

NETWORK RESOURCES MANAGEMENT; COROLLARY FOR ENHANCED ENTERPRISE STRATEGIC ADVANTAGE

ORJI, AZUBUIKE STANLEY and PROF. PATRICK NWINYOKPUGI

Department of Office and Information Management, Faculty of Management Sciences

Rivers State University, Port Harcourt. Azubuikeorji1@Gmail.Com;

; nwinyokpugi.patrick@ust.edu.ng

08051215964; 0703353270

ABSTRACT

The study was triggered by the desire to investigate the relationship between network resources management and enterprise strategic advantage of media houses in Rivers State. The study was based on the dynamic capability theory. The cross-sectional survey design was used in the study. The population covered 109 principal officers drawn from media houses in Rivers State. A total of 109 leaders were chosen through a census based on the focus of the study. Data was collected using structured questionnaires. The hypotheses were tested using the Spearman Rank Order of Correlation Coefficient. The findings of the study revealed that there is a positive and significant relationship between network resources management and enterprise strategic advantage of media houses in Rivers State using the Pearson Product Moment Correlation tool at 95% confidence interval. The study concludes network resources management positively enhances enterprise strategic advantage of media houses in Rivers State. It was therefore recommended that the leadership of media houses should put in place reliable network infrastructures, capable of protecting sensitive data, thereby delivering quality contents to their audiences without any network related disruptions.

Keywords: Network, Resources Management, Corollary and Enterprise Strategic Advantage

INTRODUCTION

Enterprise strategic advantage is tied to the use of management information system which has increased for last few years not only by firms, but also by individuals and even governments. Because of today's global environment where competition is very high, it is the basic requirement of the organization to install management information systems to compete the market and to earn more profitability, invest in innovation in their products, and to grow their businesses. All of these factors transformed the information system from data processing systems to decision support systems and became the foundation of the new business environment. In this study we have investigated the impact of network resources management on the performance of the organization. And as well showed how network resources management as a key component of an organization's information system can increase profitability, innovation and growth of the organization, thereby enhancing enterprise strategic advantage.

Telecommunications networks like the Internet, intranets, and extranets have become essential to the successful operations of all types of organizations and their computer-based information systems. Telecommunications networks consist of computers, communications processors, and other devices interconnected by communications media and controlled by communications software. The concept of network resources management emphasizes that communications networks are a fundamental resource component of all information systems. Network resources include: Communications media: such as twisted pair wire, coaxial cable, fiber-optic cable, microwave systems, and communication satellite systems. Network support: This generic category includes all of the people, hardware, software, and data resources that directly support the operation and use of a communications network. Examples include communications control software such as network operating systems and Internet packages.

LITERATURE REVIEW

Ali (2010) posited that the ultimate aim of network resources and information service is to supply its user with all the materials that he or she needs in order to do research, become more educated, empower him/herself, or simply be entertained. The explosion in published output, the sharp increase in bibliographic access of literature through online and off-line databases on CDs decreasing library budgets along with high cost of published output have made it virtually impossible for libraries and documentation/ information centers to fulfill information needs of their primary clientele. Under such squeezing situation the best option left with the libraries is to optimize the output and utilize their resources through extensive sharing and networking. In view of the above, the traditional concept of ownership in collection development is gradually being replaced by access to information and knowledge without regard to location and format.

The fact is that ICT has become indispensable to organizations in the provision of timely information to users and, in fact, to the progress of librarianship as a profession. A network is, essentially, an interconnected group or system. A library and information network is therefore, a group of libraries or information centres that are interconnected or linked for the purpose of resource sharing. Kaul (2002) gives the view that a library network can bridge the digital divide and play a major role in developing appropriate content, managing content for dissemination, improving access to resources, contributing the growth of trained manpower and so on. In the same context, consortia-based subscription of e-journals is one of the major and most popular activities undertaken by library networks. The exponential growth of information and escalating cost have prompted the libraries to look for a collective arrangement which would provide them with a better bargaining power to have access to maximum information with possible minimum cost (Siddanagouda, 2013).

The conclusion of this article will highlight the formal and informal ways in which professionals can make the most of the advantages and benefits of such collaboration. Resource sharing in information centers is not a new concept. It has long been used to improve access and service through borrowing and lending from other libraries. According to Ali et al. (2010), Resource sharing among libraries and information Centres has become the common desire and practice amongst information professionals. Increase in the volume of library materials and information, the increasing costs of acquiring and processing them, the need for trained personnel, storage space, and the increasing demands by users are motivating factors for libraries to share books, journals, preprints, catalogues, list of publications, recent additions, newsletters, policy decisions, current events, news flash, etc.

Historically, the library has had a long tradition of resources sharing and networking's with ICT. It is common now for library to be members of several consortia at the same time for various types of cooperative work and resources sharing. Examples of this are the Online Public access Catalogue (OPAC) and the Online Computer Library Catalogue (OCLC). With the development of the digital library software, Greenstone digital library software, CDSware, the CERN document server software, the possibilities of sharing resources have become much easier (Aina et al., 2010). A number of research have been carried out on the need for resource sharing, collaboration and networking among libraries in Africa. Notable amongst them are Etim (2006) on resource sharing in the digital age: prospects and problems in African Universities; Waiganjo (2006) on academic and public libraries partnership in sharing information through technology in Kenya and the role of the African virtual library; on information technology potentials for interlibrary loan and cooperation; on library networking and consortia initiatives in Africa; Ossai, (2010) on Consortia Building among Libraries in Africa, John-Okeke, Rita (2013) on Bibliographic networking and Law libraries in Nigeria etc. Resource sharing and cooperative functioning through networking have become a necessity for libraries and information centres worldwide. Efficient resource sharing can be achieved by using the recent advances in information technology to collaborate with other information networks.

Enterprise Strategic Advantage

The discipline of strategic management focuses mainly on gaining and maintaining the competitive advantage as well as enhancement of the enterprise's overall performance (David, 2011). Many empirical studies emphasize that the limited success of enterprises and the failure of businesses is due to the lack of strategic management application. On the other side, the empirical results in both SME and large enterprises that apply strategic management process show that there is a positive relationship between strategic management and enterprise performance (Andersen, 2000). Although it has been argued many times that the presence of the strategic management process is closely related to the successful performance of enterprises, many of them do not practice it. As a result of this neglect, enterprises cannot attain their full potential and their survival is threatened.

The main goal of most businesses is to achieve and retain competitive advantage, so the essential question in the field of strategic management is how do firms achieve competitive advantages and retain them? Thus, identifying the sources of competitive advantage is one of the key issues in this field. The analysis of internal features of the organisation and the formulation of a strategic plan based on internal capabilities provide a basis for driving competitive advantage and performance Vuorinen et al., (2017). In literature, we encounter many strategic management tools and techniques (hereinafter referred to as SMTTs). Predominantly researches on these strategic tools and techniques with regard to the level of their usage and classification. Meanwhile, there is also a lack of understanding of whether their use affects the gaining of competitive advantage and the enhancement of enterprise performance.

Today, the business environment is dynamic, therefore, enterprises must create new competitive advantages in order to adapt to the speed of technological change, customer demand, and global competitiveness. According to Kotler et al. (2015) strategic planning may be suitable as a thought process to integrate and provide an organized

representation of all of the management steps. But it does not give any indication of the extent of the potential success of the chosen strategy it suggests a certainty to decision makers, but it does not guarantee success. Consequently, if they want to get any closer to the issue of a strategy's success, decision makers first need to adopt a diverse range of perspectives by applying strategy tools. Wright et al. (2013) think that companies can benefit more than ever from strategic management, its tools, and techniques, as their proper use improves the performance and efficiency of enterprises. Stonehouse and Pemberton (2002) highlight the maturity of an academic discipline is often judged by the extent to which its theories and techniques are employed in everyday practice.

Cost Reduction

The growth of any company is largely determined by how well it can manage its costs. This is partly because to be able to maximize profit, cost must be reduced to the barest minimum. Cost reduction has become a vital tool for companies to constantly stay ahead of the increased competition in the business environment (Alireza & Mahdi, 2012). Indeed, even organizations that are gainful can profit by implementing cost-lesening techniques to make considerably higher overall revenue on its items or administrations. According to Ogunnaike (2010), the effective and efficient management of cost is not only necessary to meet the profit objective of the company but also the going concern status of the entity. To record growth in terms of increase in profit of an organization, cost reduction mechanism should be put in place.

Chartered Institute of Management Accountants (CIMA), London defined cost reduction as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without damaging the ability of the product to serve the purpose for which it was intended. According to Gaurav,Jain,Kapoor and Nateriya (2013), cost reduction is "the way toward searching for, finding and expelling baseless costs from a business to build the benefit without negatively affecting item quality". The concept of continuously searching for new ways and avenue of reducing costs needs to be constantly promoted at all levels of an enterprise, which signifies that the enterprise has a strategic approach to this issue (Figar& Ivanoic, 2015).

Cost reduction is a planned approach to reduce expenditure. It is a continuous process of examining critically all elements of cost and each aspect of the business with a view to improving business efficiency. Cost reduction is a corrective function. Cost reduction is the process of cutting down costs incurred by an organization for the purpose of making profit. It starts when cost control ends and considers that no cost is at its optimum level. According to Adeniyi (2011), cost reduction starts with an assumption that current cost levels or planned cost levels are too high despite the fact that cost control may be good and organization experiencing high efficiency levels. The relevance of cost reduction as a measure of enterprise strategic advantage in the Nigerian Broadcasting industry cannot be over emphasized. When the goals and objectives of broadcasting firms are attained, employees are retained, increased patronage, satisfied clients act as referral agents; undoubtedly, these positive outcomes will ultimately improve the overall strategic and competitive advantage of the firm.

Innovation

Innovation is a concept with a very large applicability, whose characteristics vary based on the field of reference. According to the National Institute of Statistics (2013), innovation is an activity resulting in a new product (goods or services) or a significantly improved one, a new process or a significantly improved one, a new marketing method or a new organizational method. Glodeanu et al. (2009) quoted the definition of innovation established by the European Union as an accomplishment of a new idea in the current direct practice, either in a commercial manner, or in a voluntary and public sphere, by the diffusion, assimilation and the usage of invention in different fields of the society. They continued by adding that it is accomplished either by the transfer of existing knowledge from one field to other fields (the leverage strategy), by using existing knowledge to redefine what is already known (the expansion strategy), by creating a new field of knowledge (the accomplishment strategy), or by creating a new field of knowledge around a vision or a vague idea on a future field of knowledge (the experimental strategy) (Glodeanu et al., 2009).

Leovaridis (2008) approached organizational innovation, by considering a knowledge-intensive organization an innovation in itself, because this type of organization changes a whole series of aspects regarding the organizational dimension and that of human resources (for instance, from using specific traditional resources land, energy, etc. to knowledge resources; from mass management to a more personalized one; from respecting job requirements to negotiating competences etc.). These organizations are founded on the anthropocentric management, defined as a new type of human resources management, based on training people and competences, offering an altogether different vision on what human resources are (and what they should become) (Leovaridis, 2011). According to him, the aim of this type of management is not to be able to use the human being (as a means) to a larger extent and better, but also to be able to consider the individual as the end

goal and to see what the organization can and needs to do in order to help the respective individual become an accomplished person, but on a human level and through his work (Hoffman, 2009).

The importance of innovativeness as a measure of organizational creativity in the telecommunication industry cannot be over emphasized. When employees are innovative, the organization by extension is innovative, profits are attained, employees are retained, increased patronage, clients act as referral agents, undoubtedly, these positive outcomes will ultimately improve the industry's level of productivity and creativity. The relevance of innovation as a measure of enterprise strategic advantage of broadcasting firms cannot be over emphasized. When broadcasting firms are innovative; broadcasting practitioners are retained, clients are satisfied, and act as referral agents, undoubtedly, these positive outcomes will ultimately improve a company's level of productivity and overall sustainability.

Theoretical Foundation: Dynamic Capability Theory (David Teece, Gary Pisano & Amy Shuen 1997)

The dynamic capability theory postulates the firm's ability to adapt in dynamic market conditions as the critical source of superior performance (Liu et al. 2012). Dynamic capability affirmed the firm's ability to recognize, integrate, develop, envisage, and reconfigure internal and external capabilities to deal with environmental dynamics (Pavlou & El Sawy, 2011). Literature argues that information system resources such as a fundamental capability of an organization may influence on the dynamic capability and enhance the organizational performance (Cepeda & Vera 2007; Haas & Hansen 2005; Sher & Lee, 2004).

Relating this theory to our study, we can mean that organizations (broadcasting firms) can increase their strategic advantage by the acquisition by investing keenly network resources in a bit to attain the much needed competitive and strategic advantage.

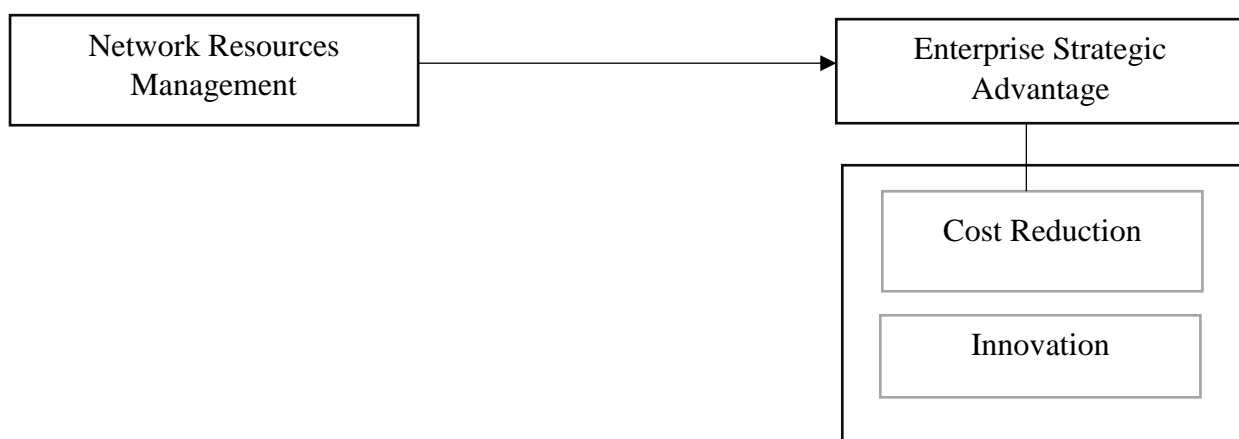


Fig. 1.1: Conceptual framework of network resources management and enterprise strategic advantage

Source: Researcher's conceptualization from the Review of Related Literature 2023

METHODOGY

This research effort adopted the cross-sectional survey design in its assessment of the relationship between network resources management and enterprise strategic advantage. The design was considered appropriate because it allows for the descriptive examination of the variables across several units in a convenient way. The survey adopted is suitable because the variables were outside the control and manipulation of the researcher. The 109 head of departments of media houses in Port Harcourt constituted the study population. The leadership of media houses in Rivers State were surveyed because the study uses macro unit of analysis. Leaders of media houses were chosen through a census based on the focus of the study. In essence, the entire population was studied. To ensure the internal reliability, the survey instrument was assessed by means of Cronbach alpha coefficient, using the statistical package for social sciences (SPSS). Hence, only the items that returned alpha values of 0.7 and above. To empirically evaluate the relationship between the predictor and criterion variable of this study (including measures of our criterion variable), the spearman's rank order of correlation coefficient (RHO) was adopted. As a tool, it was considered to be more flexible, and it is not limited or confined to

parameters statistical assumption such as applicable in the Pearson's product moment correlation. The analysis was performed through the help of the scientific package for social sciences (SPSS) version 23 software.

ANALYSIS AND RESULT

Table 2: Correlations Matrix for Network Resource and Strategic Advantage

		Network Resource	Cost Reduction	Innovation
Spearman's rho	Network Resource	Correlation Coefficient	1.000	.743**
		Sig. (2-tailed)	.	.000
		N	97	97
	Cost Reduction	Correlation Coefficient	.743**	1.000
		Sig. (2-tailed)	.000	.000
		N	97	97
	Innovation	Correlation Coefficient	.901**	1.000
		Sig. (2-tailed)	.000	.000
		N	97	97

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1: Interpreting Correlation Coefficients

Correlation Coefficient	Appropriate Interpretation
+ .70 - + 1.0	Very strong positive relationship
+ .50 - + .69	Strong positive relationship
+ .30 - + .49	Moderate positive relationship
+ .10 - + .29	Low positive relationship
+ .01 - + .09	Negligible positive relationship
00	No relationship
- .01 - - .09	Negligible negative relationship
- .10 - - .29	Low negative relationship
- .30 - - .49	Moderate negative relationship
- .50 - - .69	Strong negative relationship
- .70 - - 1.00	Very strong negative relationship

Testing of Research Hypotheses

The bivariate hypothetical statements for the study were tested using the Spearman's rank order correlation coefficient. It was adopted as the correlation tool as a result of its non-parametric features (normality of distribution, homogeneity of variance for the variables), and its suitability for data which is either scaled on the interval or ordinal level of scaling.

Source: SPSS Output version 23.0

Network Resources Management and Enterprise Strategic Advantage Measures

Table 2 shows the result of correlation matrix obtained for network resource and measures of strategic advantage. Also displayed in the table is the statistical test of significance (p - value), which makes us able to answer our research question and generalize our findings to the study population.

RQ: How does network resources enhance the strategic advantage of media houses in Rivers State?

Table 2 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.743 on the relationship between network resource and cost reduction. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in cost reduction was as a result of the adoption of network resource. Therefore, there is a strong positive correlation between network resource and cost reduction of media houses in Rivers State, Nigeria.

Similarly, Table 2 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.901 on the relationship between network resource and innovation. This value implies that a very strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in innovation was as a result of the adoption of network resource. Therefore, there is a very strong positive correlation between network resources and innovation of media houses in Rivers State, Nigeria.

Therefore, to enable us to accept or reject hypotheses 1, and 2 as well as generalize our findings to the study population the p- value was used as shown below:

H₀₁: There is no significant relationship between network resources and cost reduction of media houses in Rivers State.

Similarly displayed in the table 2 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 1, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between network resources and cost reduction of media houses in Rivers State.

H₀₂: There is no significant relationship between network resources and innovation of media houses in Rivers State.

Also displayed in the table 2 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between network resources and innovation of media houses in Rivers State.

Therefore, the results for the fourth set of hypotheses with regards to the relationship between network resources and strategic advantage of media houses in Rivers State. are stated as follows:

- i. There is a very strong positive significant relationship between network resources and cost reduction of media houses in Rivers State.
- ii. There is a strong positive significant relationship between network resources and innovation of media houses in Rivers State.

DISCUSSION OF FINDINGS

The study found out that there is a positive and statistically significant relationship between network resources management and enterprise strategic advantage of media houses in Rivers State at P value 0.000 which is less than 0.05. The finding of these study agrees with the posits of Ali (2010) who argued that the ultimate aim of network resources and information service is to supply its user with all the materials that he or she needs in order to do research, become more educated, empower him/herself, or simply be entertained.

CONCLUSION

The study concludes network resources positively enhances enterprise strategic advantage of media houses in Rivers State.

RECOMMENDATION

The study further recommended that Media houses should ensure that they have a secure and reliable network infrastructure to protect sensitive data and deliver content to audiences without interruptions.

REFERENCES

- Adeniyi. A. A. (2011). *Cost accounting: A managerial approach*. Lagos, Nigeria. El-Toda ventures Ltd, 5th ed.
- Aina, A., Ogundipe, T., & Taiwo, A. (2010). E-Library Approach for Resource Sharing in An Information Communication Technology Era: Issues, Prospects and Challenges. *Journal of Communication and Culture: International Perspective*, 1(3). Retrieved from [http:// www.icidr.org/doc/ICIDR%20PDF](http://www.icidr.org/doc/ICIDR%20PDF)
- Ali, H., Owoeye, J. E., & Anasi, S. N. I. (2010). Resource Sharing among Law Libraries: An Imperative for Legal Research and the Administration of Justice in Nigeria. *Library Philosophy and Practice (e-journal)*. Paper 404.
- Alireza, A. S., & Mahdi, A. (2012). Target and Kaizen Costing. *International Journal of Social,Behavioural,Educational,Economic,Business and Industrial engineering*, 6(2), 171.
- Andersen, T.J. (2000). Strategic planning, autonomous actions and corporate performance' , *Long Range Planning*, 33(2), 184200 [online] [https://doi.org/10.1016/s0024-6301\(00\)00028-5](https://doi.org/10.1016/s0024-6301(00)00028-5).
- Anderson, Gary, & Gary J. Anderson (2001). *Fundamentals of educational research*. Psychology Press.files/boadi.pdf

- Cepeda, G., and Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, 60(5), 426-437.
- David, F. (2011). *Strategic Management Concepts and Cases*, 13th ed., Prentice Hall International, Inc., Upper Saddle River, NJ.
- Etim, F. E. (2006). Resource sharing in the digital age: Prospects and problems in African Universities. *Library Philosophy and Practice*, 9(1). Retrieved from <http://unllib.unl.edu/LPP/etim.htm>
- Figar, N., & Ivanovic, V. (2015). Cost Reduction Strategy: process and effects. *Journal of Current Research*, 12(1), 15-26.
- Gaurav, H. Y., Jain, K. R., Kapoor, M., & Nateriya, R. (2013). Cost Reduction in Diferent Disciplines. *International Journal of Current Research*, 5(10),2821-2825.
- Glodeanu, I., Hoffman, O., Leovaridis. C., Nica, E., Nicolaescu, A., Popescu, G., and Raşeev, S. (2009). *New paradigms of innovation. Case study – the corporate university*. Bucharest: Expert Publishing House.
- Haas, M. R., & Hansen, M. T. (2005). When using knowledge can hurt performance: The value of organizational capabilities in a management consulting company, *Strategic Management Journal*, 26(1), 1-24.
- Hoffman, O. (2009). *Management. Sociohuman foundations* Bucharest: Victor Publishing House.
- John-Okeke, R. (2013). Bibliographic networking and law libraries in Nigeria. *International Journal of Library and Information Science*, 5(1), 8-13, Retrieved on January 12, 2014 of from <http://www.academicjournals.org/IJLIS>
- Kaul, K. (2002). *Library Resource Sharing and Networks*. New Delhi: Virgo Publications.
- Kotler, P., Berger, R. and Bickhoff, N. (2015). *Quintessence of Strategic Management*, Springer, Berlin, Heidelberg.
- Leovaridis, C. (2008). Knowledge-intensive organizations. *Organizational-managerial psychology. Current tendencies* (838-870). Iasi: Polirom Publishing House.
- Leovaridis, C. (2011). Knowledge-intensive organizations and their management. The advertising agency. *Knowledge management. Current themes* (45-76). Bucharest: Bucharest University Publishing House.
- Liu, H., Ke, W., Wei, K. K. & Hua, Z. (2012). The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility. *Decision Support Systems*, 54(3), 1452-1462.
- National Institute of Statistics (2013). *Romania Statistical Yearbook 2012*. Retrieved from http://www.insse.ro/cms/files/Anuar%20statistic/13/13.Stiinta,%20tehnologie%20si%20inovare_ro.pdf.
- Nielsen, P., and Lundvall, B.-A. (2007). Innovation, learning organizations and employment relations. In C. Mako, H. Moerel, M. Illessy, and P.Csizmadia (Eds.), *Working it out? The labour process and employment relations in the new economy*. Budapest: Akademiai Kiado.
- Ogunnaike, M. W. (2010). Cost Management and Profitability in Manufacturing Companies (Undergraduate Thesis). Covenant University, Ota, Ogun State, Nigeria.
- Ossai, N. (2010). Consortia Building among Libraries in Africa, and the Nigerian Experience. *Collaborative Librarianship*, 2(2), 7485.
- Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the Elusive Black Box of Dynamic Capabilities. *Decision Sciences*, 42(1), 239-273.

- Sher, P. J., and Lee, V. C. (2004). Information technology as a facilitator for enhancing dynamic capabilities through knowledge management, *Information & Management*, 41(8), 933-945.
- Siddanagouda, B. G. (2013). Resource sharing and networking of college libraries affiliated to Gulbarga University: a study submitted for the award of Degree of Doctor of Philosophy in Library and Information Science, Department of Library & Information Science Karnata University, Dharwad-India. <http://shodhganga.inflibnet.ac.in/handle/10603/8750>
- Vuorinen, T., Hakala, H., Kohtamäki, M. and Uusitalo, K. (2017).. Mapping the landscape of strategy tools: a review on strategy tools published in leading journals within the past 25 years, *Long Range Planning* [online] <https://doi.org/10.1016/j.lrp.2017.06.005>.
- Waiganjo, W. J. (2006). The Camel comes of Age: Academic and public libraries partnership in sharing Information through technology in Kenya: The role of the African virtual library project. Retrieved from <http://www.ala.org/lala/iro/iroactivities/camel%20comesofage.htm>.
- Wright, R.P., Paroutis, S.E. & Blettner, D.P. (2013). ‘ How useful are the strategic tools we teach in business schools?’ , *Journal of Management Studies*, 50(1), 92– 125 <https://doi.org/10.1111/j.1467-6486.2012.01082.x>.