Assessing Financial Resource Capability on Insurance Claims Management in Nigeria: The Moderating Role of Information Technology

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Abstract

This study examines the extent to which financial resource capability impacts claims management in the Nigerian insurance industry and also attempts to determine if this process is moderated by information technology. Given the numerous litigations arising from claims default, the Nigerian insurance sector has earned itself a bad reputation with the consequent customer apathy. However, it is also noteworthy that most of these insurance companies do not appear to possess the financial capacity to meet claims obligations as they arise, perhaps, due to low capitalisation, poor risk assessment and solvency constraints. The research is a quantitative design that utilises the survey strategy. It is predicated on a philosophical foundation of positivism and ontological orientation of objectivism. 17 insurance companies were included in the study using the stratified sampling technique. 280 questionnaires were distributed to the 17 sampled companies out of which 235 were returned and found usable for the study. Data was analysed using the Andy Hayes Process v3.3 for regression. Findings from the study revealed that financial resources and information technology have statistically significant relationship with claims management but the relationship between financial resources and claims management is not significantly moderated by information technology.

Introduction

Claims handling in the Nigerian insurance industry leaves much to be desired as this aspect of the industry value chain is, perhaps, the major factor militating against the growth of the sector. Claims settlement has been described as the mirror through which the public sees the credibility of the entire insurance industry (Damodar, 2017). Due to poor claims payments history, the Nigerian insurance sector has earned itself a pariah industry status resulting in low patronage and customer apathy (Barbington-Ashaye, 2014). When individuals and corporate organisations obtain insurance policies to mitigate their risks against the unforeseen, they hope for prompt and stress-free indemnity in order to recover from an unexpected loss when they do occur. However, when the insurer fraudulently or deliberately declines liability for claims payment, such

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an insured person or organisation will not only refuse to do any form of business with an insurance company but may discourage other people from doing so (Damodar, 2017). Claims settlement is the lifeblood of insurance business as this has a lot to do with their reputation. Daniel (2013) opines that failure to settle claims promptly has impacted negatively on insurance business in Nigeria.

Financial capacity is, perhaps, the most crucial resource an insurance company requires to survive and perform its obligation to the insuring public which is to settle claims when they do occur. Every organisation requires a strong financial background which may include equity capital and other forms of short and long term finance (Owualah, 1996). For an insurance company, premium earnings constitutes a large portion of the funds they require for normal business operations and claims settlement. This perhaps, explains why risk assessment and risk pricing are very important determinants of survival of insurance companies (Isimoya, 2013). It is instructive to note that any firm operating in the industry that cannot settle claims promptly is supposed to be sanctioned by the regulatory authorities, although this may be far from reality in the Nigerian situation (Ujunwa & Modebe, 2011).

Information technology is a major business enabler in every industry, including insurance. With improved adoption and utilisation of information technology, every aspect of insurance transaction along the value chain can thus be enabled for better performance (Deloitte, 2017). For instance, payments for premiums by customers can be automated or made online while claims settlement can easily be boosted by online transactions which will eliminate unnecessary delays and improve customer experience. Other areas where information technology can be applied in the insurance value chain includes product development, sales and distribution, new business underwriting and customer care (PwC, 2003). The business value that any organisation can derive from information technology that may culminate in improved corporate performance is well documented in the literatures as no modern organisation can survive without embracing information technology (Cakmak & Tas, 2012; Obradovic, Ebersold & Obradovic, 2015; Powell & Dent-Micallef, 1997; Singhal, 2014).

Statement of the Problem and Research Gap

The Nigerian insurance industry cannot be said to be a major contributor to the nation's economy due to its poor performance. The industry accounts for a paltry 0.12 percent of gross domestic product [GDP] (Daniel, 2014), insurance penetration rate is 0.3 percent (Swiss-re Sigma, 2016) while insurance density is $6.2 (Agboola, 2019). In a country with estimated population of 206 million people (Worldometer, 2020), there are only 3 million people having any insurance policy of some sort (Agboola, 2019). The inability of the sector managers to develop the market is, perhaps, due to the damaging image and reputation it has earned for itself as a result of frequent claims delays, payment defaults or outright avoidance of claims liability (Babington-Ashaye, 2014; Gbede, 2003). Poor claims management characterises the industry as most claims requests cannot be met expeditiously either due to financial constraints or unnecessary delays in claims settlement due to manual methods of claims processing. The low levels of solvency and inability to acquire relevant information technology infrastructure that can improve efficiency and effectiveness in the claims management process calls for urgent attention to save the industry from collapse. Most previous studies have tended to

concentrate on claims fraud, inadequate capital and lack of skilled personnel (Aje-munigbohun, S.S., Isimoya, A.O. & Ipigansi, P. M., 2019; Oke, 2012) as the major cause of poor insurance claims management in Nigeria without considering the impact of financial capacity and the role of information technology in enhancing the claims management process. This research is, however, conducted to fill this gap by examining the extent to which financial resource capability impacts claims management and also to determine if the relationship between financial resource capability and insurance claims management in Nigeria is moderated by information technology.

1   Methodology

1.1 Theoretical Framework and Literature Review

a. Theoretical Underpinning: Strategic Choice Theory

The theory of strategic choice can be credited to the work of John Child (1972). Harney (2016) posits that prior to the early 1970s, the way enterprises were understood was highly deterministic and functional in nature without consideration for the agency function of management. The benefit of the theory is predicated on the amount of discretion management has in charting a strategic direction for the organisation (Child, 1997). Strategic choice theory has become more relevant due to the ever-changing nature of the global environment in which businesses operate. Harney (2016) believes that while the traditional role of management is well appreciated and documented, the concept of strategic choice in its contemporary form came to the fore with the work of Kochan, McKersie and Cappelli (1984). The authors opine that managerial discretion was highly required through strategic choice in understanding the dynamics of the operation of industrial relations and human resources management practices.

An overriding significance of strategic choice as a management theory is derived from its ability to bring managerial agency and corporate decision-making more succinctly into the managerial equation. Because managerial discretion is crucial to how an organisation chooses to compete in the marketplace, strategic choice is a necessity for making such high profile decisions. In view of whether an insurance company chooses to build its financial resource capability by further enabling it with information technology to meet its claims obligations is a strategic choice that is at the discretion of senior management hence this theory is relevant to this study.

b. Literature Review

Building Financial Resource Capability

Financial resource is one of the key organisational resources that are required for business start-up, survival and growth. Every business enterprise requires money to produce and deliver value for their customers. In order to achieve this, a strong financial capacity must be built to enable the company hire and maintain a talented work force, acquire physical and technological assets and provide outstanding goods and services that customers desire. Enz (2008) opines that organisations that are financially strong

and stable can respond quickly and authoritatively to new business opportunities, withstand threats from the environment and gain competitive advantage. Although financial resources cannot be said to be unique, rare or difficult to imitate, the possession of strong financial power is a veritable basis of achieving competitive advantage. Harrison (2003) however avers that a company requires a powerful and steady cash flow, low gearing or levels of corporate debts, strong credit rating, access to reasonably low-interest capital and a good reputation for credit worthiness. Highly profitable organisations with low leverage and high levels of liquidity are investors' choice. In hypercompetitive environments, financial resources are required to wage battles against powerful competitors.

Building a powerful resource capability by an insurance company starts from capitalisation. It is instructive to note that the Nigerian insurance industry is grossly under-capitalised which explains why it is a poor performer in the global insurance business (Babington-Ashaye, 2014; Kuye, Adebisi & Ehiorobo, 2020). Czartoryski (2019) opines that the entire industry capitalization is N300 billion which translates to $833 million. This amount is too meagre to cover multi-billion oil and gas businesses hence a paltry 30 percent of oil and gas insurance is presently covered by local insurers while 70 percent is taken abroad mostly to European and American insurers thus leading to capital flight (Agboola, 2019).

Another major source of income for insurance companies which, perhaps, forms the backbone of claims payment is premium incomes. Premium is the money paid by an insured after taking up a policy to enter into an insurance contract. The total amount of insurance premium written in Nigeria in 2015 was $1,420 million consisting of $974 million for nonlife and $446 million for life insurance. This amount accounts for 0.03 percent contribution to global premium receipts for 2015 (Swissre-Sigma, 2016). South Africa dominates Africa's insurance market accounting for $46 billion out of the total $64 billion premium earnings for the whole continent and contributing 1.01percent to global insurance premiums (Soares, 2017). It is therefore not surprising that insurance companies in Nigeria lack the capacity to pay claims promptly and meet other financial obligations due to their weak financial capacity. However, for any player in the industry to achieve competitive dominance, it must build its available sources of finance into a capability that is unrivalled by the competition. The decision to build any major resource into a capability for competitive advantage is a strategic choice that is the prerogative of senior management.

Claims Management

A Claim has been described as the heartbeat of insurance as it is regarded as the moment the insurer honours its obligation in the insurance contract entered into with the insured. Asokore and Nwankwo (2010) opine that a claim is the demand made by the insured person on the insurer to pay indemnity under a policy. Vaughan and Vaughan (2008) aver that an insurance claim is a notification to an insurer that payment is due for an amount of money agreed upon as stated under the policy. Isimoya (2000) argues that claims payment is the sole reason for the existence of insurance firms as they are legally bound to honour claims settlement in accordance with the terms of the policy. When a loss situation occurs, the insured is awakened to the reality that he/she has taken some preventive measures to mitigate the loss and hence would have to turn to the insurance firm for payment of indemnity as agreed under the policy. Kuye *et. al*

(2020) notes that customer experience on the modalities employed by the insurance firm during claims processing and payment constitutes the most important factor defining the relationship between insurer and the insured.

Claims expenses, perhaps, account for the highest cost burden of insurance companies hence no insurer can afford to toy with the claims handling function (Angima & Mwangi, 2017; Bates & Atkins, 2007). For effective claims management, precautionary measures to prevent or minimize loss must be undertaken by the insurer. Also, before claims are paid, the insurer should ensure that the insured did what was required of him to minimize loss when the insured event occurred (Fernandez, 2009; Isimoya, 2000). Effective claims management has significant impact on an insurance company's bottom-line as it has implications for costs and customer acquisition and retention (Angima & Mwangi, 2017; Michael, 2008; Rose, 2013; Yusuf & Dansu, 2014). Claims represent a huge liability for insurance companies as they are expected to indemnify any insured person or organisation in case an insured event occurs.

Insurance companies are duty bound to investigate the circumstances leading to a loss before making any claims payment to avoid being defrauded. Claims fraud abound in the insurance industry worldwide either as sole operators or syndicate fraud which has led to huge losses in the industry (Ajemunigbohun, Isimoya & Ipigansi, 2019). Kuria and Morange (2014) believe that fraud is an omission or intention by a person to gain an undue advantage through dishonest dealings by knowingly hiding, suppressing, misrepresenting, destroying, non-disclosure of material facts relevant to a transaction and abusing financial responsibility or the   position of trust occupied by the official. Singh, Parekh, Indge, Bali and Torpey (2011) opine that fraud in the insurance industry range in level of severity from *slightly exaggerated claims to deliberate acts such as staff-induced fraud, brokers and agents-related third-party fraud, insurance applicants and surrender of policy or claimants. When fraud occurs, it weakens the financial capacity of the insurer and undermines its ability to indemnify genuine claimants and underwrite lucrative contracts.*

An efficient claims management system is required to ensure that a model for effective fraud prevention, detection and control is put in place by an insurance company. It also requires that proactive measures are taken to deal with genuine claims, minimize unnecessary costs, handle claims expeditiously, reduce delays and disputes, minimize the costs of litigation and make robust plans for prompt settlement of claims (Ajemunigbohun *et al.*, 2019; Angima & Mwangi, 2017; Leverty & Grace, 2012).

Information Technology

The business value of information technology (IT) is perhaps well established in every business operation and has thus become a major differentiating factor for firms jockeying for market share and competitive advantage. O'Brien (2003) posits that information technology is a computer-based information system that combines computer hardware and software, the internet and other telecommunications networks to convert data into information as may be required by end-users and for business application. Obradovic *et al.* (2015) observe that much of the increase in global productivity in the last decade can be attributed to improvements in information and communications technology. Several studies have been carried out to establish the strategic advantages of information technology usage in business firms. For instance, Cakmak and Tas (2012)

believe that information technology enables an organisation to minimise costs and maximise revenues and therefore, a veritable avenue of attaining a desired level of competitive advantage. IT enhances operational efficiency and effectiveness and can be used to orchestrate the strategy a business may adopt to compete in the marketplace (McFarlan, 1984). Information technology can be incorporated into the major activities of a company's value chain to create or improve sustainable competitive advantage (Mata, Fuest & Barney, 1995; Porter & Millar, 1985; Singhal, 2014). Claims can be handled faster as online platforms for interacting with the customer as well as conducting investigation and analyzing data regarding similar cases are automatically provided by internet search engines. Artificial intelligence which has become the new game changer in every industry can easily be applied to enhance faster, more accurate and reliable claims processing (Deloitte, 2017; Scor, 2018; Shabbir & Anwar, 2015). Payment systems are made easier through electronic banking and other fund transfer capabilities that are internet-enabled.

Conceptual Model

The conceptual model shows the relationship between financial resources (predictor variable) and insurance claims management (dependent variable) while information technology is depicted as the moderating variable.

Figure 1 Conceptual Model
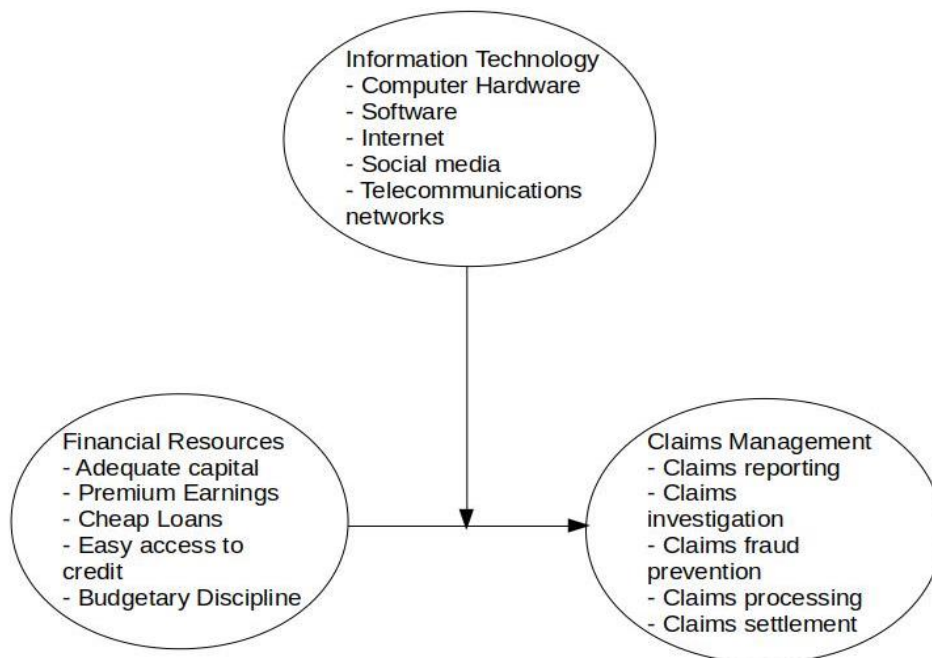
Source: Author (2020)

1.2 Research Objectives, Methodology and Data

Aim and Objectives of the Study

The main aim of this research is to assess the impact of financial capability on claims management in the Nigerian insurance industry. Specifically, the study intends to:

1. evaluate if any relationship exists between financial capability and claims management; and
2. determine if information technology moderates the relationship between financial capability and claims management in the Nigerian insurance industry.

Research Questions

In order to address the objectives, the following research questions are presented:

1. Does any relationship exist between financial capability and claims management in the Nigerian insurance sector?
2. To what extent does information technology moderate the relationship between financial capability and insurance claims management in Nigeria?

Research Hypotheses

1. Ho1: There is no significant relationship existing between financial capability and claims   management of insurance companies in Nigeria.
2. Ho2: The relationship between financial capability and insurance claims management is not moderated by information technology.

Research Design

The research adopts a quantitative cross-sectional survey design based on the positivist philosophy and an ontological orientation of objectivism. The reason for the choice of this design is due to the fact that data relating to this study are empirically testable for proof and verification.

Sources of Data, Sample Obtained and Data Collection Technique

The data for this study was obtained from17 insurance firms sampled from the 56 registered underwriting firms in Nigeria using the stratified sampling technique to obtain samples that included 4 life insurance companies, 10 non-life insurance firms and 3 composite insurance companies. A questionnaire divided into three parts with items to measure level of acquisition of financial resource capability makes up the first section. The second part consists of items measuring knowledge, adoption and usage of information technology while the third part consists of items measuring claims handling, processing and settlement by insurance companies. A total of 280 questionnaires were administered to the senior staff of these companies out of which 235 were returned and found usable.

Description of Variables

The variables of interest in this study are one dependent (Claims Management) and one predictor variable (Financial Resources) while Information Technology was adopted as a moderating variable.

Data Analysis Technique

Data for this study was analysed using the Andrew Hayes Process Approach v3.3 for measuring interactions between variables in regression. This method adopts the grand mean centring which is a process of transforming a variable into deviations around a fixed point. It is usually very important to centre variables when trying to establish interactive effects between two or more independent variables as it makes the bs for lower-order effects very easy to interpret. Thus, when the Andrew Hayes Process tool is applied, centring is automatically effected with SPSS (Statistical Package for the Social Sciences). Consequently, it is easy to determine the effect of the predictor at the mean value of the sample and the average effect of the independent variable across the range of scores for the other predictor.

Model Specification

The regression model for the interaction effect between the exogenous variable (Financial Resources) and the moderator (Information Technology) is given thus:

$$Yi = (b_0 + b_1A_i + b_2B_i + b_3AB_i) + e_i \qquad (1)$$

$$\text{ie. Claims Management} = (b_0 + b_1FR + b_2IT_i + b_3 \text{ Interaction}_i) + e_i \qquad (2)$$

where b_0 = intercept, b_1 = represents the relationship between claims management and financial resources when information technology is zero. And b_2 represents the relationship between claims management and information technology when financial resources is zero; b_3 is simply the interaction between the two predictor variables while e_i is error term.

2   Analysis and Discussion

The model summary in Table 1 shows that R = . 56 which indicates a positively strong and significant relationship between financial resources and information technology. R^2 which is the measure of the variability in the endogenous variable explained by the predictors is about .32 and all significant at .0000.

Table 1 Showing the Model Summary of the regression analysis

R	R-sq	MSE	F	df1	df2	p
.5644	.3186	.6000	35.9995	3.0000	231.0000	0000

Source: Author's computation (2020)

Table 2 shows the regression analysis for the independent variable (Financial Resources) and the moderator (Information Technology). From the analysis, it can be deduced that b = .0189; 95% CI [-.0565-.0943]; t = 91.2433, P = .6213 which is an indication that the relationship between financial resource capability and claims management in the Nigerian insurance industry is poor and not significantly moderated by information technology. Also, that 0 lies between the lower and upper limits of the confidence intervals equally shows non-significance of the interaction between financial resources and information technology.

Table 2 Showing the Model Coefficients of the Regression Analysis

```
              coeff        se         t          p       LLCI       ULCI
constant     4.7333     .0519    91.2433     .0000     4.6311     4.8356
FINANCE       .4521     .0549     8.2417     .0000      .3440      .5602
INFOTECH      .1738     .0501     3.4723     .0006      .0752      .2724
Int_1         .0189     .0383      .4947     .6213     -.0565      .0943

Product terms key:
 Int_1    :        FINANCE   x        INFOTECH
```

Table 3, which further shows the R-2 Change, indicates the additional variation in the dependent variable as a result of incorporating the moderator variable which is zero and non-significant.

Table 3 Showing the Test(s) of highest order unconditional interaction(s):

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          R2-chng         F        df1        df2          p
  X*W       .0007      .2447     1.0000   231.0000       .6213
      ----------
      Focal predict: FINANCE   (X)
            Mod var: INFOTECH (W)
```

Table 4 Shows the   Linear Model of Predictors of Claims Management

	b	**SE B**	*t*	*p*
Constant	4.73 (4.63, 4.83)	0.052	91.24	p < .001
Finance (centred)	0.45 (0.34, 0.56)	0.055	8.24	p < .001
Infotech (centred)	0.17 (0.07, 0.27)	0.050	3.47	p < .001
Finance x Infotech	0.02 (-.05. 0.09)	0.038	0.49	p = .62

Note: R^2 = .32

Table 4 shows the linear model of the predictors. The summary table indicates that both financial resources and information technology have positive and statistically significant relationship with claims management (Finance, b =.45, p < .001; Infotech, b =.17, p < .001). However, the interaction effect between information technology and financial resources is a mere .02, p =.62 which reveals a non-statistically significant relationship.

3   Discussion

Results of the analysis carried out on the data reveal that there is a positive and statistically significant relationship between financial resources and claims management in the Nigerian insurance industry (*b* = .45; P =.000). Consequent upon this, Ho1which states that there is no significant relationship between financial resources and claims management is therefore rejected. In addition, Ho2 which states that the relationship between financial resources and claims management is not significantly moderated by information technology (*b* = .018; P = .6213) is hereby accepted because even though there is a weak interaction effect, the relationship is not significant. From the model summary it can be deduced that both financial resources and information technology have a strong and statistically significant relationship with one another and with the dependent variable, R = .56, P =.000 while at the same time R^2 which is the degree of variability in the dependent variable explained by the predictors is .32 with *F*-ratio at 35.99 indicating a good model fit.

Given the above scenario it can be deduced that the Nigerian insurance industry has a long way to go in the adoption and application of information technology in its operations. This is consistent with the findings of Babington-Ashaye (2014) and Kuye *et. al* (2020) that both reveal that the poor performance of the insurance sector in Nigeria is partly attributable to the low adoption and usage of information technology. It is instructive to note that as at the present moment in 2020, there is no Nigerian insurance company that has deployed artificial intelligence in its operations (*Kuye et. al,* 2020). Even investments in the other forms of information technology has remained abysmally poor (Ujunwa & Modebe, 2011). Due to poor adoption of information technology in processing claims for clients, the claims settlement process is usually slow and mostly frustrating to the claimants thereby creating a sour relationship between the companies and their customers. This also, perhaps, explains the very negative perception of insurance business generally in Nigeria by the public who hardly voluntarily purchase insurance policies unless they are compelled to do so when it is compulsory.

Conclusion and Recommendations

This study was conducted to assess the relationship existing between financial resource capability and claims management in the Nigerian insurance industry and to determine if the relationship is moderated by information technology. 235 questionnaires were analysed using the Andy Hayes Process v3.3 for moderation. Findings from the research reveal that although there is a positive and statistically significant relationship

between financial resource capability and claims management, the relationship is, however, not significantly moderated by information technology. This finding is a clear indication of the low level of adoption and deployment of information technology in the operations of insurance companies in Nigeria. Given the poor claims settlement history in the Nigerian insurance sector, it is not surprising, therefore, that the industry's performance is abysmally poor with very low contribution to the nation's GDP.

Based on the findings of this research, it is hereby recommended that:

1. Insurance companies in Nigeria should invest more in information technology, especially artificial intelligence, to improve claims management and their overall corporate performance;
2. The insurance industry should strengthen their financial capability through recapitalization and improved premium earnings in order to be able to meet claims obligations as they arise; and
3. Embrace the adoption of Solvency II which will make it mandatory for every operator in the industry to have the financial capacity to settle any claims that arises from the risks they underwrite.

Suggestion for Further Research: This study is a cross-sectional survey design for which data was obtained from only 17 out of 56 registered underwriting insurance firms in Nigeria. Perhaps, a longitudinal study incorporating more insurance companies outside the ones included in this study may produce a different result.

References

Agabi, C. (2019, May 25). Minimum paid-up share capital for insurance and re-insurance companies. Daily Trust Newspaper

Agboola, P. (2019, August 6). Nigeria insurers may lose 72 percent of Dangote Refinery's risk, others. ThisDay Newspapers

Ajemunigbohun, S.S., Isimoya, A.O. & Ipigansi, P. M. (2019). Insurance claims fraud in homeowner's insurance: Empirical evidence from the Nigerian insurance industry. *Economics and Organization, 16*(1), 103-116.

Angima, C.B. & Mwangi, M. (2017). Effects of underwriting and claims management performance of property and casualty insurance companies in East Africa. *European Scientific Journal, 13*(13), 358-373.

Asokere, A.S & Nwankwo, S.I. (2010). *Essential of insurance: A modern approach*. 1st ed. Lagos: Fevas Publishing

Babington-Ashaye, F. (2014). Re-engineering the insurance industry. Lecture at Risk Analyst Insurance Brokers Limited, Lagos.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120.

Bates, I. & Atkins, B. (2007). *Management of insurance operations*. London: Global Professional Publishing.

Cakmak, P. I. & Tas, C. (2012). The use of information technology on gaining competitive advantage in Turkish contractor firms. *World Applied Sciences Journal, 18*(2), 274-   285

Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice, *Sociology, 6*, 1-22.

Child, J. (1997). Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect, *Organization Studies, 18*(1), 43-76.

Czartoryski, J. (2019). Micro insurance, tech, key to deepening Nigerian insurance sector. Available at: https//www.proshareng.com/micro-insurance-tech-key-to-deepening-   Nigeria's-insurance-sector/. Retrieved on 18th September, 2019

Damodar, B. (2017). Customer satisfaction towards life insurance claim settlement in Nepal.   *Janapriya Journal of Interdisciplinary Studies, 6*, 29-44

Daniel, F. (2013). Number of policyholders increase to 1.5 million. Available at: allafrica.com/stories/201307100713.html. Assessed 20th May, 2018.

Deloitte (2017). From mystery to mastery: Unlocking the business value of artificial intelligence in the insurance industry. *Deloitte Digital*, Available at: https://www2.deloitte.com. Retrieved on 5th August, 2019.

Dirisu, J.I., Iyiola, O. & Ibidunni, O.S. (2013). Product differentiation: A tool of competitive advantage and optimal organizational performance (A study of Unilever Nigeria Plc). *European Scientific Journal, 9*(34), 258-281.

Enz, C.A. (2008). Creating a competitive advantage by building resource capability: The case of outback steakhouse Korea. *Cornell Hospitality Q., 49*(1), 73-78.

Fernadez, C. (2009). *Risk management in the insurance business sector*. Everis MFC Artes Graficas, S.L.

Harney, B. (2016). 'Strategic choice' in Johnstone, S. and Wilkinson, A. (2016). *An encyclopaedia of human resources management*. Cheltenham: Edward Elgar

Harrison, J.S. (2003). *Strategic management of resources and relationships*. John Wiley &   Sons Inc. Hoboken, NJ.

Isimoya, A.O. (2013). *Introduction to insurance*. Lagos: Concept Publications.

Isimoya, A.O. (2000). *Risk management and insurance application*. 2nd Ed Malthouse Press, Lagos

Kochan, T., McKersie, R. & Campbell, P. (1984). Strategic choice and industrial relations theory. *Industrial Relations, 23*(1), 16-39.

Kuria, J.T. & Moronge, M. (2014). Effect of fraud control mechanisms of the growth of insurance companies in Kenya. *International Journal of Innovative Social & Science Education Research. 2*(1), 26-39.

Kuye, O., Adebisi, S. & Ehiorobo, A. O. (2020). Which resources are germane for gaining competitive advantage? A perspective on the Nigerian insurance industry. *Journal of Research and Development, 4*(1), 1-12.

Leverty, J.T.& Grace, M.F. (2012). Property-Liability insurer reserve error: Motive, manipulation, or mistake. *The Journal of Risk & Insurance, 79*(2), 351-380.

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.

McFarlan, F. (1984). Information technology changes the way you compete. *Harvard Business Review, 62*(3), 98-103.

Michael, K. (2008, April). *The increasing importance of claim management to insurers*. The   National Underwriters Company.

O'Brien, J.A. (2003). *Introduction to information systems: Essential for the e-business enterprise.* 11thEd. New York: McGraw-Hill Higher Education.

Obradovic, D., Ebersold, Z. & Obradovic, D. (2015). The role of technology strategy in competitive increasing*. Economic Annals-XXI, 1-2*(1), 32-35.

Owualah, S. (1999). Entrepreneurship in small business firms. Lecture Notes; Ambrose Alli University

Porter, M.E. & Millar, V. (1985). How information gives you competitive advantage. *Harvard Business Review, 65*(4), 149-160.

Powell, T.C. & Dent-Micallef (1997). Information technology as competitive advantage: The human, business, and technology resources. *Strategic Management Journal, 8*(5), 375-405.

PwC (2003). The insurance value chain. Available at https://www.pwccn.com/en/in-dustries/financial-services/insurance/the-insurance-value-chain.html. Retrieved on 3rd August 2019,

Rose, S. (2013). Predictive claims processing: Transforming the insurance claims life cycle using analytics. SAS White Paper, 1-8.

Singhal, T. K. (2014). Information technology for competitive advantage through inno-vation and differentiation. *Amity Business Review*, *15(*2), 37-44.

Singh, A., Parekh, A., Indge, R. Bali, S. & Topey, D. (2011). *Fraud in insurance on the rise: Survey 2010-2011*. India: Ernst & Young Pvt Ltd.

Scor (2018). The impact of artificial intelligence on the (re)insurance sector. Available at: www.scor.com. Retrieved 26th July, 2019.

Shabbir, J. & Anwer, T. (2015). Artificial intelligence and its role in near future*. Journal of Latex Class Files, 14*(8), 1-11.

Soare, P. (2017). 44[th] Africa Insurance Organization (AIO) Conference in Kampala, Uganda.   Available at https://www.vanguardngr.com/2017/05/nigeria-emerges-fifth-largest-insurance-market-africa/ Assessed 26th, June 2018.

Swiss-Re Sigma (2016). Insurance penetration rates. www.Swissre.com. Assessed 25[th] November, 2016.

Ujunwa, A. & Modebe, J. (2011). Repositioning the insurance industry for operational efficiency: The Nigerian case. *Journal of Applied Finance and Banking*, *1*(3), 15-32.

Vaughan, E.J., & Vaughan, T.M. (2008). *Fundamental of risk and insurance*. (11[th] ed.). London: John Wiley & Sons.

Yusuf, T.O., & Dansu, F.S. (2014). Effect of claims cost on insurers' profitability in Ni-geria. *International Journal of Business and Commerce, 3*(10), 1-20.

Worldometer (2020). Population of Nigeria, current, historic. Available at: https://www.worldometer.info/world-population/nigeria-population. Retrieved 4th May, 2020.