

Information Technology and Customer Service Performance among Insurance Companies in Nigeria

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Abstract

Information technology (IT) has been regarded as an enabler of business process. Despite the significant progress made in IT business-value research, findings have been mixed and inconsistent. This study aims at finding out if IT resources per se can account for variations in customer service performance among insurance companies in Nigeria. Using primary data obtained through field survey of 402 insurance companies in Nigeria, three hypotheses were tested with the aid of ordinary least square regression. Results show that all the three components of IT namely, IT infrastructure, IT technical skills and IT spending have weak relationship with customer service performance. This study recommends that in order to realise benefits from IT investments, IT resources must be accompanied by a judicious mix of management, economic, and human resources.

Keywords: Information technology, customer service performance, insurance companies.

Introduction

Customer service continues to generate discussions among business executives and academics as it is believed to be a key driver for measuring the competitive success of business organisations (Pargelova 2010; Mithas, Krishnan, & Fornell, 2005). It has also been recognised as a strategic means by which a firm can achieve a superior financial performance among service organisations (Reichheld, 2004; Karimi, Sommers & Gupta, 2001). Provision of better services and marketing information availability are said to be important in satisfying customer needs in the insurance industry (Epetimehin, 2011). In Nigeria, however, studies have shown that customer service is a difficult challenge faced by financial institutions (Appah & Banabo, 2012; Banabo, Ndiomu & Koroye, 2011). For instance, insurance firms are faced with the difficulty of persuading customers of the quality of their services (Olumoko, Abass & Dansu, 2012). Similarly, transactions involving money transfer and long queues and huge crowds in the banking halls have also been identified as some of the major areas where the banks in Nigeria have been encountering challenges in customer service (Abefe-Balogun & Nwankpa, 2012; Ogunnaike, 2010).

As shown in some previous studies, the increased emphasis on customer service is said to be a major reason for most IT decisions in recognition of the role IT is expected to play in customer service process (Ray et al, 2005; Wind & West, 1991). Firms are adopting IT to foster changes in managing customer relationships, manufacturing, procurement, the supply chain and all other key activities (Agarwal & Sambamurthy, 2002). Thus, the potential of IT to improve firm's processes has generated much interest among the academic researchers over the years. In part, this interest arises from the significant investments which firms have made in IT (Ravichandran & Lertwongsatien, 2005).

Some studies suggest that the increased investments in IT are a result of the belief by many organisations that IT has the potentials to improve their customer satisfaction (Abraham, 2012; Chen & Tsou, 2007; Smith, McKeen & Singh, 2007; Srinivasan, Lilien & Rangaswamy, 2002; Chopra & Mieghem 2000; Closs, Goldsby & Clinton, 1997). For instance, IT was found to be useful as a driver of incentives in the decision-making process of corporate governance and is thus proposed as an enabler in empowering executives and board members towards promoting a stakeholder perspective (Abraham, 2012). Chen and Tsou (2007) argue that firms are making significant investments in information technology to align business strategies, enable innovative functional operations and provide extended enterprise networks. IT has also been found as an enabler of new competencies that make new business strategies possible, and allow new business governance options in the way a firm works with other firms (Smith, McKeen & Singh, 2007). It has also been found that as a productivity tool, IT can be utilised to increase the capability and decrease the cost of doing business (Closs, Goldsby & Clinton, 1997).

While some studies have found that IT can impact on business performance directly or indirectly (Neirotti &

Paolucci, 2007; Duh et al., 2006), others suggest that IT cannot be a source of competitive advantage since it does not fulfill the requirements of the concept of competitive advantage (Carr, 2005; Venkatraman & Zaheer, 1990). Many scholars have argued that having technological tools is not sufficient on its own for a firm to gain and maintain competitive advantage (Vargas, Hernandez & Bruque, 2003; Powell & Dent-Micallef, 1997; Clemons & Row, 1991). Owing to the seeming rise in IT costs, business executives have begun to seek evidence verifying the true contributions of IT to the success of their firms (Nijland, 2004). This calls for more studies to investigate the effects of IT resources on firm's performance. This current study is an attempt to provide answer to the following questions: Will the information technology resources, in and of themselves, account for performance variations in customer service performance among financial institutions in Nigeria? If the answer is yes, what specific components of information technology resources have greater effects on customer service? In the next three sections, we will consider in the following order: literature review and hypotheses, research methodology, and discussion and conclusions.

Literature Review and Hypotheses

It is recognised among business executives and academic researchers that marketing is all about creating and delivering service that has value to the customers (Pergelova, 2010; Rust, Zeithaml & Lemon, 2000). There is a general consensus that quality customer service is not only the most important factor for achieving the paramount marketing outcome, namely, customer satisfaction, it is also the principal criterion for measuring the competitiveness of the customer service process (Ray et al., 2005), because it is positively associated with the market value of firms (Anderson, Fornell & Mazvancheryl, 2004). It is defined as a bundle of activities provided by the supplier that serves to maximise time and place utilities, as determined by the consumer, while ensuring that the product is delivered in the desired form (Jeffers, 2003). Much interest is being shown in investigating the effects of IT investments on intangible measures of firm performance, such as greater responsiveness to customers and overall customer experience, which are reflected in customer satisfaction (Bharadwaj, Bharadwaj & Konsynski, 1999; Brynjolfsson & Hitt, 1996). Improving customer satisfaction is one of the prime motivations for making IT investments (Chopra & Meindl 2003; Karimi, Somers & Gupta, 2001). Firms are interested in knowing the effect of IT investments on customer service, and the causal mechanisms that mediate the effect of IT systems on customer satisfaction (Banker & Kauffman, 2004). It is necessary to disaggregate the effects of various components of IT resources on customers on customer service performance.

Information technology (IT) refers to the total investment, expenditure, and know-how in computing and communication technology, including hardware, software, processes and people, dedicated to providing these services (Bullon, 2009; Weill & Broadbent, 1998). It is a group of engineering tools that facilitate market entry through operational and dynamic capabilities (Saini & Johnson, 2005). It is a term used to cover a broad spectrum of computing and communication devices that capture data, including an electromechanical device that accepts to input, process and store data according to programmed logical and arithmetic rules, and produce results (Muisiime & Biyaki, 2010). Jeffers (2003) refers to IT resources as the technology assets, available to the firm. These would necessarily include shared technology and technology services across the enterprise and the business application. The scope of IT resources may be widened to include IT Technical skills (programming, systems integration and data base development) and monetary investments. In their description of IT resources, Medville et al. (2004) include IT skills as human IT resources. This is in line with Wade and Hulland's (2004) definition of IT resources as IT asset and organisation competence. IT resources consist of IT infrastructural, IT technical skills and IT spending.

IT Infrastructure: IT infrastructure is a shared set of capital resources that provides the foundation on which specific IT applications are built (Broadbent & Weill, 1997; Duncan, 1995). It is what Dehning and Richardson (2002) identify as IT strategy in their three different formulations of IT. Medville et al. (2004) include this in technological IT Resources (ITR) and define it as the shared technology and technology services across the organisation. Weill & Broadbent (2000) describe IT infrastructure as the foundation of IT capability, delivered as reliable services shared throughout the firm and coordinated centrally, usually by the information systems group. Hence, infrastructure can be said to mirror an organisation's historic process with the use of IT and tends to be highly path-dependent in its accumulation (Keen, 1993). IT infrastructure may also refer to the set of well known hardware and software technologies that can be purchased from outside suppliers (Slight, Quinn, Avery, Bates & Sheikh, 2013). IT infrastructure, considered in isolation, according to Byrd & Turner (2001), may constitute a value-generating resource. This leads to the formulation of our first hypothesis:

H₀₁: IT infrastructure per se will not account for variation in customer service performance among insurance companies in Nigeria.

IT Technical skills: IT skills have been defined as the ability to conceive, develop, and exploit IT applications (Mata et al., 1995). IT technical skills can also "refer to general, explicit skills (e.g., programming), possessed by the firm's IT staff that are needed to develop IT applications" (Ray et al., 2005; 628). They may also refer to personnel resources, dedicated to supporting IT as part of IT resources (Mata et al., 1995). In their description of

IT resources, Medville et al. (2004) also make reference to human IT resource, which denotes both technical and managerial knowledge. Technical skills relate to application development, integration of multiple systems, and maintenance of existing systems. It is necessary to have IT staff that will consistently solve business problems and address business opportunities through IT (Bullon, 2009). IT technical skills would include operational competence, which represents the ability to provide reliable and consistent IT support to the business, and these, argue Ravichandran & Lertwongsatien (2005), are likely to have a direct effect on firm performance. Wade and Hulland (2004) argue that although the relative mobility of IT personnel tends to be high, some IT skills cannot be easily transferred, and thus, these resources can become a source of sustained competitive advantage.

Hence, our second hypothesis reads:

H₀₂: IT technical skills per se will not significantly affect customer service performance among insurance companies in Nigeria.

IT Spending: It is one of the three different IT formulations by Dehning & Richardson (2002), and falls under one of the two dimensions of IT resources in the classification used by Prasad et al. (2009), where it is referred to as the level of raw dollar spending on IT. This goes beyond what is spent on the IT infrastructure, to include non-intangible IT resources. Ray et al. (2005) argue that failure to invest in IT resources and capabilities, by sourcing them internally or externally, may put a firm at a competitive disadvantage in terms of the performance of its customer service process. One may then reason that firms in a particular industry have a strong incentive to invest in the IT assets necessary to maintain its level of competitiveness. This leads to our third hypothesis.

H₀₃: IT spending per se will not account for variation in customer service performance among insurance companies in Nigeria.

Research Methodology

Surveys have been predominant among information technology researchers (Bharadwaj et al., 2007; Ravichandran & Lertwongsatien, 2005; Ray et al., 2005), and have been found to be appropriate for social and behavioural research (Zikmund, 2000). Survey is thus adopted for use in the current study.

Materials and Methods

The population of study consists of all the managerial staff of the 48 insurance companies in Nigeria. Seventy percent of this number was randomly selected from this number, and 34 companies that emerged from this exercise were used for drawing our sample size. Fifteen managers were randomly selected from these 34 companies, giving a sample size of 510. The primary data used for the study were collected with the use of a structured questionnaire. Questionnaire is appropriate for gathering information from a widely dispersed area at a relatively low cost (Dillon, Madden & Firtle, 1994)

Variables used are IT infrastructure, IT technical skills and IT spending. IT infrastructure is a 6-item scale that was designed to measure the degree of adoption and deployment of specific IT resources and applications in the firm's customer service process. This variable was adapted from Powell and Dent-Micallef (1997) and Ray et al. (2004, 2005). For IT technical skills, 8 variables were used. One item each was adapted from Powell and Dent-Micallef (1997), Vargas et al. (2003) and Jeffers (2003). Three items were adapted from Ravichandran and Lertwongsatien (2005), and 2 items were from Ray et al. (2005). IT spending contains 6 variables that were designed to measure the level of a firm's investments in IT. One variable was adapted from Ray et al. (2005), while the remaining 5 were from Ravichandran and Lertwongsatien (2005). Five-point Likert scale was used, where 1 stands for 'Strongly Disagree' and 5 'Strongly Agree'

Seventy copies of the questionnaire were administered to managers of randomly selected insurance companies in Lagos in carrying out a pilot test. Sixty two correctly filled were used for the reliability test. Cronbach's alpha is a model of internal consistency. Field (2009) asserts that values above 0.7 of Cronbach's α are acceptable values of consistency. The results of the pilot study show an α value of 0.787 for IT infrastructure, 0.933 for IT technical skills, 0.844 for IT spending and 0.890 for customer service performance, indicating a high degree of reliability of the research instrument. In a bid to ensure a high level of construct validity of the research instrument, this study has adapted, to a great extent, existing surveys successfully used to measure similar constructs in some previous studies. For content validity, the draft questionnaire was given to some knowledgeable practitioners at the senior level in insurance companies and experienced lecturers in the fields of marketing, management and statistics to examine, in line with the method advocated in Cooper and Schindler (2001). Suggestions and recommendations made were incorporated in the final instrument.

Our hypotheses were tested with the aid of ordinary least square regression. Various tests were also carried out to ensure that the assumptions of regression were not violated. For normality assumption, which is regarded as the most fundamental by Tabachnick and Fidell (2007), the results show the skewness value of below the threshold of 3 and kurtosis of below the threshold of 10, indicating that the study variables are normally distributed (Vincent, 2012). For the assumption of linearity, the F statistic was significant at 5% and 1% levels respectively. In addition, collinearity diagnostics were performed on the variables used. With the Tolerance Values of all the

independent variables greater than 0.1, and VIF values well below the cut-off point of 10, there is no problem of multicollinearity. Also the result of Durbin–Watson d test with reported value close to 2 shows no sign of heteroscedasticity and autocorrelation.

Results

Five hundred and ten copies of the research questionnaire administered to the target members, 435 were returned, 402 of which were fully completed, giving a usable response rate of 78.8%. Compared with those of previous studies, this response rate is quite high. For instance, Wagner (2008) obtained a response rate of 13.6%, Ray et al. (2005) 13%, Jeffers (2003) 12.3%, and Vargas et al. (2003) 21.86%.

Tests of Hypotheses

H₀₁: IT infrastructure per se will not account for variation in customer service performance among insurance companies in Nigeria.

Table 1 Model Summary for H₀₁

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.319 ^b	.102	.100	.84074

Predictors: (Constant), Customer Service Performance

Table 2 ANOVA for H₀₁

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	32.060	1	32.060	45.357	.000 ^c
Residual	282.736	40	.707		
Total	314.796	40			

Dependent Variable: Customer Service Performance

Predictors: (Constant), IT Infrastructure

Table 3 Coefficients for H₀₁

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.169	.123		25.836	.000
IT Infrastructure	.342	.034	.319	6.735	.000

Dependent Variable: Customer Service Performance

Table 1 shows the R value of 0.319. In line with the guidelines provided by Cohen (1988), this indicates a moderate correlation between IT infrastructure and customer service performance. The R² value of 0.102 shows that IT infrastructure helps to explain 10.2 % of the variance in the customer service performance. Although, the relationship between IT infrastructure and customer service performance is a moderate one, the correlation is statistically significant (R= 0.319; n=402; p<0.05). We thus reject the null hypothesis that states that IT infrastructure per se will not account for variation in customer service performance among insurance companies in Nigeria. In Table 3, both the IT infrastructure and the constant are shown to contribute significantly to the model (as can be seen from the Sig. column). From the B column, the regression equation can be presented as:

$$\text{Customer service performance} = 3.169 + 0.230 (\text{IT infrastructure}).$$

H₀₂: IT technical skills per se will not significantly affect customer service performance among insurance companies in Nigeria.

Table 4 Model Summary H₀₂

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.316	.100	.097	.84175

Predictors: (Constant), IT Technical Skills

Table 5 ANOVA for H₀₂

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	31.377	1	31.377	44.283	.000 ^c
1 Residual	283.419	400	.709		
Total	314.796	401			

Dependent Variable: Customer Service Performance

Predictors: (Constant), IT Technical Skills

Table 6 Coefficients for H₀₂

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.535	.216		11.729	.000
IT Technical Skills	.342	.051	.316	6.655	.000

Dependent Variable: Customer Service Performance

As is the case with Table 1, Table 4 shows a low R value of 0.316, and R² of 0.100, indicating that IT technical skills only help to explain about 10 percent of the variance in customer service performance scale. At R= 0.316; n=402; p<0.05, we reject the null hypothesis that states IT technical skills do not affect customer service performance among insurance companies in Nigeria. Table 6 shows that both the IT technical skills and the Constant contribute significantly to the model (as can be seen from the Sig. column). From the B column, the regression equation can be presented as:

$$\text{Customer service performance} = 2.535 + 0.342 (\text{IT technical skills}).$$

H₀₃: IT spending per se will not account for variation in customer service performance among insurance companies in Nigeria.

Table 7 Model Summary H₀₃

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291	.085	.083	.84866

Predictors: (Constant), IT Spending

Table 8 ANOVA for H₀₃

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	26.708	1	26.708	37.083	.000 ^c
1 Residual	288.088	400	.720		
Total	314.796	401			

Dependent Variable: Customer Service Performance

Predictors: (Constant), IT Spending

Table 9 Coefficients for H₀₃

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.978	.164		18.119	.000
IT Spending	.247	.041	.291	6.090	.000

Dependent Variable: Customer Service Performance

From Table 7, R is 0.291 and R^2 is 0.085, indicating that IT spending only help to explain 8.5% of the variance in customer service performance. At $R= 0.291$; $n=402$; $p<0.05$, we reject the null hypothesis that states IT spending does not affect customer service performance among insurance companies in Nigeria. Table 9 shows that both the IT spending and the Constant contribute significantly to the model (as can be seen from the Sig. column). From the B column, the regression equation can be presented as:

$$\text{Customer service performance} = 2.978 + 0.247 (\text{IT spending}).$$

Discussion

This study proposes that the variation in customer service performance across firms cannot be explained by IT resources per se, which include IT infrastructure, IT technical skills, and IT spending. And where customer service performance is affected by IT resources, the study intends to disaggregate the effects of various components of IT resources. Our results indicate that there is a correlation, albeit a moderate one, between IT infrastructure and customer service performance. Our adjusted R^2 indicates that only about 10% of the variance in customer service performance is explained by IT investments. This result is in agreement with the findings in Prasad et al. (2009), where IT resources were found to have a direct but marginal impact on customer service. Thus, IT infrastructure has not been found to be a source of sustained competitive advantage (Powell and Dent-Micallef 1997). In Ray et al. (2005) however, it was found that generic information technologies, that is, IT infrastructure did not explain significant variance in customer service performance. Jeffers (2003) found that IT resources alone are not a predictor of customer service.

Regarding our second hypothesis, our results also show a relatively low correlation between IT technical skills and customer service performance. The relationship is statistically significant ($R= 0.316$; $n=402$; $p<0.05$), indicating that IT technical skills actually have a moderate effect on customer service performance. This result coincides with findings in Ray et al. (2005) where IT technical skills were found not significant in explaining variance in customer service performance. The third hypothesis relates to the effects of IT spending on customer service performance. Although the correlation between IT spending and customer service performance was found to be low ($R = 0.291$), the relationship is statistically significant. This finding agrees with those of some the previous studies. For instance, Mithas (2005) found that IT spending did not seem to have a significant effect on perceived quality, perceived value and customer satisfaction for service firms. Similarly, it was found in Li and Ye (1999) that IT spending was not statistically significant in improving performance.

Conclusion

This study intends to find out if IT resources per se can explain variance in customer service performance across competing firms in the insurance industry in Nigeria. Another object of the study is to disaggregate the effects of IT resources in order to establish which of IT components have greater effects. With R^2 of 0.102 for IT infrastructure, 0.100 for IT technical skills and 0.085 for IT spending, all the three components have low effects with IT infrastructure have slightly greater effects. Previous studies that focus on a direct relationship between IT and organisation performance may have failed to take into consideration other intervening firm capabilities that might have enhanced IT, and which are true facilitators of performance improvement. This suggests that the unique value of IT is that it is an enabler of organisational processes. The submission is in harmony with the so-called hypothesis of strategic necessity, which states that IT is a necessary but not sufficient factor in improving competitive position (Vargas et al, 2003; Clemons & Row, 1991).

While some organisations continue to be able to record impressive performance due to their IT investments, others record low or negative IT business value. There is the need, therefore, to better understand the sources of such variations and, consequently, the mechanisms by which IT contributes to firm performance. For decision makers, while it is necessary for firms to invest in building and deploying IT to improve their customer service process, the performance effects of such investments depend on the presence of certain firm-specific resources that are complementary to IT. Business executives should note that creating and utilising unique organisation environment are crucial to realising benefits from their IT investments.

REFERENCES

- Abefe-Balogun, B., & Nwankpa, N. N. (2012). National development: the significance of e-banking. *Advances in Arts, Social Sciences and Education Research*, 2(3), 121-128.
- Abraham, S. E. (2012). Information technology, an enabler in corporate governance. *Corporate Governance*, 12(3), 281 – 291.
- Agarwal, R., & Venkatesh, V. (2002). Assessing a firm's web presence: A heuristic evaluation procedure for the measurement of usability. *Information Systems Research*, 13(2), 168-186.
- Anderson, E.W., Fornell, C., & Mazvancheryl, S. K. (2004). Customer satisfaction and shareholder value. *Journal of Marketing*, 68(4), 172-185.

- Appah, E., & Banabo, E. (2012). Customers service strategy and commercial banks survival in a post-consolidation era in Nigeria. *American International Journal of Contemporary Research*, 2(8), 142-153.
- Banabo, E., Ndiomu, K., & Koroye, B. H. (2011). Customer service strategies of retail organizations in the Niger delta area of Nigeria. *Asian Journal of Business Management*, 3(3), 219-227.
- Banker, R. D., Kauffman, R. J. (2004). The evolution of research on information systems: A fiftieth year survey of the literature in management science. *Management Science*, 5(3), 281-298.
- Bharadwaj, S., Bharadwaj, A., & Bendoly, E. (2007). The performance effects of complementarities between information systems, marketing, manufacturing, and supply chain processes. *Information Systems Research*, 18(4), 437-453. doi: 10.1287/isre.1070.0148
- Bhardwaj, A., Bhardwaj, S., & Konsynski, B. (1999). Information technology effects on firm performance as measured by Tobin's q. *Management Science*, 45(6), 1008-1024.
- Broadbent, M., & Weill, P. (1997). Management by maxim: How business and IT managers can create IT infrastructures. *Sloan Management Review*, 38(3), 77-92.
- Brynjolfsson, E., & Hitt, L. M. (1996). Paradox lost? Firm-level evidence on the returns to information systems spending. *Management Science*. 42(4), 541-558.
- Bullon, L. A. (2009). Competitive advantage of operational and dynamic information technology capabilities, *Journal of Centrum Cathedra*, 2(1), 86-107.
- Byrd, T. A., & Turner, E. D. (2000). Measuring the flexibility of information technology infrastructure. *Information and Management*, 17(1), 167-208.
- Carr, N. (2005). The end of corporate computing. *Sloan Management Review*, 46 (3), 67-73.
- Chen, J. S. & Tsou, H. T. (2007). Information technology adoption for service innovation practices and competitive advantage: The case of financial firms. *Information Research*, 12(3), 314-336.
- Chopra, S., & Meindl, P. (2003). What will drive the enterprise software shakeout? *Supply Chain Management Review*, 7(1), 50-57.
- Clemons, E. K., & Row, M. C. (1991). Sustaining IT advantage: The role of structural differences. *Management Information Systems Quarterly*, 275-292.
- Closs, D. J., Goldsby, T. J. & Clinton, S. R. (1997) Information technology influences on world class logistics capability. *International Journal of Physical Distribution & Logistics Management*, 27(1), 4-17.
- Cooper, D. R., & Schindler P. S. (2001). *Business research methods* (7th Ed.). New York: McGraw Hill.
- Dehning, B., & Richardson, V.J. (2002). Returns on investments in information technology: A research synthesis. *Journal of Information Systems Management*, 16(1), 7-30.
- Dillon, W. R., Madden, T. J., & Firtle, N. H. (1994). *Marketing research in a marketing environment*. (3rd ed.) Burr Bridge, Ill: Irwin.
- Duh, R.R., Chow, C.W. & Chen, H. (2006). Strategy, IT applications for planning and control, and firm performance: The impact of impediments to IT implementation. *Information & Management*, 43 (8), 939-949.
- Duncan, N. B. (1995). Capturing flexibility of information technology infrastructure: A study of resource characteristics and their measure. *Journal of Management of Information Systems*, 12(2), 37-57. 195.
- Epetimehin, F. M. (2011). Achieving competitive advantage in insurance industry: The impact of marketing innovation and creativity. *Journal of Emerging Trends in Economics and Management Sciences*, 2(1), 18-21,
- Field, A. (2009). *Discovering statistics using SPSS* (3rd Ed.) London: Sage.
- Jeffers, P.I. (2003). *Information technology (IT) and process performance: An empirical investigation of the complementarities between IT and non-IT resources* (Doctoral dissertation). Retrieved from http://etd.ohiolink.edu/view.cgi?acc_num=osu1061404946.
- Karimi, J., Sommers, T. M., & Gupta, Y. P. (2001). Impact of information technology management practices on customer service. *Journal of Management Information Systems*, 17(4), 125- 158.
- Keen, P. G. W. (1993). Information technology and the management difference: A fusion map. *IBM System Journal*, 32(1), 17-39.
- Li, M. & Ye, R. (1999). Information technology and firm performance: Linking with environmental, strategic and managerial contexts. *Information & Management*, 35(1), 43-51.
- Mata, F. J., Barney, J. B., & Fuerst, W. L. (1995). Information technology and sustained competitive advantage: A resource-based analysis. *MIS Quarterly*, 14(4), 487-506.
- Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Review: Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly*, 28(2), 283-322.
- Mithas, S., Krishnan, M. S. & Fornell, C. (2005). *Effect of information technology investments on customer satisfaction: Theory and evidence* (Ross School of Business Working Paper No. 200500971). Retrieved from Social Science Research Network website: <http://ssrn.com/abstract=901643>

- Musiime, A., & Biyaki, F. (2010). Bank clients' perception of information technology usage, service delivery and customer satisfaction: Reflections on Uganda's banking sector. International Trade & Academic Research Conference (ITARC) - London 2010. Retrieved from: <http://www.scribd.com/doc/61247382/>.
- Neirotti, P., & Paolucci, E. (2007). Assessing the strategic value of Information Technology: An analysis on the insurance sector. *Journal of Information and Management*, 44(6), 568-582.
- Nijland, M. H. (2004). *Understanding the use of IT evaluation methods in organisations* (Doctoral dissertation). Retrieved from http://www.rug.nl/staff/e.w.berghout/2004_nijland_
- Ogunnaike, O. O. (2010). Assessing the relationship between service quality and customer satisfaction: Evidence from Nigerian banking industry. *Global Journal of Management and Business Research*, 10(3), 2-5.
- Olumoko, T. A., Abass, O. A., & Dansu, S. F. (2012). The role of personal selling in enhancing client satisfaction in Nigerian insurance market. *Journal of Emerging Trends in Economics and Management Sciences*, 3(2), 147-152.
- Pergelova, A. (2010). *Connecting customers with the company: The role of interactiveness and its effect on performance* (Doctoral thesis). Universitat Autònoma de Barcelona, Spain.
- Powell, T. C. & Dent-Micallef, A. (1997). Information technology as competitive advantage: The role of human, business, and technology resources. *Strategic Management Journal*, 18(5), 375-405.
- Prasad, A., Heales, J., & Green, P. (2009). Information technology resources, complementarities and capabilities: Towards a deeper understanding of leveraging business value from IT. *Proceedings of the 15th Americas Conference on Information Systems, San Francisco*. California, 1-10. Retrieved from <http://aisel.aisnet.org/amics2009/192>
- Ravichandran, T., & Lertwongsatien, C. (2005). Effect of information systems resources and capabilities on firm performance: A resource-based perspective. *Journal of Management Information Systems*, 21(4), 237-276.
- Ray, G., Barney, J. B., & Muhanna, W. A. (2004). Capabilities, business process, and competitive advantage: Choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal*, 25(1), 23-37.
- Ray, G., Muhanna, W. A., & Barney, J. B. (2005). Information technology and performance of the customer service process: A resource-based analysis. *MIS Quarterly*, 29(4), 625-652.
- Reichheld, F. F. (2004). The one number you need to grow. *Harvard Business Review*, 2, 131-133.
- Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2000). *Driving customer equity: How customer lifetime value is reshaping corporate strategy*. Free Press, New York, 2000.
- Saini, A., & Johnson, J. L. (2005). Organisational capabilities in e-commerce: An empirical investigation of e-brokerage service providers. *Academy of Marketing Science Journal*, 35(3), 360-375.
- Slight, S. P., Quinn, C., Avery, A. J., Bates, D. W., & Sheikh, A. (2013). A qualitative study identifying the cost categories associated with electronic health record implementation in the UK. *Journal of the American Medical Informatics Association*, doi: 10.1136/amiajnl-2013-002404
- Smith, H. A., McKeen, J. D., & Singh, S. (2007). Developing information technology strategy for business value. *Journal of Information Technology Management*, 18(1), 49-58.
- Srivastava, R., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management*, 27(6), 777-802.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.
- Vargas, A., Hernandez, M. J. & Bruque, S. (2003). Determinants of information technology competitive value. Evidence from a western European industry. *Journal of High Technology Management Research* 14, 245-268.
- Venkatraman, N., & Zaheer, A. (1990) Electronic integration and strategic advantage: Quasi experimental study in the insurance industry. *Information Systems Research*, 1(4), 377-393.
- Vincent, O. M. (2012). *The impact of corporate environmental responsibility on financial performance: extractive sector perspective* (Doctoral dissertation). Brunel Business School, Brunel University, London, UK.
- Wade, M., & Hulland, J. (2004). The resource-based view and information systems research: review, extension, and suggestions for future research. *MIS Quarterly*, 28(1), 107-142.
- Weill, P., & Broadbent, M. (1998). *Leveraging the new infrastructure: How market leaders capitalise on information technology*. Boston, MA: Harvard Business School Press.
- Wind, J., & West, A. P. (1991, October). Reinventing the corporation. *Chief Executive*, 72-75.
- Zikmund, W. G. (2000). *Exploring marketing research* (7th ed.). Fort Worth: Dryden Press.

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