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

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Abstract

The main objective of this study was to investigate the moderating effect of information technology governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. To achieve this objective a hypothesis was formulated: ITG has no moderating effect on the relationship between CITS and service delivery of state corporations in Kenya. The Diffusion of Innovation Theory (DoI) and Fourth Industrial Revolution Theory guided the conceptualization and contextualization of the study. Descriptive cross-sectional research design was employed and primary data was collected through administering structured questionnaire and secondary data on service delivery was also collected from annual performance contract reports from 178 state corporations in Kenya. Thus, a census survey was conducted in order to get complete information from all participants in the population used to inclusively obtain better coverage than sample surveys. Out of 178 respondents, 120 questionnaires were filled and retuned thus making 67.4% response rate. The findings of the study found out that there is a statistically significant effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. This was well depicted by 69.8% variations in service delivery as explained by variations in corporate IT Target ITG level of implementation, monitoring and evaluation of ITG framework, existence of corporate IT strategy, information on resource capability use, level of implementation of corporate IT strategy, level of cascading of corporate IT strategy. The study findings of this investigation can serve as a baseline to organizations that want to utilize corporate IT strategy and IT governance as overarching tools in their operations for efficient services. Not only that but also, the government through relevant ministries and other stakeholders who are key players in the performance of state corporations can use the findings to develop appropriate policies in regard to application of corporate IT governance strategies and service delivery innovations to support customized services.*

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

Introduction

Corporate IT strategy and IT governance are novel ideas in many organizations of developing economies in the world. Nevertheless, established organizations have deployed corporate IT strategy with an aim to provide in depth guidelines on IT investment and use to support business objectives and strategies (Thompson, 2007). Business entities prudently utilize IT strategy at the corporate and competitive levels as a tool for creating valuable governing ideas that allow managers to identify opportunities that support organizational processes and goals (Kräftner, 2006). Valuable IT investment requires IT knowledgeable top management to enable them understand the role of IT strategy, it is implementing processes and the degree of cascading of IT- related decisions and competencies to achieve informed organizational goals. 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).

Whereas corporate IT strategy is an overarching comprehensive plan that defines the role of information technology in spurring organization processes (Arvidsson et al 2014). Information technology governance (ITG) comes in handy as a technological tool designed to facilitate the efficient and strategic use of IT elements and policies for value creation that is pegged on informed decisions that minimizes risks associated with IT investment and use in order to improve critical performance measures vis-visa; cost, quality, services and speed (De Haes & Van Grembergen, 2013). IT governance has other far reaching benefits; improved business processes, motivated staffs, and minimized expenses, growth in market share, transparency and quality services (Pang, 2014). Two key technological theories helped to conceptualize the study, first, the Diffusion of Innovation (DoI Theory, which explains the process through which anew idea penetrates through various parts of an organization over a particular period of time (Rogers, 2003) and the Fourth Industrial Revolution theory which postulates that; Economic and technological advancements are characterized with major industrial revolution; firstly manual production to digitization of work processing and working environment meant to enhance operational excellence and superior performance (Frey & Osborne, 2013; Schwab, 2016). As postulated by the two theories, organizations endeavor to offer superior and competitive performance by deploying quality and user friendly technologies that will enable value added processes and competitive positioning.

The study was conducted on I78 operational state entities that are owned, financed and regulated by Kenya government. The corporations are highly regarded as major contributors of employment, innovation and growth of the economy. They provide crucial services for improving the livelihoods of citizens, which includes energy, manufacturing, agriculture, transport, infrastructure, health and education (Muthaura, 2007). However, majority of state corporations luck adequate IT strategies funds, losses and inefficiencies in product and services provision due to corruption and mismanagement of public resources (Mirungu & Muoria, 2012).

Research Problem

Digitalization of organizational processes and creating new business models calls for proper utilization of corporate IT strategy that can enable customized commodities and services for profitability, growth, networking and competitive advantage

(Abdi, Mohammed & Dominic, 2010). Corporative IT strategy has been regarded as a guiding tool on the use of IT to achieve organizational objectives and strategies (Peppard, Galliers & Thorogood, 2014). Successful firms that enjoy operation excellence and superior performance have integrated and interconnected their processes with a formidable IT strategy (Arvidsson et al., 2014). Besides that, organizations that want to thrive and be market leaders also need to ensure service delivery is of quality to foster customer expectation, satisfaction, retention and loyalty (Miremadi, Ghalamkari & Sadeh, 2011). In addition to that, corporate governance leadership needs to devise how IT governance can influence the effect of IT strategy on service delivery improvement mechanism to foster customer friendly environment.

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 (Mirungu & Muoria, 2012). However, Mulili and Wong (2011) outlined that the major concern of citizens is poor performance and services rendered by the government owned organizations. This failure is attributed to using incompetent human resource, scarce IT resources, poor risk mitigation, corruption and mismanagement of funds, unfair promotions to flawed procurement procedures (Muthaura, 2007). 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 (Kashorda, Waema, Omosa & Kyalo, 2007). Consequently, there is need for an integrative knowledge model on how the government can make state corporations innovation centers that can spur economic and financial growth by ensuring citizenry services.

This study addressed a number of conceptual and contextual gaps that previous studies partly and scantly addressed. Earlier empirical studies showed that corporate IT strategy supports organizational strategic goals, decision making process and value creation towards competitive positioning (Yayla & Hu 2014). 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. However, Danjum and Rasli, (2012) asserts that effective service delivery of firms is an outcome of top management participation and motivated workers. The debate on how information technology governance is a moderator between corporate IT strategy and service delivery is not clear. However, Bowen, Cheung and Rohde (2007) noted that IT governance moderates between IT capital, investment and implementation processes. De Haes and Van Grembergen (2013) also noted that IT governance provides a roadmap on the strategic alignment between IT and business by ensuring an effective evaluation, selection, prioritization, funding and implementation of IT investment for clear business benefits leaving gaps on how it regulates the impact of IT strategy on services rendered by organizations. Study by Blitstein and Ron, (2012) shows that ITG is modulates between IT use and hiring IT skilled personnel to facilitate administrative process and sustainable competitive advantage. Besides that, Martin (2014) also noted that IT governance enables organizational management to generate and deploy IT for administrative efficiency and competitive positioning.

These prior analysis of ITG literature revealed that a number of schools of thoughts that can be distinguished in ITG, these thoughts see ITG as decision making tool, as part of IT auditing, as part

of an integral model on IT performance, improves governance processes and as an enabler of administrative and clerical processes(Bowen et al., 2007; Pang, 2014).

Research Objective

The main objective of the study was to determine the effect of information technology governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya

Literature Review

This study was anchored on two theories, firstly, The Fourth Industrial Revolution Theory, which explains that there is growth in technology and sporadic economic advancements due to the shift from mechanical digital production (Frey & Osborne, 2013). Many organizations have not been left behind in this technological and economic paradigm shift so as to remain productive, profitable and competitive. Customized Service delivery has remained a critical measure of performance and thus the need for pedigree technologies that outwit manual systems that are costly, slow and unreliable. Secondly, the Diffusion of Innovation (DoI) Theory explains the process through which anew idea penetrates through various parts of an organization over a particular period of time (Rogers, 2003). Organizations endeavor to offer superior and competitive services by using quality and user friendly technologies that will lead to value delivery and competitive positioning.

Previous literature reviews on measures organizations have put in place to ensure customer oriented services are realized revealed that management participation in service delivery practices and employee motivation plays a critical role (Dabholkar & Overby, 2005; McNeil & Mumvuma, 2006). In addition to that Lee and Yang (2013) established that service delivery improvements can be achieved by conducting managerial and governance reforms, strengthening transparency and accountability and also gathering information on the needs, preferences and expectations of customer. Further, Valentine and Stewart (2013) noted that firms face a number of challenges including poor management measures, inadequate technological resources and general employee attitude in offering customized services. This has made firms to gradually change and substitute the traditional modes of improving service delivery through the implementation of different kinds of technological advancement. Therefore, Over the last decade, both the public and private sectors have increasingly embraced the application of available resources in forms of skilled employees and IT to ensure customer centered goods and services (Salihu, 2011).

Besides the technological and managerial support on service delivery improvements, studies have not clearly outlined the moderating effect of ITG on corporate IT strategy and the entire service offering process. Earlier literatures indicate that corporate IT strategy play an important role in providing clear guidelines on the use of IT to foster entire organizational processes for superior performance and competitive advantage (Yayla & Hu, 2014). On the other hand, IT governance is conceived to be a technological process constructed to facilitate strategic alignment of IT resources and business processes and policies for value creation (Pang, 2014). The whole process of deploying ITG in firms informs decision making process on IT investment, competencies and managing risks related to IT use (De Haes & Van Grembergen, 2013). The aspect of globalization has put organizations on the spot and thus the need to devise and deploy competitive IT strategies in order to realize valuable benefits like; improved business processes, motivated staffs, minimized expenses,

growth in market share, transparency and quality services (Abdi et al, 2010). Though, corporate IT strategy and ITG need to remain inseparable for any firm to realize improved service delivery, the moderating effect of IT governance on the relationship between corporate IT strategy and service delivery of organizations is a new concept that needs to be practiced in the future.

Conceptual Frame Work

The conceptual framework comprised of the independent variable corporate IT strategy, the moderating variable, IT governance and the dependent variable, service delivery in line with the objective of the study and hypothesis is illustrated as shown in figure below;

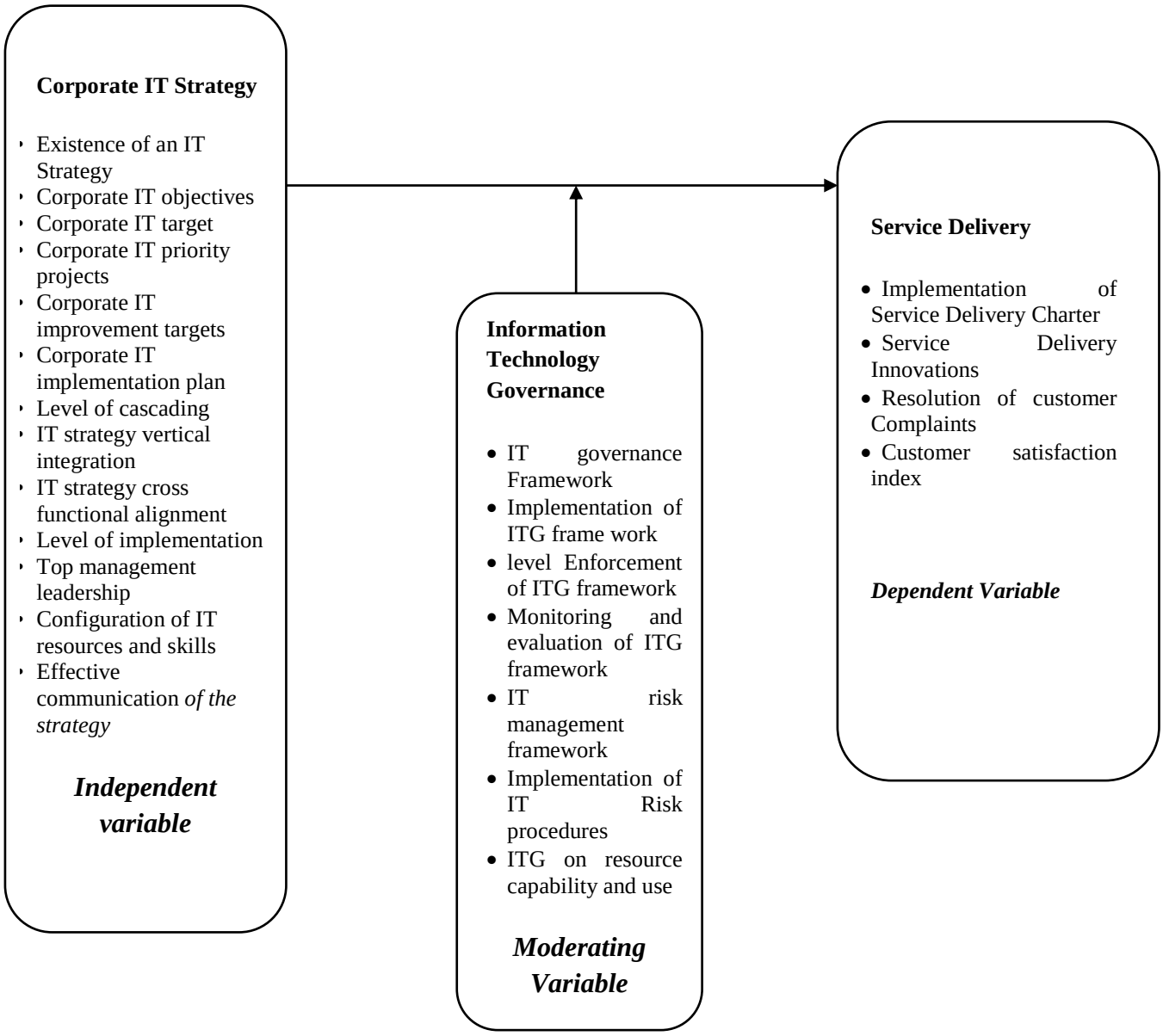

Figure 1: Conceptual Model

From the conceptual framework, the following hypothesis was proposed:

H_0: Information technology governance has no moderating effect on the relationship between corporate IT strategy andservice delivery.

Methodology of Research

The study was anchored 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 (Hjørland, 2005). 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 (Collins, 2010; Kevin, Prakash & Rana, 2006). Descriptive technique was used to gather information that is doing on about the subject of study at a given period of time (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, 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. 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 back 2013 observed that due to policy dynamism and economical changes as influenced by the government decisions to review merge or discontinue some corporations, the number is likely to keep changing depending on their purpose, performance and government development agenda. One questionnaire was presented to every state corporation and it remained the prerogative role of the concerned to delegate or consult and provide relevant information. A census survey was 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, 2020

Data Collection and Analysis

Data was collected chronologically from targeted variables (corporate IT strategy, ITG and service delivery) from 178 state corporations in Kenya. Bryman and Bell (2011) argued that data collection is mechanism of gathering and quantifying information on targeted variables in an established system to get complete and accurate picture of the area of research. The collected data was critical in deducing relevant answers that supported the evaluation of the 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 research assistants by drop and pick method through administering

structured questionnaire that comprised of closed and open-ended questions self-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). Secondary data on service delivery was collected from annual performance contract reports and annual evaluation reports of SCs pertaining to service delivery as from 2013 to 2018 on cycles of five years.

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 performance contracting guidelines.

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

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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***

Source: Researcher, 2020

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), simple linear regression, hierarchical regression, stepwise multiple regression and multiple linear regression analysis. Hierarchical regression analysis was used to test the influence of IT governance on corporate IT strategy and service delivery of Kenyan state corporations.

Table 4: Summary of Objectives, Hypotheses and Analytical Model

Objective	Hypothesis	Analytical model	Interpretation
To determine the moderating effect of IT governance on the relationship between corporate IT strategy and	H_1: Information technology governance has no significant moderating effect on the relationship between	Stepwise Linear Régression analyses $Y_2= \alpha+ \beta_1X + \varepsilon$ $Y_3= \alpha+ \beta_1X+ \beta_2Z+\varepsilon$ $Y_4= \alpha+ \beta_1X+ \beta_2Z+\beta_3 X.Z + \varepsilon$	R^2 depicts model fitness and also explains the changes in dependent variable. β_1, β_2 and β_3 are coefficient explaining the influence of a unit change in each of the corporate IT strategy and

Objective	Hypothesis	Analytical model	Interpretation
service delivery of state corporations in Kenya;	Corporate IT strategy and service delivery of state corporations in Kenya;	α =constant (intercept), β_1, β_2, β_3= coefficients Y_2, Y_3 andY_4 = service delivery; X= corporate IT strategy, Z= ITG ε= Error term; X.Z= corporate IT strategy and IT governance interaction	ITG constructs on service delivery. P-value, F-ratio and t-statistic explains the significance of the model constructs

Source: Researcher, 2020

Results and Findings

Response Rate

The study targeted all the 178 state corporations in Kenya spread across the twenty ministries and they formed the target population for the study. 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

The response rate was 67.4% which is considered good for survey research as recommended by Mugenda and Mugenda (2003) and Saunders et al. (2007) that 50% response rate is adequate, 60% good and above 70% very good. Whereas according to Kamel & Lioyd (2015), a response rate of above 50 percent is acceptable for such studies. In this part, 67.4 % of the population of the study positively responded implying that most of the state owned entities are actively operational.

Hypothesis Test Findings and Discussions

Result of the test for the hypothesis of the study was formulated from the research objective that sought to determine the

moderating effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. This objective was tested for through this hypothesis:-

H_0: Information technology governance has no significant moderating effect on the relationship between Corporate IT strategy and service delivery of state corporations in Kenya.

Stepwise regression model was used to test on the moderating effect of IT governance on the relationship between corporate IT strategy and service delivery of State Corporation in Kenya.

Table 6: Variables Entered/Removed on the Effect of IT Governance on the Relationship between Corporate IT Strategy and Service Delivery of State Corporations in Kenya

Model	Variables Entered	Method
1	Corporate IT Target* ITG Level of Implementation	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Monitoring and Evaluation of ITG Framework	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Existence of Corporate IT Strategy	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Information Technology Governance on Resource Capability/Use	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
5	Level of implementation of Corporate IT strategy	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
6	Level of Cascading of Corporate IT Strategy	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
	a. Dependent Variable: Service Delivery	

Source: Research Data (2020)

From the findings on table 10, the sixth stepwise regression model is the most suitable predictive model give the inclusion of the product variable or moderator (Corporate IT Target* ITG Level of Implementation). 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 on the Effect of IT Governance on the Relationship between Corporate IT Strategy and Service Delivery of State Corporations in Kenya

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659[a]	.434	.429	3.18807
2	.768[b]	.591	.584	2.72325
3	.800[c]	.640	.631	2.56309

4	.817[d]	.667	.655	2.47793
5	.832[e]	.692	.679	2.39143
6	.845[f]	.713	.698	2.31831

a. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation

b. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework

c. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework, Existence of Corporate IT Strategy

d. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation

of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource Capability/Use

e. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation

of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource Capability/Use, Level of implementation of Corporate IT strategy

f. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource

Capability/Use, Level of implementation of Corporate IT strategy, Level of Cascading of Corporate IT Strategy

Source: Research Data (2020)

From the results in Table 7, the adjusted R^2 keeps on improving from 0.429 to 0.698. Although all models are significant, the stepwise model number six is a good predicator of the effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. Thus, 69.8% (Adjusted R^2 = 0.698) of variations in service delivery is explained by variations in corporate IT Target* ITG level of implementation, monitoring and evaluation of ITG framework, existence of corporate IT strategy, information technology governance on resource capability/use, level of implementation of corporate IT strategy, level of cascading of corporate IT strategy.

Table 8 presents that the model is statistically significant in explaining the effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya, $F(6, 113) = 46.875$, $P<0.000$ [g].

Table 8: Model Overall Significance (ANOVA[a]) on the Effect of IT Governance on the Relationship between Corporate IT Strategy and Service Delivery of State Corporations in Kenya

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	919.600	1	919.600	90.478	.000[b]
	Residual	1199.326	118	10.164		
	Total	2118.926	119			
2	Regression	1251.245	2	625.622	84.360	.000[c]
	Residual	867.681	117	7.416		
	Total	2118.926	119			
3	Regression	1356.874	3	452.291	68.848	.000[d]
	Residual	762.053	116	6.569		
	Total	2118.926	119			
4	Regression	1412.813	4	353.203	57.524	.000[e]
	Residual	706.113	115	6.140		
	Total	2118.926	119			
5	Regression	1466.965	5	293.393	51.302	.000[f]
	Residual	651.961	114	5.719		
	Total	2118.926	119			
6	Regression	1511.602	6	251.934	46.875	.000[g]
	Residual	607.324	113	5.375		
	Total	2118.926	119			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation

c. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework

d. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework, Existence of Corporate IT Strategy

e. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation

of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource Capability/Use

f. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource

Capability/Use, Level of implementation of Corporate IT strategy

g. Predictors: (Constant), Corporate IT Target* ITG Level of Implementation, Monitoring and Evaluation of ITG Framework, Existence of Corporate IT Strategy, Information Technology Governance on Resource

Capability/Use, Level of implementation of Corporate IT strategy, Level of Cascading of Corporate IT Strategy

Source: Research Data (2020)

From the results in Table8, it can be observed that as one moves from stepwise model number one to six, the standard error of the estimate keeps decreasing from 919.600 to 251.934 as so does the F values from 90.478 to 46.875.

As presented in Table8, using standardized coefficients: corporate IT target* ITG level of implementation has a strong positive effect on service delivery (β= 0.228, t= 3.465, P>0.001); monitoring and evaluation of ITG framework has a strong positive effect on service delivery (β= 0.286, t= 4.709, P<0.000); existence of corporate IT strategy has a strong positive effect on service delivery (β= 0.149, t= 2.506, P>0.014); information technology governance on resource capability/use has a strong positive effect on service delivery (β= 0.186, t= 3.123, P>0.002); level of implementation of corporate IT strategy has a strong positive effect on service delivery (β= 0.183, t= 3.087, P>0.003); and level of cascading of corporate IT strategy has a strong positive effect on service delivery (β= 0.170, t= 2.882, P>0.005).

Table 9: Regression Coefficients of the Effect of IT Governance on the Relationship between Corporate IT Strategy and Service Delivery of State Corporations in Kenya Model coefficients [a]

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	57.323	.881		65.042	.000
	Corporate IT Target* ITG Level of Implementation	.865	.091	.659	9.512	.000
2	(Constant)	50.312	1.291		38.980	.000
	Corporate IT Target* ITG Level of Implementation	.605	.087	.461	6.974	.000
	Monitoring and Evaluation of ITG Framework	3.212	.480	.442	6.687	.000
3	(Constant)	46.361	1.564		29.640	.000
	Corporate IT Target* ITG Level of	.502	.086	.382	5.860	.000

	Implementation					
	Monitoring and Evaluation of ITG Framework	2.853	.461	.393	6.189	.000
	Existence of Corporate IT Strategy	1.866	.465	.249	4.010	.000
4	(Constant)	44.785	1.600		27.995	.000
	Corporate IT Target* ITG Level of Implementation	.429	.086	.327	4.975	.000
	Monitoring and Evaluation of ITG Framework	2.512	.460	.346	5.466	.000
	Existence of Corporate IT Strategy	1.670	.455	.223	3.673	.000
	Information Technology Governance on Resource Capability/Use	1.313	.435	.192	3.018	.003
5	(Constant)	42.967	1.653		25.992	.000
	Corporate IT Target* ITG Level of Implementation	.362	.086	.276	4.204	.000
	Monitoring and Evaluation of ITG Framework	2.288	.450	.315	5.089	.000
	Existence of Corporate IT Strategy	1.320	.453	.176	2.912	.004
	Information Technology Governance on Resource Capability/Use	1.330	.420	.194	3.167	.002
	Level of implementation of Corporate IT strategy	1.412	.459	.188	3.077	.003
6	(Constant)	41.166	1.720		23.932	.000
	Corporate IT Target* ITG Level of Implementation	.299	.086	.228	3.465	.001
	Monitoring and Evaluation of ITG Framework	2.080	.442	.286	4.709	.000
	Existence of Corporate IT Strategy	1.115	.445	.149	2.506	.014
	Information Technology Governance on Resource Capability/Use	1.273	.408	.186	3.123	.002
	Level of implementation of Corporate IT strategy	1.374	.445	.183	3.087	.003
	Level of Cascading of Corporate IT Strategy	1.341	.465	.170	2.882	.005
a. Dependent Variable: Service Delivery						

Source: Research Data (2020)

The relationship derived on the effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya is statistically significant. The regression equation derived was thus as follows:

Service Delivery (Y) *= 0.228 Corporate IT Target* ITG Level of Implementation + 0.286 Monitoring and Evaluation of ITG Framework + 0.149 Existence of Corporate IT Strategy + 0.186 Information Technology Governance on Resource Capability/Use + 0.183 Level of implementation of Corporate IT strategy + 0.170 Level of Cascading of Corporate IT Strategy*

The results of the beta coefficient showed that a unit increase in corporate IT target* ITG level of implementation will cause a 0.228 positive effect on service delivery (β= 0.228, t= 3.465, P>0.001); a unit increase in monitoring and evaluation of ITG framework will cause a 0. 286 positive effect on service delivery (β= 0.286, t= 4.709, P>0.000); a unit increase in existence of corporate IT strategy will cause a 0. 149 positive effect on service delivery (β= 0.149, t= 2.506, P>0.014); a unit increase in information technology governance on resource capability/use will cause a 0. 186 positive effect on service delivery (β= 0.186, t= 3.123, P>0.002); a unit increase in level of implementation of corporate IT strategy will cause a 0. 183 positive effect on service delivery (β= 0.183, t= 3.087, P>0.003); and a unit increase in level of cascading of corporate IT strategy will cause a 0. 170 positive effect on service delivery (β= 0.170, t= 2.882, P>0.005).

Moreover, the effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya was statistically significant. This implies, overall, IT governance is a good moderating predictor on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The findings therefore rejects the null hypothesis that there is no a significant effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The null hypothesis H_{O1} is therefore rejected.

Discussion of the Results

The objective for the study was to determine the moderating effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The study revealed that IT governance and corporate IT strategy accounted for 69.8 % of the variation in service delivery in State Corporation in Kenya. The model was significant in overall (F = 46.875, P-value=0.000<0.05). The interaction term, corporate IT target* ITG level of implementation will cause a 0.228 positive effect on service delivery (β= 0.228, t= 3.465, P-value=0.001<0.05) was significant.

The result on the moderating effect of IT governance 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. This confirmed a moderation and therefore rejected the hypothesis that Information technology governance has no significant moderating effect on the relationship between Corporate IT strategy and service delivery of state corporations in Kenya and supports the alternative hypothesis that moderation exist.

De Haes and Van Grembergen (2013) asserts that IT governance provides a roadmap on the strategic alignment between IT and business by ensuring an effective evaluation, selection, prioritization, funding and implementation of IT investment for clear business benefits like improved customer services, reduction in operational costs and strong

strategic standing of firms. On the other had Lee and Yang (2013) established that service delivery improvements can be achieved by conducting managerial and governance reforms, strengthening transparency and accountability and also gathering information on the needs, preferences and expectations of customer. These prior discussions depicts that they are so many factors that contributes to customized services in organizations though little was done to reveal the significance of the moderating effect of ITG on the relationship of CITS and service delivery of state corporation in Kenya.

Conclusions and Recommendations

The study concluded that information technology governance has a significant moderating effect on the relationship between corporate IT strategy and service delivery of state corporations in Kenya.

Results and findings of the study have addressed the main research gaps. Earlier literatures had not indicated any clear studies on the effect of IT governance on the relationship between corporate IT strategy and service delivery of state corporations in Kenya. The findings conform to the current school of thoughts that l information technology governance is critical in enhancing the connection between corporate IT strategy and service delivery improvement. In addition to that its worth to note that the study underpinning theories that is; the fourth Industrial Revolution and Diffusion of innovation Theory both affirms that technological innovations and economic growth has to diffuse through all components of a firm to realize efficiency. For this to be achieved, 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 IT governance on the link between corporate IT strategy and service delivery as presented 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.

Contributions to Managerial Policy and Practices

The findings of this study are useful to various stakeholders including investors, state corporations managers, regulators and the government. The effects of ITG on the relationship between corporate IT strategy and service delivery of State Corporations in Kenya significant results as documented in the study can help investors and state corporations managers to deploy ITG in corporate governance processes for improved customer services, reduce operational costs and become world class competitors. Based on the results of this study, the government through relevant ministries and stakeholders should develop appropriate policies that support the need to establish and deploy strong ITG frameworks and corporate IT strategy which aims at improving service delivery and strategic standing of the state corporations. In addition to that, the significant results depicts that it is important for state corporations in Kenya to establish appropriate IT applications, rules and mechanisms that should cut across all management levels with an aim to create service outputs that are of value to customers.

Limitation of the Study

All 178 entities were included in the study having adopted census survey approach, this proved to be tiresome. Also the state corporations are spread all over the country and often the government restructuring and merging of the state

corporations to limit overlapping of duties delayed responses. 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 corporate IT strategy, ITGN and service delivery practices and processes.

Suggestions for further Study

This study established that IT governance has a significant moderating effect on the relationship between corporate IT strategy and service delivery of state corporations. There is need for further study to empirically establish the mediating/intervening effect of IT governance on the same relationship.

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