Effects of Strategic Leadership, Organizational Innovativeness and Information Technology Capability on Effective Strategy Implementation

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Abstract

The paper examined the role of strategic leadership, organizational innovativeness, information technology capability on strategy implementation in tertiary institutions situated at Kaduna state, Nigeria. One hundred and twenty-four (124) questionnaires were administered to Deans of colleges/faculties of the institutions located in the state. Out of the number, one hundred and eight (108) questionnaires were retrieved. PLS-SEM was used to analysed the data. The result shows a significant relationship between strategic leadership, organizational innovativeness, IT capability and effective strategy implementation. The study recommends radical move from the present style of administration in Nigerian tertiary institution to new form of leadership, which strategic leaders ought to champion. This radical move should be supported by innovation and full utilization of IT facilities available to the institutions. This is the best time, considering the dramatical change and the serious reform the sector is witnessing presently.

Keywords: Information technology capability, Organizational innovativeness, Strategic leadership, Effective Strategy implementation.

INTRODUCTION

Today, strategic management is gaining more and more acceptance as a tool for managing public tertiary educational institutions for better results. The need for strategic management practices in public tertiary institutions grew when the institutions shifted from relatively stable environment to more rapidly changing one, in response to an increasing competition that characterised by shortages of resources (Montanan & Backer, 1986). This is very timely, as strategic management is needed in an environment where new forms of influence are imagining and where norms and values as well as social utility of organizations is being challenged and redefined (Ansoff, Dcelark & Hayes 1976). A good strategic plan if effectively implemented will certainly give an organization superior competitive advantage and increase its performance. However, one important thing to note here is no matter how brilliant a strategy is, without proper execution, it is difficult to get any meaningful result. Markiewicz (2011)

opined that the problem faced today by most organizations is not lack of organizational strategies, but implementation. Hrebiniak (2006) argued that while the formulation of good strategy is difficult but making it work (implementation) is even more daunting and hectic. Without effective execution, no strategy will ever succeed (Hrebiniak 2006). A good mechanism for reaping the benefit of strategic plans is effective strategy implementation (Sharbat & Fuqaha, 2014; Ali & Hadi, 2012). Effective Strategy execution is a process by which strategies are put into concrete action through improvement of programs, budgets, and actions. The processes are often referred to as operational planning and usually comprise the allocation of day-to-day decisions in resource allocations (Wheelen & Hunger, 2008).

Facts from the extant literature has shown that competitive advantages rooted in organizational internal competencies can be safer in creating benefits for institutions (Arasa & K'obonyo, 2012). This research tends to empirically explore the relevance of three organizational internal competencies, i.e. strategic leadership, organizational innovativeness and information technology capability in attaining organizational competitive advantages through effective strategy implementation.

Presently, there are very few researches, mostly conducted in Europe and America that integrate these three important (competencies) variables in assessing their effect on organizational strategy implementation. The researches focused mainly on profit making organizations. This paper, therefore is an attempt to move outward the frontier of knowledge concerning the relationship between strategic leadership behaviours (SLP), organizational innovativeness (OIV), information technology capability (ITC) on effective strategy implementation (ESE) by looking at it from different context namely, Nigeria.

LITERATURE REVIEW

Strategic Leadership

Strategic leadership as defined by Hitt, Ireland and Hoskisson, (2007 p.375) as "the leader's ability to anticipate, envision, and maintain flexibility and to empower others to create strategic change as necessary". Strategic leadership is versatile. It involves managing through subordinates, and helps organisations to cope with changes that seem to be increasing dramatically in today's globalised business environment (Huey 1994). Strategic leadership demands for the ability to integrate both the inside and outside business environment of the organisation, and engage in multifaceted information processing.

Leadership in general and Strategic leadership is widely regarded by numerous scholars as one of the key elements for effective strategy implementation (Lynch 2006; Noble 1999; Ulrich, Zenger & Smallwood 1999; Collins 2001; Bossidy & Charan 2002; Thompson & Strickland 2003; Freedman & Tregoe 2003; Kaplan & Norton 2004; Pearce & Robinson 2007; Hrebiniak 2005). While lack of leadership, specifically strategic leadership in an organisation, has been pencilled as one of the major obstacles to organizational strategy execution (Alexander 1985; Beer & Eisenstat 2000; Kaplan & Norton 2004; Hrebiniak 2005).

Extensive literature review on role of strategic leaders in successful strategy execution in numerous orgfanizations across the globe reveals a lot. Sila and Gichinga (2016) conducted a study on the impact of strategic leadership on the performance of public universities in Kenya. The qualitative research that administered survey to 98 respondents that include deans, head of

departments and other stakeholders within JKUAT University found that strategic leadership plays a crucial role in effective strategy implementation in the institution. It is then recommended that strategic leadership in public tertiary institutions should be biased towards strategy implementation. In their study conducted in an Indonesian higher education institution, Hidaya et al. (2015) shows that the three dimensions of strategic leadership they test gives reasonable contribution to strategy implementation in the institution. The dimensions are strategic expert (strategist), change agent, and visionary leadership. The study consists of 67 respondents from different strata in the sampled institution.

In their paper titled Making Strategy Work, Yang et al. (2009) posited that there are two type of implementation studies; the once that highlight the essentiality of individual factors for strategy implementation, as well as those that stress the big picture of how the factors correlate to form a strategic implementation environment. The first involves individual factors that accelerate strategy implementation like strategy formulation process, strategy implementers; managers and employees, structure, communication activities, level of commitment for the strategic plan, relationship among different departments and different strategic levels, the employed execution tactics and the administrative system in an institution. The second stream comprises multiple factors together within a single comprehensive model or framework.

Clement (2014) carried out a study on the impact of management in strategy development in Mbarara University of Science and Technology, Uganda Management Institute and Makerere University Business School. The outcome of the study indicated that management was very cardinal in the formulation of policies, sourcing for resources, communication of the institutional mission, vision, plan development as well as development of successive cultures among others. Fuller (2012) studied the Leaders Role in Strategy Implementation in Liverpool University. He administered questionnaire to 197 respondents who made the sample population for the research. Factors like developing vision and mission, setting objectives and goals, strategy formulation, implementation the strategy, as well as evaluating performances scored strongly on the scale of measure. This indicates that strategic leadership is cardinal in the success of a strategies tertiary institution. More so, Omboi, (2011) conducted a study using survey in Meru Central District of Kenya on selected public tertiary institutions. Using population that made up of 136 lecturers, 30 heads of departments and 12 top managers. The study suggests that weak influence of managerial behaviours was because of the Management strategic thinking. He argued that organizational leaders co-opting the subordinates like the faculty members would lead to effective strategy implementation. Cater and Pucko (2010) opined that while a well-formulated strategy, couple with a strong and effective pool of skills, combine with human capital are exceptionally important resources for strategy success, poor leadership is one of the major hurdles to successful strategy execution. Lorange (1998) argued that chief executive officer (CEO) and other top management must highlight the various interfaces within the organization. One important challenge in successful organizational strategy executions is ensuring employees 'buy-in', channelling their capabilities, and understanding toward the new invented strategy. Thus, the need for effective and strategic leadership outweighs any other factor (Rajasekar, 2014).

Strategic leadership was hypothesized to have a positive impact on organizational innovativeness (Safarzadeh et al. 2015). In addition, strategic leaders have been repetitively recognized for their decisive role in recognizing opportunities and taking positive decisions that will have impact on innovation process (Safarzadeh et al. 2015). More so, strategic leadership and organizational innovativeness are considered fundamentals for achieving and maintaining strategic competitiveness in the 21st century (Elenkov et al., 2005).

Organizational Innovativeness

According to Hurley and Hult (1998), organizational innovativeness is the thought of openness to new ideas as a characteristic of an organization's culture. Thus, innovativeness is a gauge of an organization's orientation toward innovation. There are requisites to organizational innovativeness as argued Hurley and Hult (1998). These organizational characteristics include organizational culture, such as learning, participative decision making, collaboration and support, and power sharing etc.

Innovation is rapidly becoming a key strategic implementation driver for organizations as we advance further into this century (Stanleigh, 2015). Innovativeness at the tertiary institutions level may involve the implementation of a new technical ideas or a new administrative idea (Damanpour & Evan, 1984). The adoption of a new idea in an organization, regardless of the time of its adoption in the related organizational population, is expected to result in an organizational change that might affect the effective strategy implementation performance and other aspects (Damanpour & Evan, 1984).

Administrative innovation is the new administrative process, management system and staff development program taking place in an administrative component and affects a social system of an organization via organizational members and their relationships, including rules, procedures, roles and structures related to the communication and exchange among organizational members (Subramanian & Nilakanta, 1996). Administrative innovation is the main component of organizational innovation (Subramanian and Nilakanta, 1996). The administrative innovation potentially promotes work redesign and work systems, skills enhancement, management systems, and changes in incentives (Yamin et al., 1997).

Essentially, it becomes a key determinant of competitive advantage in strategy implementation (Ussahawanitchakit, 2012). Likewise, Liao et al., (2008) aver that administrative innovation is an operation with respect to planning, organization, personnel, leadership, management, and service. These are all factors that determine effective strategy implementation. Organizational innovativeness provides the development of institutions and builds their competitive advantages (Ussahawanitchakit, 2012). Furthermore, argued Ussahawanitchakit, (2012), the institutions with greater administrative innovation that led to enhanced superior competitive advantage, gain better business excellence and attain higher organizational performance (in their strategy implementation). Hence HEIs should not be an exception.

Technological innovation is another dimension of organizational innovation. It connotes the use of gadgets (softwares and hardwares) in an organization. Technological innovation in tertiary institutions that facilitates connecting, virtually all staff (academics of non-academics) electronically, through email, internet, telephone, or the fax 24/7 (24 hours a day, seven days a week), thus replacing the traditional hours of nine to five, Monday through Friday; enhances the effectiveness of strategy implementation of an organization (Mwawasi, Wanjau & Mkala, 2013). Institutions that are pursuing the strategy of tackling student's poor academic performance may also employ technological innovation. White and Glickman (2007) posted that in this situation, students could be allow to access tutorials prior to enrolling in a course in order to achieve more homogeneous background preparation. Faculty administrators can also use technological innovation to receive immediate feedback during class meetings (White and Glickman, 2007). This will also help toward implementing performance improvement strategies.

IT Capability

Ross, Beath & Goodhue in 1996, promulgated the concept of IT capability. They defined IT capability as tertiary institutions ability to bring together, integrate and deploy IT based resources. Tippins and Sohi (2003) posited that IT capabilities are the level to which the institutions are well equipped with IT objects, IT knowledge as well as effective IT operations. An excellent level of IT public tertiary institutions facilitates the smooth execution of the organization's strategies, develops solid and cost effective systems within the organization (Bhatt & Grover, 2005). Tippins and Sohi (2003) proposed three components of IT capability. These components are IT knowledge, operation and objects. IT knowledge.

Effective Strategy Implementation

Implementation of strategies are more difficult than formulating strategies (Hrebiniak, 2008). Gurowitz (2007) opined that only less than 10% of well-formulated strategies are effectively executed. More so, the same results of just 10% of strategies being effectively executed is also reported by Judson (1991) and Speculand (2006). Correspondingly, Farsight, (2007) study discover that 80% of organizations have the right strategies, but unfortunately only 14% implement them effectively. Presently, empirical findings on effective strategy execution are therefore far from encouraging (Cater & Pucko, 2010). Noble (1999), also argued that deep and cohesive body of literatures in the area of effective strategy implementation are noticeably absence; and of course, this must have consequences for organizational practice. Effective strategic implementation can help higher education institutions to revamp their performance and leap ahead of their competitors. Execution of organisational strategy is a persistent theme in both strategic management and organizational skills. Constant academic study and empirical evidence confirm that successful strategy execution piloted by strategic leaders and innovation ability of an organization has a momentous impact on the organizational performance (Hrebiniak & Joyce, 1984); and it is fundamental for accomplishment of operational efficiency and subsequently, attainment of organizational effectiveness. In line with this, Sproull and Hofmeister (1986) aver that successful and effective strategy implementation is crucial to the smooth functioning of an organization.

UNDERPINNING THEORY

Resource based view theory provides theoretical underpinnings to support the relationship between strategic leadership, organizational innovativeness, IT capability and effective strategy implementation. The RBV implies that organizations can leapfrog over their rivals through developing resources that are distinctive and diversely distributed (Barney, 1991). Barney (1991) affirmed that organizations attain sustained competitive advantages by controlling atypical resources that has economic value and competitors cannot easily copy, or substitute. Consequently, an organization with these types of rare resources should be able to utilize them for their own unique organizational benefits. Amit and Schoemaker (1993) gave a more comprehensive definition of resources. They argued that resources are assets that are possessed by an organization through control or ownership; while capabilities refer to an organization's ability to bring together resources and adequately utilize them. Example using staff competency and organizational practices experiences to create a distinctively innovative organizational culture where workers do better than their competitors. Resource-based theory treats organization as potential creator of value-added capabilities (Prahalad and Hamel, 1990; Conner and Prahalad, 1996).

Organizational resources consist of all organizational assets tangible and intangible, as well as human and nonhuman that are owned or controlled by the organization (Barney, 1991; Wernerfelt, 1984). Resources and capabilities that are precious, uncommon, difficult to imitate and non-substitutable comprise of organization's unique or core competencies (Prahalad & Hamel, 1990), hence they yield a lasting competitive advantage. Intangible organizational resources are more likely to generate competitive advantage than tangible resources (Hitt, Bierman, Shimizu & Kochhar, 2001). Distinctively, intangible organizational resources such as strategic leadership, knowledge, innovation ability, permit organization to add up value to incoming factors of production (Hitt et al., 2001). And they represent competitive advantages for an organization (Collis & Montgomery,1995) Such advantage is developed over time and cannot easily be imitated. Barney (1991) argued that the resources controlled by an organization are what allow it to craft and execute strategies that consequently facilitate the organization's expansion, efficiency and effectiveness.

METHODOLOGY

Population and Sample

The population of the study consist of the thirteen (13) public tertiary institutions located in Kaduna state, Nigeria. The state is being referred to as the 'centre of learning' in Nigeria due to the high number and unique tertiary institutions located in the state. The state is third largest state in Nigeria behind Kano and Lagos states (NPC, 2006). The organizations will serve as unit of analysis for the study; while Deans from these institutions will serve as the respondents to the survey to be administered, due to the important role they play in implementation of any meaningful strategy in their institutions. Hence, many respondents will be considered from each institution. Strategy gurus opined that using several respondents from each institution in strategy research tend to limit potential measurement error (Bowman & Amborsini, 1997; Niyyar, 1992; Hambrick, 1981; Snow & Hrebiniak, 1980). Moreover, in the contrary, taking single respondent in an institution may lead to unrealistic outcome (Bowman & Amborsini, 1997). Hence, this study contacted 118 deans from these institutions.

Measurement

To measure the various variables in this, a structured survey was used. The questionnaire comprised of two major segments. Section one dealt with the variables under investigation, while section two solicit information about the respondent's demographic profile. The four-variable employed, strategic leadership behaviour (Wendy Lear, 2012); organizational innovativeness (Hurley & Hult, 1998); IT capability (Tippins & Sohi, 2003) and effective strategy implementation (Mintzberg, 2004) was measured using six Likert scale (1 = Strongly Disagree to 6 = Strongly Agree). The questions for strategic leadership behaviours was adapted from the previous works by Baum et al. (1998), Bass & Avolio (1992) and House (1998). For organizational innovativeness, the indicators are from Rainey (1999) and Hurley & Hult (1998). IT capability are adapted from Tippins and Sohi (2003) and finally for effective strategy implementation, the measure were adapted from (Mintzberg, 2004).

Technique for Data Analysis

Four main data techniques analyses were employed to analysis the data collected. Firstly, the descriptive analysis was used to summarise the respondents' demographic profile. PLS SEM

technique that is referred to as the second-generation structural equation modelling by (World, 1982) was used for the main data analysis. To confirm the hypotheses in the study, a correlation analysis technique was employed.

RESULTS

Assessing the measurement model

An assessment of a measurement model connotes determining individual item reliability, content validity, internal consistency reliability, convergent validity as well as discriminant validity (Henseler et al., 2009; Hair et al., 2014; Hair et al., 2011). Discriminant validity can be assessed by comparing the indicator loadings with cross-loadings (Chin, 1998). To attain sufficient discriminant validity, all the indicator loadings should be higher than the cross-loadings.

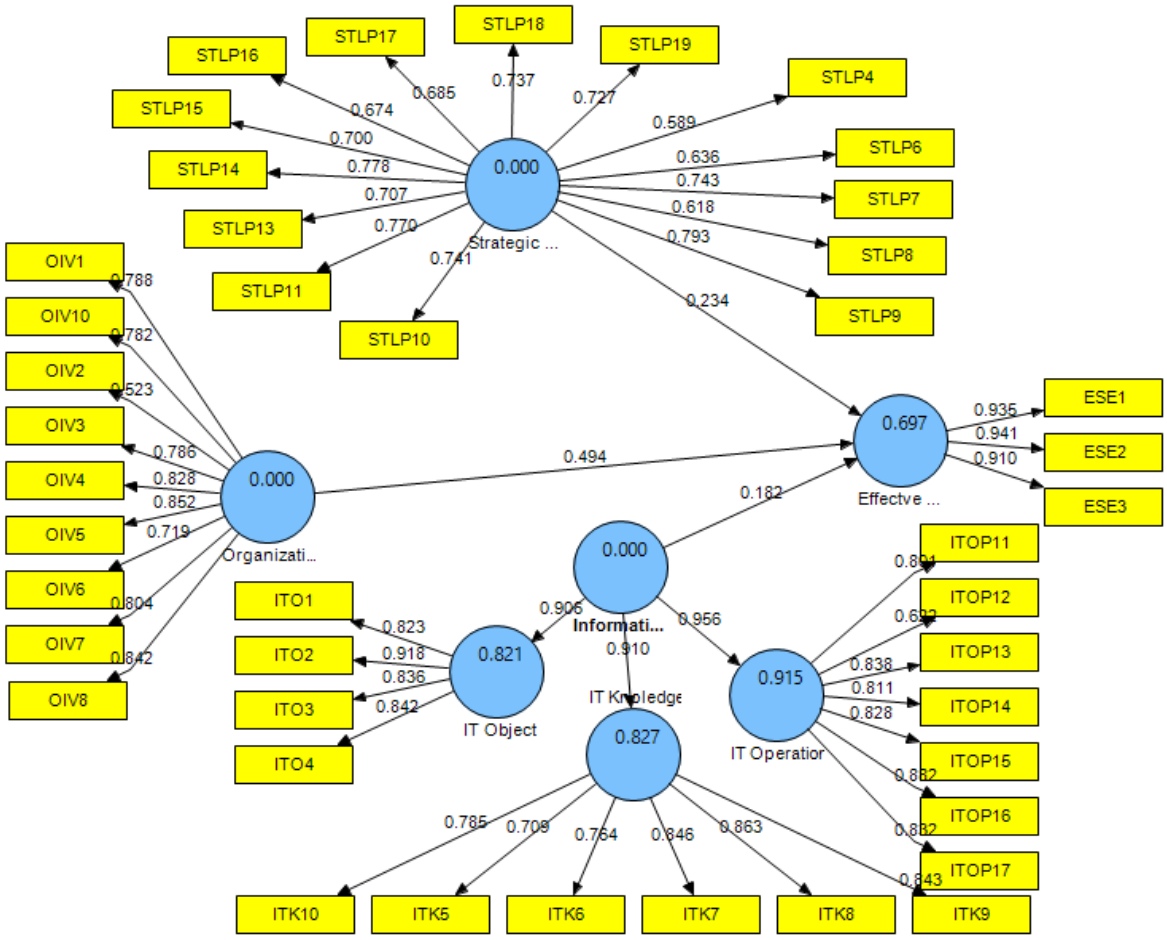

Figure 1
Measurement Model
Individual Item Reliability

The reliability of the individual items was investigated by using the outer loadings of each construct's measure.

Table 1
Cross Loadings

Item	Effective Strategy Impl.	IT Knowledge	IT Object	IT Operation	Org. Innova.	Strategic Leadership
ESI1	**.935**	.511	.564	.648	.754	.726
ESI2	**.941**	.504	.547	.623	.732	.698
ESI3	**.910**	.455	.499	.606	.758	.723
ITK10	.538	**.785**	.624	.720	.508	.592
ITK5	.299	**.709**	.533	.500	.354	.325
ITK6	.306	**.764**	.561	.547	.368	.376
ITK7	.427	**.846**	.594	.668	.495	.542
ITK8	.410	**.863**	.567	.633	.448	.516
ITK9	.525	**.843**	.641	.713	.540	.523
ITO1	.523	.681	**.823**	.647	.451	.492
ITO2	.504	.616	**.918**	.759	.448	.511
ITO3	.492	.588	**.836**	.733	.479	.539
ITO4	.457	.622	**.842**	.694	.509	.498
ITOP11	.483	.637	**.726**	**.801**	.493	.534
ITOP12	.336	.606	.533	**.622**	.296	.274
ITOP13	.581	.645	.701	**.838**	.529	.587
ITOP14	.630	.559	.613	**.811**	.531	.502
ITOP15	.609	.651	.711	**.828**	.560	.590
ITOP16	.625	.693	.713	**.882**	.535	.584
ITOP17	.508	.665	.655	**.832**	.492	.501
OIV1	.651	.466	.429	.477	**.788**	.696
OIV10	.623	.429	.367	.432	**.782**	.625
OIV2	.457	.266	.333	.432	**.523**	.444
OIV3	.605	.445	.430	.464	**.786**	.672
OIV4	.746	.550	.597	.601	**.828**	.722
OIV5	.664	.422	.461	.500	**.852**	.699
OIV6	.543	.364	.312	.381	**.719**	.602
OIV7	.615	.430	.417	.454	**.804**	.651
OIV8	.663	.535	.442	.518	**.842**	.708

Table 1

Cross Loadings (continuation)

Item	Effect. Stra. Impl.	IT Knowledge	IT Object	IT Operation	Organizational Innovativeness	Strategic Leadership
STLP13	.585	.539	.480	.469	.596	**.707**
STLP14	.580	.433	.406	.493	.658	**.778**
STLP15	.572	.323	.342	.408	.562	**.700**
STLP16	.483	.277	.324	.388	.567	**.674**
STLP17	.507	.482	.457	.432	.582	**.685**
STLP18	.587	.514	.576	.605	.684	**.737**
STLP19	.600	.625	.600	.564	.684	**.727**
STLP4	.353	.329	.357	.297	.444	**.589**
STLP6	.501	.367	.438	.441	.524	**.636**
STLP7	.527	.404	.376	.407	.613	**.743**
STLP8	.426	.272	.236	.292	.529	**.618**
STLP9	.653	.359	.376	.438	.644	**.793**

Table 1 above compares the indicator loadings with other reflective indicators. All indicator loadings were greater than the cross loadings, suggesting adequate discriminant validity for further analysis (Chin, 1998).

Internal consistency reliability is the extent to which the entire items on a particular (sub) scale have measured the same concept (Sun et al., 2007; Bijttebier et al., 2000). Cronbach's alpha coefficient as well as composite reliability coefficients are the most commonly employed to estimates the internal consistency reliability of an instrument (McCrae, Kurtz, Yamagata, & Terracciano, 2011).

Table 2

Items loading, Average Variance Extracted (AVE) and Reliabilities

Variable	Code	Loadings	AVE	Composite Reliability	Cronbachs Alpha
Effective Strategy Implementation	ESI1	.935	.863	.950	.920
	ESI2	.941			
	ESI3	.910			
IT Knowledge	ITK10	.785	.645	.916	.889

	ITK5	.709			
	ITK6	.764			
	ITK7	.846			

Items loading, Average Variance Extracted (AVE) and Reliabilities (Continuation)

Variable	**Code**	**Loadings**	**AVE**	**Composite Reliability**	**Cronbachs Alpha**
	ITK9	.843			
IT Object	ITO1	.823	.732	.916	.877
	ITO2	.918			
	ITO3	.836			
	ITO4	.842			
IT Operation	ITOP11	.801	.649	.928	.908
	ITOP12	.622			
	ITOP13	.838			
	ITOP14	.811			
	ITOP15	.828			
	ITOP16	.882			
	ITOP17	.832			
Organizational Innovativeness	OIV1	.788	.601	.930	.914
	OIV10	.782			
	OIV2	.523			
	OIV3	.786			
	OIV4	.828			
	OIV5	.852			
	OIV6	.719			
	OIV7	.804			
	OIV8	.842			
Strategic Leadership	STLP10	.741	.503	.934	.923
	STLP11	.770			
	STLP13	.707			
	STLP14	.778			
	STLP15	.700			
	STLP16	.674			
	STLP17	.685			
	STLP18	.737			
	STLP19	.727			
	STLP4	.589			

STLP6	.636
STLP7	.743
STLP8	.618
STLP9	.793

Table 2 displays the composite reliability coefficients of the latent constructs. As on the table, composite reliability coefficient for individual constructs ranged from .916 to .950. All of them exceeded the minimum acceptable level of .70, 137. This suggests satisfactory internal consistency reliability of the measures (Bagozzi & Yi, 1988; Hair et al., 2011).

Discriminant validity is the level of which a construct differs from other constructs (Duarte & Raposo, 2010). In the present study, discriminant validity was examine using AVE, as postulated by Fornell and Larcker (1981). This was accomplished by comparing the correlations among the latent constructs with square roots of average variance extracted (Fornell & Larcker, 1981).

Table 3

Variables	**1**	**2**	**3**	**4**	**5**	**6**
1. Strategy Implementation	**.929**					
2. IT Knowledge	.527	**.803**				
3. IT Object	.578	.732	**.856**			
4. IT Operation	.674	.791	.829	**.806**		
5. Organizational Innovativeness	.805	.569	.551	.614	**.775**	
6. Strategic Leadership	.771	.604	.596	.641	.841	**.709**

Note: The bold values across diagonal are the square root of AVE, while off diagonal values are the correlations among variables.

Table 3 shows the results of the discriminant validity analysis of the constructs used in this study. Along the diagonal, the table shows square roots of AVE for all the constructs indicating a higher square root of AVE of 0.929 for effective strategy implementation, and lowest for strategic leadership of 0.709. Nevertheless, all the square roots of AVE for the constructs are greater than the off-diagonal coefficients or elements in the corresponding rows and columns, thus, establishing an evidence of discriminant validity.

HYPOTHESIS TESTING

The table below (Table 5) display the result of the computed hypothesis (prepositions). The prepositions were hitherto stated as follows:

H1: Organizational innovativeness has significant relationship with organizational strategy implementation.

H2: Strategic leadership has significant relation with organizational strategy implementation

H3: Information technology capability has significant relationship with organizational strategy implementation.

Table 4
Hypotheses Testing

Relationship	Beta value	Standard Error	t value	p value	Decision
Organizational Innovativeness -> Organizational Strategy Implementation	.495	.122	4.051	.000***	Supported
Strategic Leadership -> Organizational Strategy Implementation	.235	.126	1.861	.033**	Supported
IT Capability -> Organizational Strategy Implementation	.226	.102	2.217	.014**	Supported

***p<.01, **p<.05

Hypothesis 1 predicted that organizational innovativeness has positive significant relationship with organizational strategy implementation. The prediction was supported by the results (β = .495, t= 4.051, p= 000). Similarly, Hypothesis 2 predicted that strategic leadership has positive significant relationship with organizational strategy implementation. This was also supported (β= .235, t= 1.861, p= .033). Moreover, Hypothesis 3 predicted that information technology capability has significant and positive relationship with organizational strategy implementation. This was also confirmed (β= .226, t= 2.217, p= .014).

CONCLUSION AND RECOMMENDATIONS

From the results above, the study concluded that the three studied independent variables (strategic leadership, organizational innovativeness and IT capability) have positive and significant effect on organizational strategy implementation in the institutions under investigation. This was portrayed by the strong coefficient of correlation as well as the p-value, which stands at less than 0.05. The entire effect of the calculated factors was very high as shown by the coefficient of determination.

Focused on the contributions among leaders in academic environments, the researcher quantitatively examined the existence of strategic leadership, organizational innovativeness and informational technology capability among tertiary institutions located in Kaduna state Nigeria. The result indicates the essentiality of the afore mentioned variables in assisting tertiary institutions toward the implementation of their strategic plans. Going by this, the institutions should now know better that strategic leaders plays tremendous roles in any meaningful strategy implementation. More innovative cultures should also be strengthened in the institutions for the betterment of the institutions. Ditto to the IT capability.

The results further suggest that deans, deputy deans, as the respondents' in the study plays important roles of administrative roles associated with strategic leadership. The strategic leadership qualities can serve and guide the deans in building the tertiary institutions strategic resources into not only sustainable competitive advantage, but also facilitating the increase effort to develop IT capability and innovativeness of their subordinates. The three variables as studied in this paper can be applied in a turbulent environment in other sectors, not tertiary institutions alone.

The paper, indeed, has several limitations. Firstly, due to the nature of sampling unit, the research cannot be generalized to a larger population because only public tertiary ins institutions in Kaduna state was investigated. Thus, administering the survey instrument to all head of departments, deans as well as top level academic and administrators like Vice Chancellors from private all public tertiary institutions across the Nigeria may demonstrate shows outcomes and trend that smaller sample may not reveal. More so, the use of cross-sectional data also limits some of the conclusions obtained. Hence, future research should use different sampling items, which would be more generalizable. The study can also be extended to private tertiary institutions in Nigeria, the institutions that are on the rapid increase both in number and in capacity.

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