

Research Article

Toward Effective Strategy Implementation: the Role of Strategic Leadership Organizational Innovativeness and Information Technology Capability. Empirical Evidence

Palladan AA*

School of Business Education, Federal College of Education, Nigeria

*Corresponding author: Ahmad A. Palladan, School of Business Education, Federal College of Education, Ashaka Road, PMB 60, Gombe, Nigeria

Received: April 12, 2018; Accepted: May 22, 2018;

Published: May 29, 2018

Abstract

This study investigates the determinants of perceived organizational strategy implementation among public tertiary institutions in Nigeria. Primarily, the study explored the effects of Strategic Leadership (SL), Organizational Innovativeness (OI) and Information Technology Capability (ITC) on Effective Strategy Implementation (ESI). More precisely the direct effect of SL, OI and ITC on ESI was assessed. The study also examines the moderating effect of ITC on SL and OI on ESI. Thirteen public tertiary institutions were considered by the research. One hundred and four deans who serve as the research respondents were sampled out of the population total of 143 deans from the institutions. Hand delivery of questionnaires was used to solicit information from the respondents. Partial Least Squares Method (PLS 2) algorithm and bootstrap techniques were used to test the study hypotheses. The results provided support for most of the hypothesized relationship for the study. Specifically, SL, OI and ITC are found to be significant and positively affect organizational ESI. Additionally, ITC has been found to significantly moderate the relationship between SI and perceive ESI. While negative moderating effect of ITC was found between OI and perceive ESI. PIIT theory as well as Diffusion of Innovation Theory was partly considered as probable reasons for the negative finding. Therefore, significant positive effects of SL, OI and ITC suggest that the variables are important in facilitating ESI. As such, public tertiary institutions in Nigeria should be encouraged to demonstrate these behaviors for enhanced success of organizational strategy implementation. Enhanced success of effective strategy implementation could improve the overall effective function of the organizations.

Keywords: Strategic leadership; Organizational innovativeness; IT capability; Effective strategy implementation; Tertiary institutions

Introduction

In today's world, strategic management is gaining more ground as a tool for managing public tertiary institutions for better results [1]. The need for strategic management practices in Nigerian public tertiary institutions grew when the organizations shifted from relatively stable environment to environment that is characterized by increasing competition and shortages of resources [2]. For these institutions, adoption of strategic management practices at this moment is very timely. Strategic management practices are needed in an environment where new forms of influence are imaging and where norms and values as well as social utility of organizations is being challenged and redefined [3].

Ali and Hadi argued that the main challenge in strategic management process is associated with strategy implementation. A good strategic plan if effectively executed will certainly give an institution superior competitive advantage [4]. Revealing (Figure 1) from [5] suggest that less than 10% of well-formulated strategies are effectively executed. Additionally, [6,7] reported a similar result of just 10% of strategies being effectively executed. Correspondingly, it was reported that strategy implementation in Chinese firms has become a subject of discussion, with survey indicating that 83%

organizations failed, and only 17% organizations were successful [8].

It has been documented in the extent literature that Nigerian tertiary institutions have formulated strategies, missions and visions aimed at excellence [9]. However, these strategies are still far from been realized [10]. The reason for this unhealthy situation is lack of effective strategy implementation that resulted in their deficient performance [11]; [1]. The issue of performance in Nigerian public tertiary institutions has continued to attract the attention of government and the public. This issue of performance is pushing more and more students to opt for other countries outside Nigeria for furtherance of their education [12]. Presently the expenses of Nigerian students abroad are said to be more than 2 Billion dollars annually [13].

In Nigerian context, we argued that strategic leadership and organizational innovativeness are the top variables that affect strategy implementation in public tertiary institutions. Quite number of literatures had affirmed that lack of effective leadership is the most influential factor that retards effective strategy implementation in Nigerian for profit and non-profit organizations [14-17]; while innovation has been recommended as the single factor desirable to promote institutional performance in Nigerian public tertiary

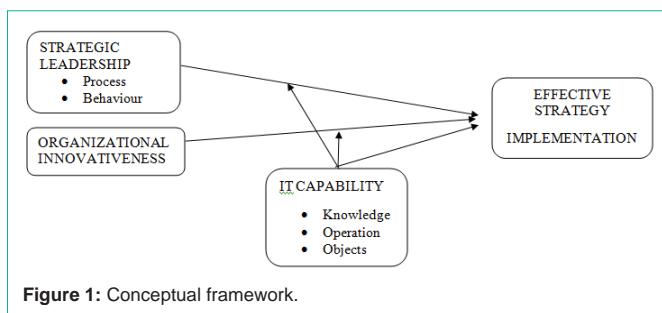


Figure 1: Conceptual framework.

institutions [18-20].

Numerous strategy literatures heavily emphasize the superiority of internal organizational competencies when it comes to seeking of competitive advantages [21-24]. One of the most essential organizational internal competitive superiorities is leadership style. Substantial number of strategic researchers and practitioners are on the agreement that strategic leaders are the backbone for any meaningful strategy implementation and organizational efficiency [25-27]. On the other hand, organizational innovation ability (innovativeness) has been regarded as integral part of organizational competitive advantage and effective instrument for effective strategy implementation [21,28].

However, most of previous strategic leadership studies on strategy implementation are based on the single-actor or 'hero' leader. This notion seems to be erroneous especially in the context of Nigerian tertiary institutions. In this paper, we conceptualized strategic leadership to consist of several of actors; something similar to distributed leadership. Thus, head of departments, deans and directors in the institutions are regarded as part of strategic leaders due their enormous contribution in any meaningful strategy implementation.

This study also proposes IT capability to moderate the relationship between strategic leadership and organizational innovativeness on effective implementation of strategies in Nigerian public institution. IT capability as argued [29] is organizational ability to mobilize and deploy IT based resources combined with other resources

and capabilities to achieve competitive advantages. Information technology capability is found to be a popular factor that yields considerable influence on several organizational intangible resources [30,31].

Additionally, scholars argued that there is need to comprehend the essentiality of information technology in the operations of Nigerian public tertiary institutions [32]. This is very timely as maximization of IT capability in the institutions has the potential of enhancing quality of policies, as well as leading to greater and proper implementation of institutional strategies and monitoring [33,34].

Resource Based View [35] is the theory underpinning this study. Organizational resources consist of all organizational assets tangible and intangible, as well as human and nonhuman that are owned or controlled by the organization [35,36]. Distinctively, intangible organizational resources such as strategic leadership, knowledge, innovation ability, permit organization to add up value to incoming factors of production [37]. And they represent competitive advantages for an organization [38,41].

Conceptual framework

Based on the previous discussions and theoretical gaps highlighted above, a conceptual framework for this study was developed demonstrating the role of IT capability as moderating variable on the relationship between (1) strategic leadership; (2) organizational innovativeness and effective strategy implementation.

Methodology

Strategic leadership is defined as "the leader's ability to anticipate, envision, and maintain flexibility and to empower others to create strategic change as necessary" [42]. The measures for this construct were measured employing the methodological approach presented by Baum, Locke and Kirkpatrick [43] in collaboration with Bass and [44] Multifactor Leadership Questionnaire (MLQ) – Form 6S. The MLQ questionnaire was found to be among the best instruments as well as one of the most utilized set of measures for all leadership researches. The MLQ instruments consist of three broad segments that represent transformational, transactional and laissez-faire leadership behaviors. However, laissez-faire behaviour segment in the

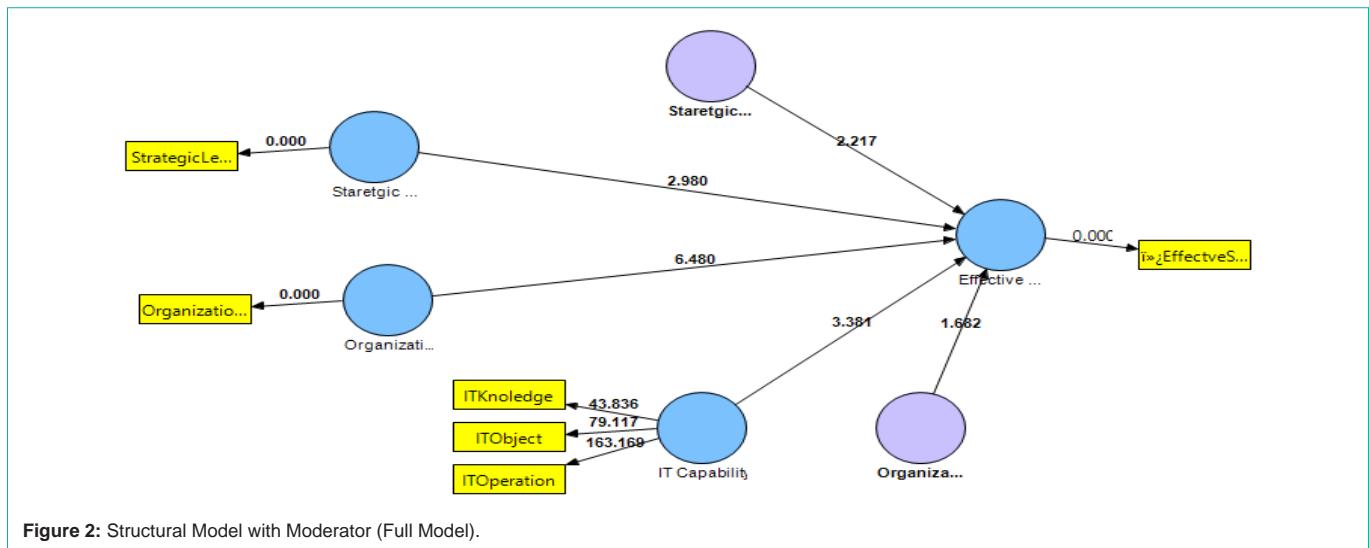


Figure 2: Structural Model with Moderator (Full Model).

Table 1: Items loadings, Average Variance Extracted (AVE) and reliabilities.

Variable	Code	Loadings	AVE	Composite Reliability	Cronbachs Alpha
Effective Strategy Implementation	ESI1	0.935	0.863	0.95	0.92
	ESI2	0.941			
	ESI3	0.91			
IT Capability	ITK10	0.785	0.645	0.916	0.889
	ITK5	0.709			
	ITK6	0.764			
IT Capability	ITK7	0.846			
	ITK8	0.863			
	ITK9	0.843			
IT Capability	ITO1	0.823	0.732	0.916	0.877
	ITO2	0.918			
	ITO3	0.836			
IT Capability	ITO4	0.842			
	ITOP11	0.801	0.649	0.928	0.908
	ITOP12	0.622			
IT Capability	ITOP13	0.838			
	ITOP14	0.811			
	ITOP15	0.828			
IT Capability	ITOP16	0.882			
	ITOP17	0.832			
	OIV1	0.788	0.601	0.93	0.914
Organizational Innovativeness	OIV10	0.782			
	OIV2	0.523			
	OIV3	0.786			
Organizational Innovativeness	OIV4	0.828			
	OIV5	0.852			
	OIV6	0.719			
Organizational Innovativeness	OIV7	0.804			
	OIV8	0.842			

MLQ questionnaire was not used, because as argued Elenkov, Judge and [45], laissez- faire leadership behaviors defy the very essence of strategic leadership. Thus, the researchers adapted sixteen items from the MLQ. The visionary aspect of strategic leadership was measured using three essential attributes proposed by [46]. According to Hurley and [47], organizational innovativeness is the notion of openness to new ideas as a characteristic of organization's culture. Thus, innovativeness is a gauge of an organization's orientation toward innovation. Ten indicators were adapted from [48] and Hurley and [47] to measure this construct. IT capability construct is use as a one-dimensional construct in this study. It will be measured using three dimensions. The measurements for these dimensions were adapted from [49]. It contains seventeen measurable items. The respondents are required to assess their organization on the perceived application of IT capability measured in three dimensions; knowledge, object and operation. All the constructs were measured using six Likert scale.

A total of 124 questionnaires were administered to chief

Table 2: Items cross loadings, AVE and Reliabilities.

Items loading, Average Variance Extracted (AVE) and Reliabilities (Cont.)					
Variable	Code	Loadings	AVE	Composite Reliability	Cronbachs Alpha
Strategic Leadership	STLP10	0.741	0.503	0.934	0.923
	STLP11	0.77			
	STLP13	0.707			
	STLP14	0.778			
	STLP15	0.7			
	STLP16	0.674			
	STLP17	0.685			
	STLP18	0.737			
	STLP19	0.727			
	STLP4	0.589			
	STLP6	0.636			
	STLP7	0.743			
	STLP8	0.618			
	STLP9	0.793			

executives, deans and head of departments of thirteen public tertiary institutions located in Kaduna state of Nigeria. Strategic scholars argued that taking several informed and knowledgeable respondents from an organization to serve as respondents limit the potentiality of measurement error [50-54] sampling techniques was used to determine the sample size. In the end, 112 questionnaires were duly completed and returned. This represent 91.1% percent response rate. In the end, 108 questionnaires were finally considered for analysis. The PLS SEM 2 software was used for the analysis due to its flexibility for statistical model building as well as prediction [55].

Results

Individual item reliability

The reliability of individual items was ascertained by looking the outer loadings of every construct's measure [56]. Adhering to the rule of thumb for keeping items with loadings that ranges between .40 and .70 [56], it was discovered that out of 48 items, 5 items were deleted because their loading fall short below the threshold of 0.40. Hence, in the whole model, only 43 items were retained because their loadings are above 0.50.

Assessing the measurement model

Table 1 depicts the results of AVE calculations with resulting coefficients that range from 0.50 to 0.86, signifying that convergence validity has been attained for all the variables. By obtaining the results of the convergence validity that signifies satisfactory item loadings, composite reliability satisfactory AVE coefficients for the individual indicators, it was clearly enough to prove that the items stand for distinct latent constructs, therefore establishing their convergence valid (Table 2).

On the other hand, discriminant validity implies that measures that should not be related are not related. To ascertain the discriminant validity, the square root of the AVE for individual construct is used [57]. Diagonally, the table depicts square roots of AVE for all the

Table 3: Latent variable correlation.

Variables	1	2	3	4	5	6
1. Effective Strategy Implementation	0.929					
2. ITC Knowledge	0.527	0.803				
3. ITC Object	0.578	0.732	0.856			
4. ITC Operation	0.674	0.791	0.729	0.806		
5. Organizational Innovativeness	0.805	0.569	0.551	0.614	0.775	
6. Strategic Leadership	0.771	0.604	0.596	0.641	0.541	0.709

variables connoting higher square roots of AVE for (0.94), as well as lower AVE for (0.77). Nevertheless, all the square roots of AVE for the constructs on the table are greater than the off-diagonal elements in the corresponding rows and columns, hence, establishing a proof of discriminant validity.

Conclusively, (Table 3) suggests that the measures for all the four constructs comprising of strategic leadership, organizational innovativeness, and effective strategy implantation and information technology capability are valid measures of their respective constructs based on their parameter estimates and statistical significance [58].

Assessment of significance of the structural model

The study applied the standard bootstrapping benchmark of 5000 bootstrap samples to examine significance of the path coefficients [56]. (Figure 2) shows the estimates for the compete structural model, which consist of the moderator.

Discussion and Conclusion

In furtherance of the analysis, the five hypotheses of the study were also discussed. Hypothesis 1 assumed that Strategic Leadership (SLP) is positively related to Effective Strategy Implementation (ESI). The result displayed on (Table 4), indicated that strategic leadership had a significant positive effect with effective strategy implementation at ($\beta = .235$, $t = 1.861$, $p < .033$). Hence, supporting the Hypothesis.

Hypothesis 2 predicted that Organizational Innovativeness (OIV) has positive effect on Effective Strategy Implementation (ESE). More so, the table suggest the existence of positive effect between organizational innovativeness and effective strategy implementation ($\beta = .495$, $t = 4.05$, $p < 0.00$), supporting Hypothesis 2. Again, Hypothesis 3 proposed that Information Technology Capability (ITC) is positively related to perceived effective strategy implementation. The result again supported this preposition with value of ($\beta = .181$, $t = 2.083$, $p < 0.020$). Thus, Hypothesis 3 is supported. On the contrary, the moderating effect of Information Technology Capability (ITC) on Organizational Innovativeness (OI) and Effective Strategy Implementation (ESI) was found to be not supporting Hypothesis 4.

Table 4: Hypotheses testing.

Relationship	Beta value	Standard Error	t value	p value	Decision
Strategic Leadership -> Effective Strategy Implementation	.235	.126	1.861	.033**	Supported
Organizational Innovativeness -> Effective Strategy Implementation	.495	.122	4.051	.000***	Supported
Information Technology Capability -> Effective Strategy Implementation	.181	.087	2.083	.020**	Supported
Organizational Innovativeness * IT Capability -> Effective Strategy Implementation	-.153	.091	1.682	.048	Not supported
Strategic Leadership * IT Capability -> Effective Strategy Implementation	.226	.102	2.217	.014**	Supported

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

departments, deans directors e.t.c., is an important thing. This will certainly go a long way in making sure that the institutional strategies are properly executed [65].

It could also be inferred from the result that, the most significant aspect of strategic leadership that has the highest contribution in the strategy implementation process in the institutions is the strategic leadership process aspect. This could be discerned from the number of items that measured the segment. In another word, out of nineteen items that measured strategic leadership construct, thirteen of them represent process aspect (i.e. normal functions that leaders perform). This is to say that strategic leadership functions like communication, planning, organizing etc. takes the centre stage as top functions that strategic leaders performed in Nigerian tertiary institutions (Ololube, Agbor, & [66,67]. Hence another policy implication for this study is the urgent need for the leadership in Nigerian tertiary institutions to imbibe the behavioral aspect of strategic leadership like doggedness, foresight, and proper utilization of resources as well as other behaviors that strategic leadership stand for. By so doing, the institutions are expected to tremendously record high improvement on their strategy implementation and in intuitional performance in general. The finding suggests that there is need for public tertiary institutions in Nigeria to instill further, the culture of innovation among their employees. This very essential since innovativeness in the organizations have been found to be among the important determinants of effective strategy implementation in the institutions Kwon [68].

Another important issue is the result indicated that the level of achievement in organizational performance on strategy implementation may be dependent to the extent of IT capability. A higher level of IT capability may lead to a higher level of success in organizational strategy implementation. To assess organizational IT capability in terms of competency needed to look beyond specific technology, but three IT dimensions: IT objects, IT knowledge and IT operations. As IT capabilities are resources that facilitate effective collection and utilization of information [29].

Another important practical contribution of this study should do with its economic contribution. Through proper execution of strategic plans by Nigerian public tertiary institutions, their performance will surely improve [69]; and this will attract more and more student both from outside and within Nigeria. Hence this means more revenue to the institutions. Additionally, the out flux of Nigerian students abroad could be curtailed. Presently the expenses of Nigerian students abroad are said to be more than 2 Billion dollars annually [13]. This suggests that the money they spent while they are abroad will now be channeled into the Nigerian economy and subsequently boost the Nigerian Gross Domestic Product (GDP).

Limitations of the Study and Direction for Future Research

This study uses quantitative research design; future research may consider a qualitative approach or a mixed/triangulation design. Precisely, qualitative interview could be carried out with participants who may give a better understanding of the relationships among the constructs under study. Future research may decide to consider larger area like taking Nigeria as whole.

References

1. Nwankwo IN, Omebe CA, Nwogbo VN. Towards revitalizing Nigerian university system through strategic thinking and planning. International Journal of Education, Learning and Development. 2015; 4: 10- 20.
2. Sallis E. Total quality management in education. Routledge. 2014.
3. Ansoff IH, Declerck RP, Hayes RL. From Strategic Planning, to Strategic Management, (ed.) John Wiley & Sons, New York NY, USA. 1976.
4. Birasnav M. Knowledge management and organizational performance in the service industry: The role of transformational leadership beyond the effects of transactional leadership. Journal of Business Research. 2014; 67: 1622-1629.
5. Gurowitz EM. The challenge of strategy implementation. Bespoke Solutions. 2007.
6. Judson AS. Invest in a high-yield strategic plan. Journal of Business Strategy. 1991; 12: 34-39.
7. Spector PE. Method variance in organizational research: Truth or urban legend?. Organizational Research Methods. 2006; 9: 221-232.
8. Sial A, Usman MK, Zufiqar S, Satti AM, Khursheed I. Why do public Sector organizations fail in implementation of strategic plan in Pakistan?. Public Policy and Administration Research. 2013; 3: 33-41.
9. Ezekwe EA, Onwe SO. Configuration of Nigerian tertiary institutions employee using mission statements: a discourse. International Journal of Political Science and Administration. 2014; 2: 23-32.
10. Kolo I. Re-enacting impact – oriented legislations for tertiary education. 2016.
11. Obanya P. In Kolo A. 2016.
12. Oyedijo A. Antecedents and Performance Outcomes of Strategic Planning in Nigerian Public Universities. International Journal of Asian Social Science. 2012; 2: 448- 461.
13. Oriere LA. Nigerians spend \$2bn on school fees abroad. Vanguard Newspaper. 2016.
14. Moti UG. Development Plans and Visions as a Strategy for Sustainable Development: The Experience of Nigeria. Department of Public Administration University of Abuja, Nigeria. 2012.
15. Asiyai RI. Improving quality higher education in Nigeria: The roles of stakeholders. International Journal of Higher Education. 2015; 4: 61-70.
16. Mbat DO, Eyo EI. Corporate Failure: Causes and Remedies. Business and Management Research. 2013; 2: 19.
17. Obasan KA, Ogunkoya OA. Strategic Planning and Bank Management in Nigeria: Issues for Policy Consideration. Journal of Research and Development. 2013; 1: 25-43.
18. Radwan I, Pellegrini G. Knowledge, productivity, and innovation in Nigeria: creating a new economy. World Bank Publications. 2010.
19. Bogoro SE. Enhancing the relevance of research and industry partnership in Nigeria: a case for new strategies. 2015.
20. Palladan AA, Kadir KA. Information Technology Capability for Nigerian Public Tertiary Institutions: A Tool for Gaining Competitive Advantage. Sains Humanika. 2016; 8: 4-2.
21. Camisón C, Villar-López A. Organizational innovation as an enabler of technological innovation capabilities and firm performance. Journal of Business Research. 2014; 67: 2891-2902.
22. Stettner U, Lavie D. Ambidexterity under scrutiny: Exploration and exploitation via internal organization, alliances, and acquisitions. Strategic Management Journal. 2014; 35: 1903-1929.
23. Lin Y, Wu LY. Exploring the role of dynamic capabilities in firm performance under the resource-based view framework. Journal of Business Research. 2014; 67: 407-413.

24. Rothaermel FT. Strategic management. McGraw-Hill. 2015.
25. Mahdi OR, Almsafir MK. The role of strategic leadership in building sustainable competitive advantage in the academic environment. *Procedia-Social and Behavioural Sciences*. 2014; 129: 289-296.
26. Neumann Y, Neumann EF. The president and the college bottom line: The role of strategic leadership styles. *Library Consortium Management: An International Journal*. 2000; 13: 73-81.
27. Shoemaker PJ, Krupp S, Howland S. Strategic leadership: The essential skills. *Harvard Business Review*. 2013; 91: 131-134.
28. Graham CR, Woodfield W, Harrison JB. A framework for institutional adoption and implementation of blended learning in higher education. *The Internet and Higher Education*. 2013; 18: 4-14.
29. Bharadwaj SG, Varadarajan PR, Fahy J. Sustainable competitive advantage in service industries: a conceptual model and research propositions. *The Journal of Marketing*. 1993; 57: 83-99.
30. Asiyai RI. Assessment of information and communication technology integration in teaching and learning in institutions of higher learning. *International Education Studies*. 2014; 7: 25-36.
31. Ghobakhloo M, Hong TS, Sabouri MS, Zulkifli N. Strategies for successful information technology adoption in small and medium-sized enterprises. *Information*. 2012; 3: 36-67.
32. Bassey SU, Okodoko D, Akpanumoh UD. Information communication technologies in the management of education for sustainable development in Africa. *African Research Review*. 2009; 3: 414-428.
33. Yusuf MO. Information and Communication Technology and Education: Analysing the Nigerian National Policy for Information Technology. *International Education Journal*. 2005; 6: 316-321.
34. Adeoye YM, Oluwole AF, Blessing LA. Appraising the Role of Information Communication Technology (ICT) as a Change Agent for Higher Education in Nigeria. *International Journal of Educational Administration and Policy Studies*. 2013; 5: 177-183.
35. Barney J. Firm resources and sustained competitive advantage. *Journal of Management*. 1991; 17: 99-120.
36. Wernerfelt B. A Resource-Based View of the Firm. *Strategic Management Journal*. 1984; 5: 171-180.
37. Hitt MA, Biermant L, Shimizu K, Kochhar R. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*. 2001; 44: 13-28.
38. Collis D, Montgomery CA. Competing on Resources. *Harvard Business Review*. 1995; 119.
39. Bogner WC, Thomas H, McGee J. Competence and competitive advantage: towards a dynamic model. *British Journal of Management*. 1999; 10: 275-290.
40. Post HA. Building a strategy on competences. *Long Range Planning*. 1997; 30: 733-740.
41. Markides C. Strategic innovation. *Sloan management review*. 1997.
42. Hitt MA, Ireland RD, Hoskisson RE. Strategic Management: Competitiveness and Globalization. Ohio: Thomson/South Western. 2007.
43. Baum JR, Locke EA, Kirkpatrick SA. A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*. 1998; 83: 43.
44. Bass BM, Avolio BJ. Organizational description questionnaire: Sampler set. Mind Garden, Incorporated. 1992.
45. Elenkov D, Judge W, Wright P. Strategic leadership and executive innovation influence: An international multi-cluster Comparative study. *Strategic Management Journal*. 2005; 26: 665-682.
46. House RJ. Appendix: Measures and assessments for the charismatic leadership approach: Scales, latent constructs, loadings, Cronbach alphas, and interclass correlations. *Monographs in Organizational Behaviour and Industrial Relations*. 1998; 24: 23-30.
47. Hurley RF, Hult GTM. Innovation, market orientation, and organizational learning: an integration and empirical examination. *The Journal of Marketing*. 1998; 62: 42-54.
48. Rainey HG. Using comparison of public and private organizations to assess innovative attitudes among members of organizations. *Public Productivity & Management Review*. 1999; 23: 130-149.
49. Tippins MJ, Sohi RS. IT competency and firm performance: is organizational learning a missing link?. *Strategic Management Journal*. 2003; 24: 745-761.
50. Bowman C, Ambrosini V. Using Single respondent in strategy research. *British Journal of Management*. 1997; 8: 119-131.
51. Snow CC, Hrebiniak LG. Strategy, Distinctive and Organizational Performance. *Administrative Science Quarterly*. 1980; 25: 317-335.
52. Hambrick DC. High profit strategies in mature capital goods industries: A contingency approach. *Academy of Management journal*. 1983; 26: 687-707.
53. Nayyar PR. On the measurement of corporate diversification strategy: evidence from large US service firms. *Strategic Management Journal*. 1992; 13: 219-235.
54. Krejcie RV, Morgan DW. Determining sample size for research activities. *Educational Psychology Measurement*. 1970; 30: 607-610.
55. Ringle CM, Sarstedt M, Straub DW. Editor's comments: a critical look at the use of PLS-SEM in MIS quarterly. *MIS quarterly*. 2012; 36: iii-xiv.
56. Hair JF, Hult GTM, Ringle CM, Sarstedt M. A primer on partial least squares structural equation modeling (PLS-SEM). Thousand Oaks: Sage Publications. 2014.
57. Fornell C, Bookstein FL. Two structural equations models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*. 1982; 19: 440-452.
58. Chow WS, Chan LS. Social network and shared goals in organizational knowledge sharing. *Information & Management*. 2008; 45, 7: 458-465.
59. Nov O, Ye C. Personality and technology acceptance: Personal innovativeness in IT, openness and resistance to change. In Hawaii International Conference on System Sciences, Proceedings of the 41st Annual .IEEE. 2008: 448-448.
60. Agarwal R, Prasad J. A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*. 1998; 9: 204-215.
61. Ololube NP, Ubogu AE, Ossai AG. ICT and distance education in Nigeria, A review of literature and accounts. *International Open and Distance Learning (IODL) Symposium*. 2007.
62. Ndidi EP, Ifeoma OE. Extent of provision and integration of ICT for implementing of university policies in Nigeria. *International Journal of Educational Research and Technology*. 2010; 1: 60-65.
63. Qureshi S, York AS. Information technology adoption by small businesses in minority and ethnic communities. In Hawaii International Conference on System Sciences, Proceedings of the 41st Annual. 2008: 447-447.
64. Scott JE, Walczak S. Cognitive engagement with a multimedia ERP training tool: Assessing computer self-efficacy and technology acceptance. *Information & Management*. 2009; 46: 221-232.
65. Kettunen J. Competitive strategies in higher education. *Journal of Institutional Research*. 2002; 11: 38-47.
66. Ololube NP, Agbor CN, Kpolovie PJ. Effective Communication Processes: The Responsibility of University Management for Enhanced Organizational Justice (OJ). In *Handbook of research on organizational justice and culture in higher education institutions*. IGI Global. 2016: 34-56.
67. Edet AO, Ekpoloh UI. Administrative challenges of academic heads of department in tertiary institutions in Cross River state. *Mediterranean Journal*

- of Social Sciences. 2017; 8: 129.
68. Kwon EH, Kwon LN, Migap J. Research and innovation strategies for economic competitiveness and industrial growth: lessons for Nigeria. European Journal of Business and Innovation Research. 2014; 2: 56-76.
69. Owolabi SA, Makinde OG. The effect of strategic planning on corporate performance in university education: A study of Babcock University. Kuwait Chapter of Arabian of Business and Management Review. 2012; 2: 27-43.