



**EMPIRICAL STUDY OF INFLUENCE OF FINANCIAL INNOVATION ON
ORGANISATIONAL PERFORMANCE OF SELECTED NIGERIAN
INSURANCE COMPANIES**

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Abstract

Despite the proliferation of information technology, many Nigerian insurers do not deploy fully integrated computer software system. This study therefore examines the effect of financial innovation on organisational performance with specific reference to the Nigerian insurance industry. Specifically, the study examines the association that exists between process innovation, product innovation, service innovation, organisation innovation and organisational performance. A survey research approach was adopted to sample the opinion of respondents. A purposive sample technique was adopted to select 150 senior managers of the selected 69 insurance companies in Southwest, Nigeria. The data collection instruments for the study were structured questionnaires designed for the study. Path Analysis was used to analyse the data. The study concluded that process innovation, product innovation, service innovation, and organisation innovation have positive and significant association with organisational performance. Therefore, the study recommended that it is imperative for the insurance sector in Nigeria to fully implement financial innovation to enable it achieve its vision of being the industry of choice among emerging markets noted for high market capacity, transparency, efficiency and safety and to attain the position of one of the 20 largest insurance markets in the world by the year 2030.

Keywords: Process innovation, Product innovation, Service innovation, Organisation innovation, Performance

INTRODUCTION

The global competitive environment has reduced coverage for the Nigerian insurance industry. EFiNA (2012) confirms that more than 150 million Nigerians are not insured. This scenario has affected the sector's contribution to the country's GDP. This assertion is consistent with the claims of Babalola (2008), that the sector's contribution to the country's GDP is still less than 1%. Similarly, according to a report by Business Monitor International (BMI) Ltd, Nigeria's overall insurance business environment assessment



(IBER) was low compared to other African countries. Despite the proliferation of information technology, many Nigerian insurers have not deployed full integrated computer software system. Manual services are still prevalent in the industry, causing delays in the settlement of claims, fraudulent practices, mistakes, and errors in the entire business operations. This presents the sector with the challenge of satisfying customers in terms of product delivery, quality of service, and sophistication of the products offered. This may be the reason why the insurance coverage in the country is so low. Out of the population of over 170 million, about 1.5 million policyholders use insurance products and services (Sajuyigbe, 2016).

Financial innovation is recognised by scholars and financial experts of the industry as one of the strategies to keep up with the changing environment. According to Mwiti (2021), fierce global competition and the devastation of COVID-19 have forced financial institutions to evaluate and apply innovative strategies to gain competitive advantage. Ebrahim and Hussain (2010) confirm that financial innovation is a powerful key to the communication channel of financial development. Nkem and Akujinma (2017) argue that financial innovation helps organisations to reposition to unexpected improvements in a range of operations that stimulate customer satisfaction. Zouari-Hadiji (2020) sees financial innovation as the development of new applications aimed at introducing new services and products to gain a competitive advantage.

Therefore, this study is relevant to emerge markets where insurance penetration is low and where there is no well-established distribution network. While there are many studies investigating the relationship between financial innovation and organisational performance in the banking, manufacturing, and telecommunications sectors (Kiplangat & Tibbs, 2018; Alharbi, Jamil, Mahmood & Shaharoun, 2019; Domeher, Frimpong & Appiah, 2015; Chipeta & Muthinja, 2018), few or none of these studies have investigated the impact of financial innovation on the performance of insurance companies in Nigeria. Therefore, this study aims to investigate how financial innovation affects the performance of insurance companies in Nigeria. The result of this study is positioned to help the sector have a strong distribution network platform that drives the sector to the forefront of global relevance.

LITERATURE REVIEW

Theoretical Framework

The innovation theory of constraints by Silber (1975) was adopted in this study. According to the theory, financial innovation is inevitable for an organisation to maximize profits under both external and internal constraints. Ndwigwa and Maina (2018) argue that financial innovation in global competition is just an alternative channel to organisational



performance. In another study, Kiplangat and Tibbs (2018) confirm that financial innovation is only the driving force for financial institutions to become stronger in the midst of severe global competition. The theory of constraints of innovation states that the purpose of broader insurance coverage is the driving force behind financial innovation (Nkem & Akujinma, 2017). According to Zouari-Hadiji (2020), financial innovation plays a powerful role in achieving economic growth and value creation by changing the structures that characterise the emergence of existing and new products and services. According to a survey, companies that are prone to innovation are profitable, and companies that are not profitable in their respective sectors are disproportionately innovative (Ndwiga & Maina, 2018). The theory assumes that financial innovation is a rational response to unfavourable competition (Cherotich, Sang, Shisia, & Mutung'u, 2015).

Therefore, in the midst of external competition, COVID 19, and government regulation, companies need to innovate to gain a competitive advantage. The Walker's (2004) study agrees with the theory of constraints of innovation that financial innovation has a strong impact on performance by introducing new system processes, services, and products that provide competitive advantage and superior performance. Roberts and Amit (2003) also confirm that highly disrupted environments, cost savings, moral hazard reductions, regulatory cost savings, and adaptations will drive financial innovation. Financial innovation opens up new ideas for opportunities and expands the range of new and innovative products on the market (Ignazio, 2007). Solans (2003) describes financial innovation as technological advances in access to information, trade, and payment instruments, as well as new organisational forms, new financial products, and new services. According to Lerner and Tufano (2011), financial innovation is the act of creating new products/services, new business processes, new organisational structures, new technologies, and new financial products.

Empirical Review and Hypotheses Development

The previous studies on the relationship between financial innovation and organisational performance are reviewed as follows; Cherotich, Sang, Shisia, and Mutung'u (2015) carried out a study on the association between financial innovation and bank performance in Kenya. The result establishes that financial innovation has a linear relationship with bank performance. Another study conducted in Kenya by Ndwiga and Maina (2018) conceptualises financial innovation into product innovation and process innovation. The study reveals that process innovation has a significant link with organisational performance, while product innovation has an insignificant linkage with organisational performance. A study by Kiplangat and Tibbs (2018) attests that organisational



performance is significantly influenced by financial innovation. Ahmed and Wamugo (2018) also conceptualise financial innovation in terms of agency banking, mobile banking, internet banking, and ATM banking, and the study reveals that agency banking, mobile banking, internet banking, and ATM banking jointly and independently have a significant effect on bank performance. In the same vein, Zouari-Hadiji (2020) conceptualises financial innovation in terms of innovation risk, innovation horizon, and innovation specificity. The study also affirms that innovation risk, innovation horizon, and innovation specificity have a significant association with organisational performance.

A similar study conducted by Sujud and Hashem (2017) proves that financial innovation is a predictor of organisational performance. Also, Mugane and Ondigo (2016) established a positive relationship between financial innovation and a firm's performance. A study by Mwiti (2021) establishes that financial innovation parameters, financial systems innovations, process innovation, and product innovation jointly and independently influence the financial performance of banks. Another study conducted in Pakistan by Tahir et al. (2018) shows that financial systems innovations have a significant influence on organisational performance. A similar study conducted by Mohamud and Mungai (2019) reaffirms that financial innovation has a direct link with a firm's performance. Additionally, a study by Moki et al. (2019) concurs with the previous studies that financial innovation is a driving force of organisational performance. Monica (2018) also concludes that financial innovation is an alternative paradigm to organisational performance. Thus, the following hypotheses are proposed:

H₁: There is significant association between product innovation and organisational performance

H₂: There is significant association between process innovation and organisational performance

H₃: There is significant association between service innovation and organisational performance

H₄: There is significant association between organisational innovation and organisational performance

Conceptual Framework

The figure below is the diagrammatic explanation of the both Independent and Dependent variables of the study.

Independent Variables

Dependent Variable

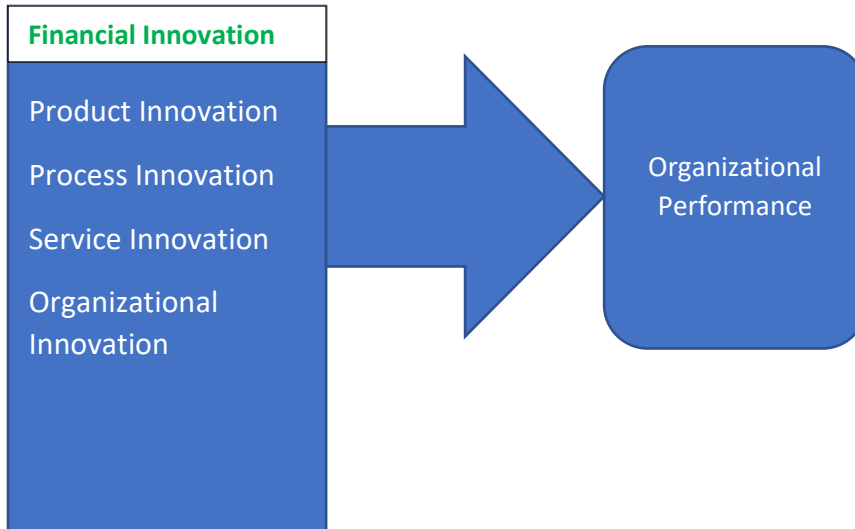
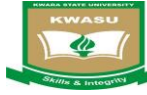


Figure 1: Conceptual Model of the study

METHODOLOGY

A survey research approach was adopted to sample the opinion of the respondents. A purposive sample technique was adopted to select 150 senior managers of the selected from 69 insurance companies in Southwest, Nigeria. The data collection instruments for the study were structured questionnaires designed for the study. All respondents were informed of data confidentiality and that information supply will be strictly used for research purposes alone. Among them, males account for 60%, while females represent 40%; the mean age of the sample was 42.5 years old. Master degree holders accounted for 30%, Bachelor degree / Higher National Diploma holders accounted for 50%, while professional certificate holders accounted for 20%; In terms of length of service, 25% of the respondents have 5-10 years, 55% have 11-20 years, while 20% have more than 20 years. The implication of the above results is the process innovation, product innovation, service innovation, organisation innovation have a positive and significant association with organisational performance.



Measures

Financial innovation construct was conceptualised in terms of product innovation, process innovation, service innovation and organisational innovation as follows:

Product Innovation scale: This scale was developed and validated by Mwiti (2021) and has a total of 4 items. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.88.

Process Innovation Scale: This scale was developed and validated by Zouari-Hadiji (2020) and has a total of 4 items. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.89

Service Innovation Scale: This scale was developed and validated by Ndwiga and Maina (2018) and has a total of 4 items. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.83.

Organisational Innovation Scale: This scale was developed and validated by Kiplangat and Tibbs (2018) and has a total of 4 items. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.86.

Organisational Performance Scale: This scale was developed and validated by Nkem and Akujinma (2017) and has a total of 4 items.. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.89.

RESULTS AND DISCUSSIONS

The Path Analysis was used to analyse the data.

The scales were subjected to further item analysis to determine their psychometric soundness as indicated in Table 1 below:

Table 1: Summary of Results of the Measurement Instruments Validation

Scale	No of Items	Meaning Bartlett	KMO	Eigenvalue of the principal Component	% of the Variance	α Cronbach	of
Process innovation	4	p = .000 (significant)	0.888	3.718	73.45%	0.81	
Product innovation	4	p = .000 (significant)	0.790	2.763	87.07%	0.79	



Service innovation	4	p = .000 (significant)	0.867	3.208	89.51%	0.89
Organisational Innovation	4	p = .000 (significant)	0.891	3.127	81.60%	0.88
Organisational Performance	4	p = .000 (significant)	0.948	2.998	84.07%	0.85

From Table 1 above, factor loads of all the indicators are higher than 0.5 which shows that the questions highly explain the variance of their variables. This implies that the measurement model has high factor validity.

Table 2: Results of Path Analysis

Path	Beta-value	Std. Err	P-value	Hypothesis
PCI→ OP	.2418	.0715	0.001	H₁ is supported
PDI→ OP	.3303	.0692	0.000	H₂ is confirmed
SCI→ OP	.2879	.0696	0.000	H₃ is supported
OGI→ OP	.1833	.0592	0.002	H₄ is confirmed

Note: PCI = Process innovation, PDI= Product innovation, SCI= Service innovation, OGI = Organisational innovation, OP = Organisational performance

Table 2 depicts the results of path analysis, using a standardized coefficient. The beta value of 0.2418 indicates that process innovation has a positive relationship with organisational performance, while the p-value of 0.001 further explains that organisational performance is significantly influenced by process innovation. This shows that the sector has fully implemented process innovations, such as the Ins-Tech app that allows customers to pay their premiums and make their claims as to when due. The study is in line with Ndwiga and Maina (2018) that process innovation has a significant link with organisational performance. Thus, **H₁** is supported. The beta value of 0.3303 reveals that product innovation has a positive correlation with organisational performance, while the p-value of 0.000 further depicts that product innovation has a significant influence on organisational performance. This connotes that product innovation is a major determinant of performance of insurance companies. The study contradicts Ndwiga and Maina (2018) that product innovation has an insignificant linkage with organisational performance. Therefore, **H₂** is confirmed. The beta value of 0.2879 shows that service innovation has a positive



association with organisational performance, while the p-value of 0.000 further depicts that service innovation has a significant influence on organisational performance. Hence, **H₃** is confirmed. The beta value of 0.1833 shows that organisation innovation has a positive association with organisational performance, while the p-value of 0.001 further depicts that organisation innovation has a significant influence on organisational performance. Hence, **H₄** is supported.

Table 3: Relationship between variables

variable	r-value	p-value
cov(PSI,PDI)	.6782	0.000
cov(PSI,SCI)	.6744	0.000
cov(PSI,OGI)	.5519	0.000
cov(PDI,SCI)	.6634	0.000
cov(PDI,OGI)	.5191	0.000
cov(SCI,OGI)	.5339	0.000

Table 3 depicts the relationship between independent variables. The results show that process innovation has a positive and significant relationship with product innovation, service innovation, and organisation innovation with r-values of 0.678, 0.674 and 0.551, and p-value of 0.000 respectively. Evidence reveals that product innovation has a positive and significant association with service innovation and organisation innovation with r-value of 0.663 and 0.519, and p-value of 0.000 respectively. Furthermore, it was revealed that service innovation has a linear and significant correlation with organisation innovation with r-value of 0.533 and p-value of 0.000 (see Figure 2).

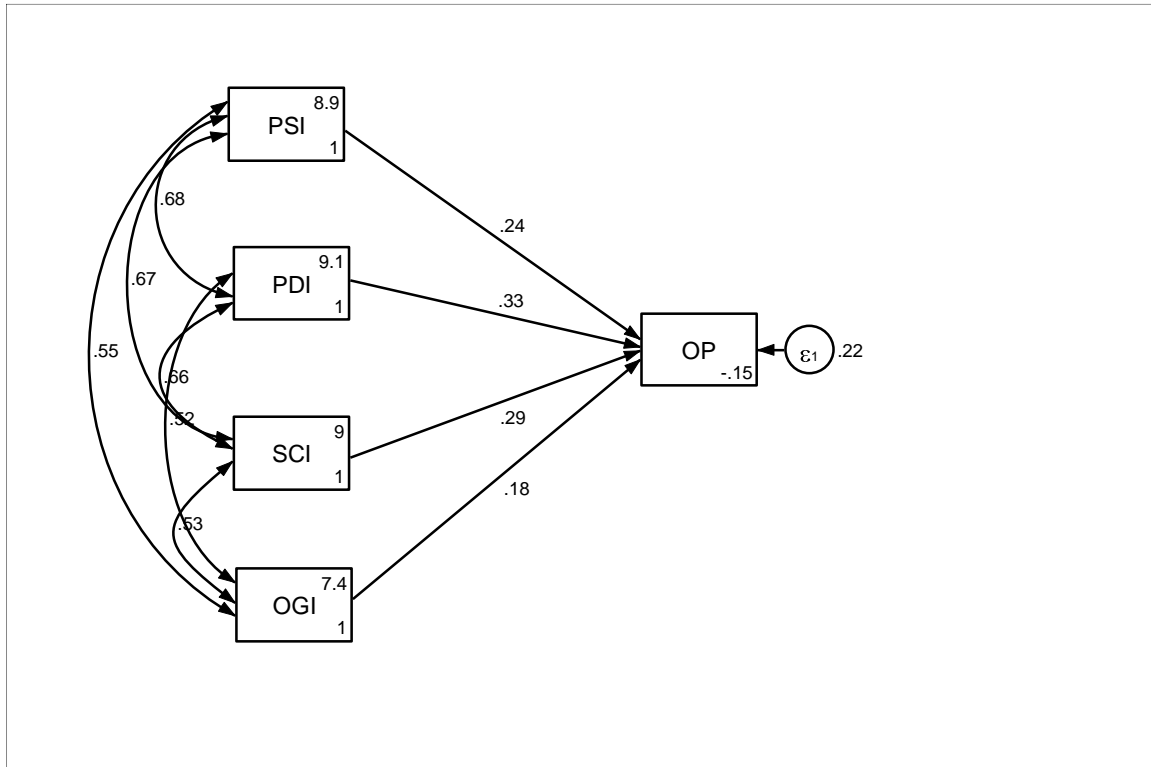


Figure 2: Path Analysis

Discussion of Findings

The result reveals that process innovation ($\beta = 0.2418$; $P < .05$) has a positive relationship with organisational performance. This shows that the sector has fully implemented process innovations, such as the Ins-Tech app that allows customers to pay their premiums and make their claims as to when due. The study is consistent with the previous studies that process innovation is a strong predictor of organisational performance (Ndwiga & Maina, 2018; Mwiti, 2021; Zouari-Hadiji, 2020; Kiplangat & Tibbs, 2018). The study further reveals that product innovation ($\beta = 0.3303$; $P < .05$) has a positive correlation with organisational performance. This connotes that product innovation is a major determinant of performance of insurance companies. The study contradicts Ndwiga and Maina (2018) that product innovation has an insignificant linkage with organisational performance. Evidence shows that service innovation ($\beta = 0.2879$; $P < .05$) has a positive and significant association with organisational performance. It was also revealed that organisation innovation ($\beta = 0.1833$; $P < .05$) has a positive and significant association with organisational performance. This study concurs with constraint innovation theory that



financial innovation is inevitable for an organisation to maximize profits under both external and internal constraints. In another study, Ndwiga and Maina (2018) argue that financial innovation in global competition is just an alternative channel to organisational performance. Similarly, Kiplangat and Tibbs (2018) confirm that financial innovation is only the driving force for financial institutions to become stronger in the midst of severe global competition.

CONCLUSION AND RECOMMENDATION

The study investigates the effect of financial innovation on organisational performance with specific reference to the Nigerian insurance industry. Specifically, the study examines the association that exists between process innovation, product innovation, service innovation, organisation innovation and organisational performance. The study establishes that process innovation, product innovation, service innovation, organisation innovation have a positive and significant association with organisational performance. It further revealed that that process innovation has a positive and significant relationship with product innovation, service innovation, and organisation innovation. Evidence reveals that product innovation has a positive and significant association with service innovation and organisation innovation. Furthermore, it was revealed that service innovation has a linear and significant correlation with organisation innovation.

Therefore, it is imperative for the sector to fully implement the financial innovation to enable the sector achieve its vision to be the insurance industry of choice among emerging markets, noted for high market capacity, transparency, efficiency and safety, to attain the position of one of the 20 largest insurance markets in the world by the year 2030.

Limitations and Recommendations for further studies

This study has several limitations that can be researched for future studies. The first limitation is that the study was limited to the insurance industry. Thus, this study may be generalised. In order to obtain an adequate generalisation of results, it is essential to include other sectors such as telecommunication, manufacturing, education, and oil. Second, the study used only questionnaires whereas interviews can be included for further studies. Third, the study used only a quantitative approach, meanwhile, both qualitative and quantitative techniques can be used in future studies.



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