Knowledge Recognition and Organizational Innovativeness Of Tertiary Institutions In South-South, Nigeria.

Gladys O. Onah and Isaac Zeb-Obipi Department of Management, Rivers State University gladysonah4luv@gmail.com

Abstract

This paper examined the correlation between knowledge recognition and organizational innovativeness of tertiary institutions in south-south, Nigeria. The cross-sectional survey design was adopted with the research data collected through questionnaire from a sample of 285 principal officers and functional heads of government owned degree-awarding tertiary institutions in south-south, Nigeria. The instruments were validated through MTMM tool and also reliable in line with Cronbach Alpha Coefficient of 0.70. The research hypotheses were tested using the Spearman's Rank Order Correlation Coefficient tool at a 0.05 level of significance. The result of the analysis showed significant and positive relationships between knowledge recognition and the measures of organizational innovativeness. Based on our findings, the study concluded that actions related to seeking and identifying knowledge through knowledge recognition offers the organization a basis and drive for change which in turn impact positively on the administrative, process and service innovativeness of tertiary institution in south-south, Nigeria. Based on our conclusion, it was thereafter recommended that tertiary institutions should advance their knowledge recognition activities through openness towards partnerships and other learning processes such as research and development activities.

Keywords: Organizational Innovativeness, Knowledge Recognition, Process, Administrative, Service.

Introduction

The economic tide of today's business world is primarily driven by competition and as such, the need to stay relevant has become a necessity for organizations. Accordingly, there appears to be a growing consciousness of the need for innovativeness as a means through which organizations can distinguish themselves and standout amongst their rivals or competitors (Kaya & Patton, 2011; Eris & Ozmen, 2012). Yet, such innovative advancements, especially within tertiary institutions in Nigeria is noted to be problematic given growing reports on the lag between tertiary institutions and the changes and developments within their contexts – primarily as a result of their inability to effectively recognize useful and rare knowledge (Bamiro, 2012).

As a case within Africa, the growth of tertiary institutions within Nigeria can be considered as explosive. Report indicates that from a time period of about 15 years (2000 – 2015) more than 100 tertiary institutions (universities, colleges of health, polytechnics etc.) have been established (WENR, 2017). However, such growth has not offered much than the proliferation of poor education outfits and inadequate infrastructure. While the concern as Ojo (2007) observed has focused on meeting the growing population of the nation, the quality and innovativeness of these institutions has been relegated to the background. Hence, the establishment of these institutions have only served the selfish interest of most political leaders and business investors who are primarily concerned about their profits and not the implications of the weak and inadequate features of these tertiary institutions (Ojo, 2007; Bamiro, 2012).

For organizations to benefit from knowledge, such knowledge must be inimitable, scarce and emerge on the premised on the unique features of the context or environment of the organization. Nonetheless, the noted lack of research on the implications of knowledge recognition on innovativeness is further made evident in the reports of Ajayi (2007); Bamiro (2012) and Archibong & Okey (2006) of Nigerian tertiary institutions which have failed to either identify with the changing dynamics of their societies or to apply the suitable practices and processes in addressing their research and responsibilities; thus, further increasing the gap between their features such as their course content, administrative processes, technological tools, and the required or tenable features demanded in dealing with the challenges of the current sphere of academia (Bamiro, 2012; Ajayi, 2007). A study of this nature therefore offers the opportunity for a more specific (as it will generate evidence particular to the experience of tertiary institutions in Nigeria) investigation to the relationship between knowledge recognition and the organizational innovativeness of tertiary institutions in south-south, Nigeria.

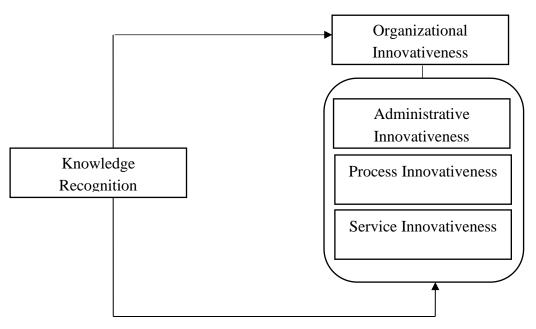


Figure 1: Conceptual framework of knowledge recognition and organizational innovativeness Source: Conceptualized by researchers' (2020) with measures adapted from Shoham *et al* (2012).

Research Purpose and Objectives

The purpose of this study was to investigate the relationship between knowledge recognition and organizational innovativeness of tertiary institutions in south-South, Nigeria. In order to achieve this purpose, the following objectives were raised.

- i. Ascertain the relationship between knowledge recognition and administrative innovativeness of tertiary institutions in south-south, Nigeria.
- ii. Determine the relationship between knowledge recognition and process innovativeness of tertiary institutions in south-south, Nigeria.
- iii. Examine the relationship between knowledge recognition and service innovativeness of tertiary institutions in south-south, Nigeria.

Research Questions

The following research questions are also presented in line with the objectives of the study:

- i. How does knowledge recognition relate with administrative innovativeness of tertiary Institution in south-south, Nigeria?
- ii. How does knowledge recognition relate with process innovativeness of tertiary institution in south-south, Nigeria?
- iii. How does knowledge recognition relate with service innovativeness of tertiary institution in south-south, Nigeria?

Theoretical Foundation (Knowledge-Based Theory)

The knowledge-based theory is considered a variant of the resource-based view theory. While the resource-based view offers a broader and more generalized approach towards resource development and utilization as a basis for improved competition, the knowledge-based theory is more specific and draws essentially on the position that knowledge investments and development are key factors behind competitive and successful organizations (Adler & Heckscher, 2006). According to Akhtar, Arif, Rubi and Naveed (2011) organizations which invest and emphasize on building and developing their knowledge base are considered as having a pool of options and competencies upon which their functions and capacities are anchored. However, as Schiuma (2012) pointed, the ability to identify or recognize useful and scarce knowledge is integral to the development of organizational qualities which support its creativity and capacity for innovation. The theory in this way serves as the basis for his paper's position on the role of knowledge recognition in the actualization of organizational innovativeness.

Knowledge Recognition

Knowledge recognition refers to the organizations ability to spot knowledge which is useful, advantageous and unique. It is a behaviour of the organization primarily concerned with the recognition of rare and scarce knowledge connected to organization's context and as such linked to its functions and operations within such a context. In recognizing knowledge, Cohen and Levinthal (1990) notes that organizations must be able to specify and point out the possible advantages such knowledge could offer them, especially through research and development (R & D) activities in the long-run and how its utility would differentiate them from other similar organizations or competitors and offer them the required competitiveness in their behaviour. Tajeddini (2010) agrees with this position as he opined that organizations are defined by the level of uniqueness they bring to the table and the extent to which their behaviour imbues them with distinct value and as such relevance in their various markets or environment.

Organizational Innovativeness

Organizational innovativeness describes the organizations capacity for creativity and imagination in its product and service offerings. Shoham, Vigoda-Gadot, Ruvio and Schwabsky (2012) in their study distinguished between innovativeness and innovation, noting that innovativeness describes the capacity for innovation – in other words, innovativeness is a significant antecedent of innovation. Innovation therefore denotes the application of creative ideas aimed at providing solution to an identified gap or introducing a change. Creativity express the potency to generate ideas. It is the thinking process while innovation entails understanding the risk, constraints and benefit in the creative idea, and converting such idea to a valuable form to meet an articulated need. While creativity remain a vital component of innovation, it is possible to be creative without necessarily be innovative and such determining factor lies in the ability to connect the creative ideas to manifest and reveal a hidden value new to the market. From the perspective of Shoham *et al* (2012) creativity and imagination are necessary for predicting outcomes of service or product innovation especially that which is concerned with uniquely addressing satisfaction gaps within the market. Existing literature incorporate creativity as an essential element of innovation as poor innovativeness has been linked to the lack of adequate attention to creativity (Perry-Smith & Mannucci, 2017).

According to Yildiz, Basturk and Boz (2014), innovativeness indicates a disposition which is flexible, adaptive and highly knowledgeable of the market. This agrees with Abiola (2013) view that to innovate, one must know and understand the areas or gaps within which such innovations apply or within which they will be more appreciated. Innovativeness therefore describes those qualities and characteristics which support, equip and advance the organizations adaptive and distinct change capabilities.

Administrative Innovativeness

This describes the organizations' overall actions and disposition towards change and its market expectations (Elidemir, Ozturen & Bayighomog, 2020). It describes its attitude towards clients, customers, partners and other stakeholders (Shoham *et al*, 2012). Administrative innovativeness therefore reflects the attitude and disposition of the organization in its dealings and exchanges – indicating its level of ingenuity in dealing with various stakeholders and its market. It

also involves the organizations administrative and leadership actions and functions – describing the forms or models of its structures, work arrangements and overall external and internal relationship. It is critical for determining the support and encouragement of creativity from both internal (e.g. employees) and external sources (e.g. suppliers or vendors).

Process Innovativeness

Process innovativeness is concerned with the operations and systems of the organization – the way roles and responsibilities are connected and carried out. Process innovativeness is systematic and involves the uniqueness of technology applications, the flow of communication and correspondence within units, organizations as well as the interfacing of project phases. Shoham *et al*, (2012) opined that unlike the administrative and service measures of innovativeness, process innovativeness is a more dynamic and internally oriented aspect of organizational innovativeness. Process innovativeness according to Shoham *et al* (2012) and Pouwels & Koster (2017) addresses features such as functional efficiency, communication, and the linking of organizational decisions with its goals or objectives.

Service Innovativeness

Service innovativeness describes the content and features of the service offerings of the organization. Also referred to as product innovativeness, and describes the organizations ability or capacity to modify and uniquely develop service features and content in such a way that offers a distinct value to the market. Shoham *et al* (2012) described service innovativeness as the organizations capacity to express fluidity in capturing and maintaining its market, despite the rivalry and competition from other organizations. Organizations which are high on service innovativeness can brand, rebrand and modify their services and products in a manner to match the changes in the market and also offer them advantage over their competitors. It is a key determinant of the survival and resilience of the organization and reflects agility in its actions (Hsieh, 2013).

Knowledge Recognition and Organizational Innovativeness

Gupta and Batra (2016) noted that the process of knowledge recognition involves the actual investigation and research of context-related issues as a way of building knowledge and specifying solutions. In this way, Cohen & Levinthal (1990) argued that in recognizing knowledge that are considered useful, organization is first required to understand its own needs in line with expectations of its environment. Knowledge recognition as such can be considered as enhancing the organizations awareness of the gaps and at the same time informing it of the nature and form of knowledge required for effectively addressing such gaps or markets in a creative manner (Yusuf, 2009).

While studies on innovativeness identify the role and imperatives of knowledge-based actions across most parts and regions of the Western world (Zachary *et al*, 2011; Schiuma, 2012), there is however, a scarcity of empirical content which addresses this relationship between the variables especially within Nigeria. Given the noted challenges in terms of innovativeness and the possible advantages and implications of knowledge recognition for these institutions, there is a need for assessing this relationship within the context of Nigeria. However, there is a scarcity of empirical evidence or support linking both variables, hence, this study hypothesizes as follows:

HO₁: There is no significant relationship between knowledge recognition and administrative innovativeness of tertiary institutions in south-south, Nigeria.

HO₂: There is no significant relationship between knowledge recognition and process innovativeness of tertiary institutions in south-south, Nigeria.

HO₃: There is no significant relationship between knowledge recognition and service innovativeness of tertiary institutions in south-south, Nigeria.

Methodology

The design adopted in this study was the cross-sectional survey design. This choice is premised on the action of sourcing and generating data from several cases or units clearly defined by certain parameters and within a particular time frame (Neuman, 2006). The accessible population for this study was 1012 principal officers and functional heads of all government owned degree-awarding tertiary institutions in south-south, Nigeria (Akwa-Ibom State, Rivers State, Cross Rivers

State, Edo State, Delta State, Bayelsa State). The sample size for this study was derived using the Krejcie and Morgan 1970 (Sekaran, 2003) sample size derivation table. Based on the noted accessible population of 1012 senior staff, a sample size of 285 was adopted in line with the sample size distributions table.

Sampling for the study was carried out using the stratified sampling technique in which each institution was assessed as a stratum and the sample size (285) is proportionately distributed across the sub-population for each institution. This paper adopted the questionnaire as its primary tool for data collection. The instrument used in measuring knowledge recognition was sourced from previous studies (Lichtenthaler, 2016; Flor & Oltra, 2013) with the items adapted to suit the context of the present study – tertiary institutions. The instrument for organizational innovativeness is adapted from previous research (Bertrand & Mol, 2013; Finne, Brax, & Holmstrom, 2013). Indicators for both variables were scaled on a 5-item instrument with all indicators stated in the positive and ranked on the Likert scale of (SDA) strongly disagree, (D) disagree, (U) undecided, (A) agree, and (SA) strongly agree.

Data Result

The administration of the questionnaire revealed that out of a total of 285 questionnaire copies distributed, only 221 copies were successfully retrieved. Questionnaire distribution was carried out within a period of 1 week with some questions distributed online using the survey monkey to the official email addresses of respondents based on their profiles and platforms as availed on their institution websites. As such only 221 copies (making 77% of the total number) were returned and utilized. The Cronbach alpha reliability test was also carried out on the instrument with results showing good reliability outcomes (a > 0.70) for all instruments (Sekaran, 2003).

Table 1 Summary Distribution for The Variables of the Study

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Recognition	221	3.4199	.71195	-1.050	.164	.148	.326
Administrative	221	2.9756	.62402	981	.164	.275	.326
Process	221	2.8434	1.05050	095	.164	-1.636	.326
Service	221	2.5457	.45800	810	.164	.513	.326
Valid N (listwise)	221						

Source: Survey Data, 2020

Evidence from table 1: demonstrates the distribution for the variables where knowledge recognition (x = 3.4199) is noted to be evident in the behaviour of the tertiary institutions. Also, all three measures of organizational innovativeness were observed to characterize the institutions where administrative innovativeness (x = 2.9756), process innovativeness (x = 2.8434) and service innovativeness (x = 2.5457). The distribution for the variables suggests that knowledge recognition is a more dominant behaviour and action of the organization compared to the other features or characteristics assessed herein.

Table 3: Knowledge Recognition and Organizational Innovativeness

			Recognition	Behaviour	Process	Service
Spearman's rho	Recognition	Correlation Coefficient	1.000	.268**	.222**	.550**
		Sig. (2-tailed)	•	.000	.001	.000
		N	221	221	221	221
	Behaviour	Correlation Coefficient	.268**	1.000	.510**	.528**
		Sig. (2-tailed)	.000	•	.000	.000
		N	221	221	221	221
	Process	Correlation Coefficient	.222**	.510**	1.000	.297**
		Sig. (2-tailed)	.001	.000		.000
		N	221	221	221	221
	Service	Correlation Coefficient	.550**	.528**	.297**	1.000
		Sig. (2-tailed)	.000	.000	.000	
		N	221	221	221	221

Source: Survey Data, 2020

The test on the relationship between knowledge recognition and the measures of organizational innovativeness demonstrates a position that identifies knowledge recognition as a significant predictor of outcomes of organizational innovativeness. The results are shown as follows:

- i. Knowledge recognition significantly at a rho of 0.268 and P < 0.05, contributes towards the administrative innovativeness of the institutions. In line with the research question regarding the relationship between the variables, it is evident that it is a weak relationship however, it is yet positive suggesting that knowledge recognition enhances outcomes of administrative innovativeness. Hence the null hypothesis was rejected as the evidence affirmed that there is a significant relationship between knowledge recognition and administrative innovativeness of tertiary institutions in south-south, Nigeria.
- ii. Knowledge recognition significantly at a rho of 0.222 and P < 0.05, contributes towards the process innovativeness of the institutions. The result demonstrates that the relationship between the variables is weak but yet positive, implying that knowledge recognition facilitates outcomes of process innovativeness. Hence the null hypothesis was rejected as the evidence affirmed that there is a significant relationship between knowledge recognition and process innovativeness of tertiary institutions in south-south, Nigeria.
- Knowledge recognition significantly at a rho of 0.550 and P < 0.05, contributes towards the service innovativeness of the institutions. With regards to the research question, the evidence revealed that the relationship between the variables is moderate and positive. Hence the null hypothesis was rejected as the evidence affirmed that there is a significant relationship between knowledge recognition and service innovativeness of tertiary institutions in south-south, Nigeria.

Discussion Of Findings

In line with the observed significant relationship between knowledge recognition and the measures of organizational innovativeness, all hypotheses were rejected. This is based on the findings which revealed knowledge recognition to be a significant antecedent of organizational innovativeness measures such as administrative, process and service innovativeness. The findings demonstrate the necessities of knowledge recognition in the development of creative content and

innovative capabilities for the tertiary institutions in south-south, Nigeria. The evidence further positioned knowledge, especially that which is rare and unique to the organization, as a primary factor in its change and innovative goals.

According to Kale and Singh (2007) knowledge recognition opens up the organization to the availing possibilities that pervade its environment. Through the identification and recognition of knowledge which is rare and useful, organizations can effectively develop their systems to match the demands of their environment and thus advance the achievement of their goals and objectives. According to Kallio (2012) knowledge is critical to the organizations' ability to adapt and to be creative – thus, knowledge recognition is fundamental to innovativeness of the organization and its ability to thrive and survive.

Conclusion

Given the noted significant relationship between knowledge recognition and the measures of organizational innovativeness such as administrative, process and service innovativeness, this study revealed that actions related to seeking and identifying knowledge through knowledge recognition offers the organization a basis and drive for change which in turn impacts positively on the administrative, process and service innovativeness of tertiary institution in south-south, Nigeria. This study concluded that knowledge recognition contributes to administrative innovativeness of tertiary institution in south-south, Nigeria. Knowledge recognition significantly enhance process innovativeness of tertiary institution in south-south, Nigeria. Knowledge recognition significantly impact service innovativeness of tertiary institution in south-south, Nigeria.

Recommendations

In line with the observed role of knowledge recognition in the actualization of organizational innovativeness, it was recommended that tertiary institutions should advance their knowledge recognition activities through openness towards partnerships and other learning processes to drive administrative innovativeness. Tertiary institution should advance their knowledge recognition through research activities to enhance process innovativeness. Tertiary institutions should focus on delineating useful, rare and unique knowledge forms to have a competitive advantage and offer them distinctiveness in their services within their various contexts or environment.

REFERENCES

- Abiola, I. (2013). Organizational learning, innovativeness and financial performance of Small and Medium Enterprises (SMES) in Nigeria. *European Journal of Business and Management*, 5(2), 179-186.
- Adler P.S. & Heckscher C. (2006). Towards collaborative community, in the firm as a collaborative community. *Reconstructing Trust in the Knowledge Economy*, 11-101.
- Ajayi K (2007). Emergent issues in teacher education and professionalization of teaching in Nigeria. *African Journal of Historical Science in Education* 3(1), 22-28.
- Akhtar, S., Arif, A., Rubi, E., & Naveed, S. (2011). Impact of learning on organizational performance: Study of higher education institutes. *International Journal of Academic Research* 3(5), 327-331.
- Archibong L.A & Okey SA (2006). Towards quality graduate output from Nigerian universities. Nigerian Journal of Educational Philosophy 2 (2), 71-77.
- Bamiro K. (2012). The Nigerian university system and the challenges of relevance, In: Convocation Lecture University of Lagos, Akoka-Lagos 12 January.
- Bertrand, O. & Mol, M.J. (2013). The antecedents and innovation effects of domestic and offshore R&D outsourcing: the contingent impact of cognitive distance and absorptive capacity, *Strategic Management Journal*, 34(6), 751-760.

- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128-152.
- Eris, E. D., & Ozmen, O. N. T. (2012). The effect of market orientation, learning orientation and innovativeness on firm performance: a research from turkish logistics sector. *International Journal of Economic Sciences and Applied Research*, 5(1), 77-108.
- Elidemir, S. N. Ozturen, A., Bayighomog, S. W. (2020). Innovative behaviour, employee creativity and sustainable competitive advantage: A moderated mediation 12, 3295 *sustainability*.
- Finne, M., Brax, S., & Holmström, J. (2013). Reversed servitization paths: a case analysis of two manufacturers. Service Business, 7(4), 513-537.
- Flor, M.L. & Oltra, M.J. (2013). An exploratory analysis of the relationship between absorptive capacity and business strategy, *Technology Analysis & Strategic Management*, 25(9), 1103-1117.
- Gupta, V.K. & Batra, S. (2016). Entrepreneurial orientation and firm performance in Indian SMEs: universal and contingency perspectives, *International Small Business Journal*, 34(5), 660-682.
- Kale, P. & Singh, H. (2007). Building Firm Capabilities through Learning: The Role of the Alliance Learning Process in Alliance Capability and Firm-Level Alliance Success. *Strategic Management Journal*, .28, 981-1000.
- Kallio, A. (2012). Enhancing absorptive capacity in a non-research and development content. Doctoral dissertation. University of Technology, Lahti School of Innovation, in the Auditorium of the Lahti Adult education center, Lahti, Finland on the 16th of June, 2012 at noon.
- Kaya, N., & Patton, J. (2011). The effects of knowledge-based resources, market orientation and learning orientation on innovation performance: an empirical study of Turkish firms. *Journal of International Development*, 23(2), 204-219.
- Lichtenthaler, U. (2016). Absorptive capacity and firm performance: an integrative framework of benefits and downsides, *Technology Analysis & Strategic Management*, 28(6), 664-676.
- Neuman, W. L. (2006). Social research methods: Qualitative and quantitative approaches. Boston, Pearson Education.
- Ojo, A. O., Raman, M., Chong, S. C. & Chong, C. W. (2013). Individual antecedents of ACAP and implications of social context in joint engineering project teams: a conceptual model. *Journal of Knowledge Management*. 18(1), 177-193.
- Pouwels, I., & Ferry, K. (2017). Inter-organizational cooperation and organizational innovativeness. A comparative study. *International Journal of Innovation Science*, 9(2), 184-204.
- Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social network drivers of the four phases of the idea journey. *Academy of Management Review*, 42, 53–79.
- Schiuma, G. (2012). Managing knowledge for business performance improvement, Journal of Knowledge Management, 16(4), 515-522.
- Sekaran, U. (2003). Research methods for business: A skill-building approach, Fourth edition. New York: John Wiley & Sons, Inc.

- Shoham, A., Vigoda-Gadot, E., Ruvio, A., & Schwabsky, N. (2012). Testing an organizational innovativeness integrative model across cultures. *Journal of Engineering and Technology Management*, 29(2), 226-240
- Tajeddini, K. (2010). Effect of customer orientation and entrepreneurial orientation on innovativeness: evidence from the hotel industry in Switzerland. *Tourism Management*, 31(2), 221-231
- WENR (2017), Education in Nigeria. World Education News + Reviews. March 7, 2017. https://wenr.wes.org/2017/03/education-in-Nigeria
- Yildiz, S., Basturk, F., & Boz, I. T. (2014). The effect of leadership and innovativeness on business performance. *Procedia: Social and Behavioural Sciences*, 150, 785-793
- Yusuf, S. (2009). 'From creativity to innovation', Technology in Society. 31 (1): 1-8.
- Zachary, M.A., McKenny, A., Short, J.C. & Payne, G.T. (2011). Family business and market orientation construct validation and comparative analysis, *Family Business Review*, 24(3), 233-251.
- Hsieh, W. L. (2013). The innovation value chain and export performance: A study of Taiwanese manufacturing industries (Doctoral dissertation, Aston University).