	Predictors	s: (Constant),	Configuration	of IT Resource	s/Skills*Correctness of Information

b. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information, Corporate IT Targets

c. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information, Corporate IT Targets, Level of Cascading of Corporate IT Strategy

d. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information,

Corporate IT Targets, Level of Cascading of Corporate IT Strategy, Level of implementation of Corporate IT strategy

e. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information,

Corporate IT Targets, Level of Cascading of Corporate IT Strategy, Level of implementation of Corporate IT strategy, Existence of Corporate IT Strategy

f. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information,

Corporate IT Targets, Level of Cascading of Corporate IT Strategy, Level of implementation of Corporate IT strategy, Existence of Corporate IT Strategy, Completeness of data

g. Predictors: (Constant), Configuration of IT Resources/Skills*Correctness of Information, Corporate IT Targets, Level of Cascading of Corporate IT Strategy, Level of implementation of

Corporate IT strategy, Existence of Corporate IT Strategy, Completeness of data, Correctness of Information

h. Dependent Variable: Service Delivery

The result in Table 11 indicated incremental values of the adjusted R2. The results revealed a good fit of the seven models. The seventh model had adjusted r² of 0.682. This implied that 68.2 percent of the variation in service delivery amongst state corporations are explained by the changes in information quality and corporate IT strategy leaving 21.8 percent unexplained (error term). Thus, both information quality and corporate IT strategy

are major determinants of service delivery in state corporations.

Overall model significance shows whether all the independent variables collectively statistically significantly influence the dependent variable. P-value< 0.05 indicates that the model is significant in overall. Results of overall significant of the models based on F ratio are presented in Table12

	Model	Sum of Squares	Mean Square	F	Sig.
	Regression	916.921	916.921	90.013	.000 ^b
1	Residual	1202.005	10.186		
	Total	2118.926			
	Regression	1189.208	594.604	74.828	.000 ^c

Table 12: ANOVAa

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

2	Residual	929.718	7.946		
	Total	2118.926			
	Regression	1313.039	437.680	63.000	.000 ^d
3	Residual	805.887	6.947		
	Total	2118.926			
	Regression	1395.648	348.912	55.476	.000 ^e
4	Residual	723.278	6.289		
	Total	2118.926			
	Regression	1435.719	287.144	47.913	.000 ^f
5	Residual	683.207	5.993		
	Total	2118.926			
	Regression	1463.123	243.854	42.018	.000 ^g
6	Residual	655.803	5.804		
	Total	2118.926			
	Regression	1485.396	212.199	37.514	.000 ^h
7	Residual	633.530	5.657		
	Total	2118.926			

The results in Table 12 revealed that computed F-rations are greater than 2 for all the seven models. Further the P-values for of the seven models are less than 0.05. This shows that each model was indeed significant. Having satisficed the first order condition of overall significance, the study moved to individual significance of the variables as shown in Table 13.

Table 13: Regression Coefficients

Model	Unstandardiz ed Coefficients		Standard ized Coefficie nts	Т	Sig.	Sig. 95.0% Confidence Interval for B			Collinearity Statistics	
	В	Std. Error	Beta			Lower Bound	Upper Bound	Toleran ce	VIF	
(Constant)	56.795	.936		60.66 8	.000	54.941	58.649			

	Resources, Skins Correctiess				5.400	.000	•/45	L.T.+.+.+	1.000	0
	of Information									
	(Constant)	51.087	1.278		39.96 0	.000	48.555	53.619		
2	Configuration of IT Resources/Skills*Correctness	.807	.091	.561	8.843	.000	.626	.988	.932	1.07 3
	of Information									
	Corporate IT Targets	2.300	.393	.371	5.854	.000	1.522	3.078	.932	1.07 3
	(Constant)	47.258	1.500		31.49 5	.000	44.286	50.230		
3	Configuration of IT Resources/Skills*Correctness of Information	.695	.089	.483	7.768	.000	.517	.872	.849	1.17 8
	Corporate IT Targets	1.843	.383	.298	4.813	.000	1.084	2.601	.858	1.16 6
	Level of Cascading of Corporate IT Strategy	2.127	.504	.270	4.222	.000	1.129	3.124	.800	1.24 9
	(Constant)	44.772	1.584		28.26 8	.000	41.635	47.910		
	Configuration of IT Resources/Skills*Correctness of Information	.612	.088	.425	6.945	.000	.437	.786	.792	1.26 3
4	Corporate IT Targets	1.420	.383	.229	3.711	.000	.662	2.177	.778	1.28 6
	Level of Cascading of Corporate IT Strategy	1.953	.482	.248	4.054	.000	.999	2.907	.792	1.26 2
	Level of implementation of Corporate IT strategy	1.702	.470	.227	3.624	.000	.772	2.632	.757	1.32 0
	(Constant)	43.294	1.648		26.26 3	.000	40.028	46.559		
	Configuration of IT Resources/Skills*Correctness	.582	.087	.404	6.709	.000	.410	.754	.778	1.28 5

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

	Corporate IT Targets	1.154	.387	.186	2.978	.004	.386	1.921	.723	1.38 3
5	Level of Cascading of	1.744	.477	.222	3.655	.000	.799	2.689	.770	1.29 9
	Corporate IT Strategy									5
	Level of implementation of Corporate IT strategy	1.441	.469	.192	3.070	.003	.511	2.371	.722	1.38 4
	Existence of Corporate IT Strategy	1.232	.476	.164	2.586	.011	.288	2.176	.700	1.42 9
	(Constant)	41.645	1.791		23.25 4	.000	38.097	45.193		
	Configuration of IT									
6	Resources/Skills*Correctness of Information	.545	.087	.379	6.267	.000	.373	.718	.749	1.33 6
	Corporate IT Targets	1.142	.381	.184	2.996	.003	.387	1.897	.723	1.38 4
	Level of Cascading of Corporate IT Strategy	1.641	.472	.208	3.478	.001	.706	2.576	.762	1.31 2
	Level of implementation of Corporate IT strategy	1.496	.463	.199	3.233	.002	.579	2.412	.720	1.38 8
	Existence of Corporate IT Strategy	1.047	.476	.140	2.198	.030	.103	1.991	.678	1.47 6
	Completeness of data	.904	.416	.123	2.173	.032	.080	1.729	.860	1.16 2
	(Constant)	43.59	2.02		21.57	.00	39.58	47.59		
	Configuration of IT Resources/Skills*Correctness of Information	.787	.149	.547	5.282	.000	.492	1.082	.249	4.01 4
	Corporate IT Targets	1.141	.376	.184	3.031	.003	.395	1.886	.723	1.38
	Level of Cascading of Corporate IT Strategy	1.551	.468	.197	3.314	.001	.624	2.479	.755	1.32 5
7	Level of implementation of Corporate IT strategy	1.512	.457	.202	3.311	.001	.607	2.417	.720	1.38 9
	Existence of Corporate IT Strategy	.988	.471	.132	2.096	.038	.054	1.922	.675	1.48 2
	Completeness of data	1.247	.446	.169	2.798	.006	.364	2.130	.731	1.36 8

	Correctness of Information	-1.577	.795	208	-1.984	.050	-3.153	002	.243	4.11 1
a. Dependent Variable: Service Delivery										

The predictive model using standardized coefficients was as follows;

Service Delivery (Y) = 0.547 Configuration of IT Resources/Skills*Correctness of Information + 0.184 Corporate IT Targets + 0.197 Level of Cascading of Corporate IT Strategy + 0.202 Level of implementation of Corporate IT strategy + 0.132 Existence of Corporate IT Strategy + 0.169 Completeness of data - 0.208 Correctness of Information

In model seven, corporate IT strategy (β = .184, p-value = 0.003<0.05), level of cascading corporate IT strategy (βbeta coefficient of the interaction term ($\beta = .197$, p-value = 0..1 < .05), level of implementation of corporate IT strategy (β = .202, pvalue=0.001<0.05), existence of corporate IT strategy (β = .132, p-value =0.038<0.05), completeness of data (β = .169, p-value = .006<.05) and correctness of information ($\beta =$.208, p-value = 0.05=0.05) shows that each independent variable was statistically individually significant.

The interaction term (configuration of IT resources /skill *correction of information) coefficient was 0.547. This means that for every one unit increase in interaction term. service delivery amongst state corporation's increases by 0.547 units holding other factors constant. The corresponding P-value = 0.000<0.05 indicated significant а relationship. Thus, information quality moderates the relationship between corporate IT strategy and service delivery in state corporations in Kenya.

The hypothesis that information quality does not significantly moderates the relationship between corporate IT strategy and service delivery in state corporations in Kenya was rejected. This implied that there exists enough evidence to show that information quality significantly moderates the relationship between corporate IT strategy and service delivery in state corporations in Kenya

Discussion of Findings

Main objective was to establish the effect of information quality on the relationship between Corporate IT strategy and service delivery of state corporations in Kenya. Results on the moderating effect of information quality on the relationship between corporate IT strategy and service delivery was computed using three steps which were all strong and significant, suggesting a moderating effect in model three after an interaction term is introduced. The value of the interaction term had a significant influence thus confirming a moderation and hypothesis therefore rejects the that Information quality has no significant moderating effect on the relationship between Corporate IT strategy and service delivery of state corporations in Kenya and supports alternative hypothesis that a moderation exit.

Corporate IT strategy provides a road map on the use of IT in monitoring and implementing organizational plans and strategies by involving employees, IT and business executives to deliver the mandate of the organization[9]. In fact entities need to own meaningful communication of their IT strategy within and outside for informed well-coordinated processes that supports attainment of their key objectives and goals. [13] Found out that many organizations continuously depend on information quality

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

by deploying quality information systems and IT leaders to hasten decision making processes, information sharing and effective strategic planning. The deploying of quality systems and IT leaders to enhance quality information has made organizations to reengineer their processes towards organizational transformation and superior competitive positioning.

Firms have designed corporate IT strategy to support their strategic decisions on benefits of investing on IT, cost implications and any business risks and the new opportunities arising from IT investments [20]. The corporate level also needs to provide profound mechanisms that integrate organizational strategies and objectives with processes, resources and information for achievable direction.

Summary of Findings

The study revealed that information quality and corporate IT strategy accounted for 68.2 percent of the variation in service delivery in State Corporation in Kenya. The model was significant in overall (F = 37.514, Pvalue<0.05). The interaction term, that is, configuration of IT resources / skill *correction of information (β = 0.547, Pvalue = 0.000<0.05) was significant.

Conclusions

The study concluded that information quality significantly moderates the relationship between corporate It strategy and service delivery of state corporations in Kenya.

Recommendations

Results of the study have addressed the key research gaps. Earlier literatures had not shown any elaborate studies on the effect of information quality on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The findings fit well with the current bundle of thoughts that useful information is pivotal in enhancing any corporate IT strategy on

service delivery improvement. In addition to that its prudent to note that the study underpinning theories that is; The fourth Industrial Revolution and Diffusion of innovation Theory both affirms that technological and economic growth need to penetrate in systems and levels of any firm. In fact diffusion of innovations need to be through capacity building in IT competencies, investing on user friendly modern technologies and research and development towards sustained competitive advantage.

The effects of information quality on the link between corporate IT strategies on service delivery as documented in the study can help investors and state corporations managers when determining factors that contribute mainly to service delivery in an optimal combination. Based on these available findings, investors can be guided on how to increase use of information quality to determine how Kenyan State corporations offer customized services.

Limitation of the Study

All 178 entities were included in the study having adopted census survey approach, this proved to be cumbersome. Firstly the state corporations are distributed all over the country and the continuous merging of the corporations to limit overlapping of duties delayed responses because of the in place restructuring. Also, one respondent from each corporation participated in data collection; this might have led to biased and inadequate information since not all staffs are well-versed with IT strategies and service delivery practices and processes.

Suggestions for Further Research

This study established that information quality has a significant moderating effect on the relationship between corporate IT strategy and service delivery of state corporations. There is need for further study

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

to empirically establish the mediating/intervening effect of information quality on the same relationship.

References

- V.Arvidsson,J. Holmström and K..Lyytinen , "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, 2014.
- S. E. Madnick, R. Y. Wang, Y. W Lee and H. Zhu, "Overview and framework for data and information quality research,"*A CM Journal of Data and Information Quality*, 1(1), 2:1– 2:22, 2009.
- C. B. Frey and M. A. Osborne, *The future of employment: How susceptible are jobs to computerization?* Oxford Martin School. Oxford, UK, 2013.
- E. M. Rogers, "Diffusion of Innovations," 5th Edition, Free Press, New York, 2003.
- GoK, "Economic Recovery Strategy for Wealth and Employment Creation," Nairobi: *Government Printer* 2003.
- F. Muthaura, "Performance Contracting in Kenya; Restoring Faith in Government through Innovation to Promote Quality of Public Service. Nairobi," Government Printer, 2007.
- R. Miring'u, and E T. Muoria, "An analysis of the effect of Corporate Governance on Performance of Commercial State Corporations in Kenya," *International Journal of Business and Public Management*, 1(1): 36-41, 2012.
- Abdi, Mohammed and P.D.D. Dominic, "Strategic IT Alignment with Business Strategy: Service Oriented Architecture Approach." IEEE 579-1-5844.5873. 2010.
- J. Peppard, R. Galliers and A.Thorogood, "Information systems strategy as practice: Micro strategy and strategizing for IS," *Journal of Strategic Information Systems*, vol.23(1), pp1-10, 2014.
- F. Khodayari, and B. Khodayari, "Service quality in higher education.," *Interdisciplinary Journal of Research in Business*, vol.1(9), 38-46, 2011.

- B.M. Mulili and P.Wong, "Corporate governance practices in developing countries: The case for Kenya," *International Journal of Business Administration*, vol .2(1), 2011.
- M. Kashorda, T.M. Waema, M. Omosa and V. Kyalo, "E-readiness survey of higher education institutions in Kenya," Kenya Education Network (KENET), 2007.
- A. Durcikova and P. Gray, "How Knowledge Validation Processes Affect Knowledge Contribution," *Journal of Management Information Systems* 25 (4), 81- 107. 2009.
- B. Otto, "Data Governance," Business and Information Systems Engineering, 3, 4, 241-244, 2011
- H. Thompson, "Crafting and Executing Strategy," Text and Readings. 15th edition, McGraw Hill Companies, New York, 2007.
- I. Danjum and A. Rasli), "Imperatives of service innovation and service quality for customer satisfaction: Perspective on higher education" *Procedia-Social and Behavioral Sciences*, 40, 347-352, 2012.
- P. O. Magutu, J. K Lelei and C. M. Borura, (), Information Systems Implementation in State Corporations: A Critical Evaluation of the Process and Challenges in Kenyan Parastatals, 2010.
- S. M. Waruinge, "Factors for IFMIS success in developing countries" Unpublished master's desertion, University of Nairobi, 2008.
- J.Njuru, "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, 2011.
- R.L.Martin, "The big lie of strategic planning, *Harvard Business Review*, January-February, 2014.
- C. Wilkin, and R. Chenhall, "A review of IT governance: A taxonomy to inform accounting information systems," *Journal of Information Systems*, 24, 107-146, 2010.
- G.B. Adaba, & L. Rusu, "IT Governance Practices in a Public Sector Organization in Ghana", *International Journal of Innovation in the Digital Economy*, 5(2):14-23, 2014.
- A. A. Yayla and Q. Hu, "The effect of Board of directors' IT awareness on CIO

https://uonjournals.uonbi.ac.ke/ojs/index.php/ajbuma

compensation and firm performance," *Decision Sciences*, 45(3), 401-435, 2014.

- S.M. Ravitch, and M. Riggan, "Reason & rigor: How conceptual frameworks guide research," Thousand Oaks, CA: SAGE, 2012.
- H. Collins, "Creative Research: The Theory and Practice of Research for the Creative Industries" *AVA Publications*, 2010.
- B. Hjørland, "Empiricism, rationalism and positivism in library and information science," Journal *of Documentation*, *61*(1), 130-155,2005.
- O. M. Mugenda and A.G. Mugenda, "*Research methods: Qualitative and qualitative approaches*," African Centre for Technology Studies Nairobi, Kenya, 2003.
- J. W. Creswell, "Research Design: Qualitative, Quantitative and Mixed Methods Approaches" (4th ed.), 2014.
- K. Parahoo, "Nursing research: principles, process and issue," Palgrave Macmillan, 2014.
- M Saunders, P Lewis and A. Thornhill, "*Research Methods for Business Students* (6 ed.): Pearson, 2012.
- A. Bryman and E. Bell, Business Research Methods.
 3rd ed. Oxford et al.: Oxford University Press, 2011.
- S. W. Huck, *"Reading Statistics and Research,"* United States of America, Allyn and Bacon, 2007.

AJBUMA Knowledge Sharing Partners

EBSCO, Open Access and Google Scholar



- J. Robinson, "Triandis theory of interpersonal behaviour in understanding software privace behaviour in the South African context" Master's degree, University of the Witwatersrand, 2009.
- D. Straub, M.C. Boudreau and D. Gefen, Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13, 380-427, 2004.
- S. M. Waruinge, "Factors for IFMIS success in developing countries," Unpublished master's desertion, University of Nairobi, 2008.
- P. Ghauri and K. Gronhaug, "*Research Methods in Business Studies*," Harlow, FT/Prentice Hall, 2005.
- A. P. Field, "Discovering Statistics Using SPSS," Sage Publications Inc, 2005.
- R. P.Burns and R. Burns, "Business Research Methods and Statistics Using SPSS." SAGE Publications, 2008.
- D.R.Jensen and D.E. Ramirez, (). *Revision: Variance inflation in regression*, Advances in Decision Sciences. 2013, 1–15, 2013.
- Business and Management Research: An Overview of Current Practice and Suggestions for Future Direction," *British Journal of Management*, Vol. 27, 426–437. 2015