

Effect of Process Innovations on Performance of Insurance Companies in Nyeri County

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Abstract: The performance of insurance companies contributes towards the market value of individual firms, industrial growth and the overall macro-economy of a country. Despite elaborate innovations in the insurance sector, insurance companies continue to post poor financial performance. This study therefore assessed the effect of process innovations on performance of insurance companies in Nyeri County. This study was descriptive in nature. The target population for this study comprised insurance companies in Nyeri County. Heads of departments was the respondents in the study. A census of all 28 insurance companies in Nyeri was conducted. Purposive sampling was used to sample 140 respondents in the study. For data collection, a questionnaire was used. Descriptive statistics and regression analysis were involved in data analysis with the help of SPSS. Results of the study were presented in form of tables and figures. The study found that process innovations were implemented to a large extent among the insurance companies in the study. There was strong and positive correlation ($r=0.798$) between process innovations and performance. Process innovations were significant ($p<0.001$). The study concluded that there was a significant relationship between process innovations and performance of insurance companies in Nyeri County. The study recommended that managers of insurance companies ought to commit themselves to determination and elimination of non-value adding activities in production process in their companies.

Keywords: Innovation, Business innovation, process innovation, insurance, performance

1. INTRODUCTION

The insurance industry is important in any economy. In financial services industry the insurance sector is very important in almost all developing and developed countries (Batool, & Sahi, 2019). According to Mandić et al. (2017), insurance is a unique product in that the ultimate cost is often unknown until long after the coverage period, while the revenue are received before or during the coverage period. Under the umbrella of financial sector, the insurance sector plays a pivotal role of regulating funds to different industries thereby contributing major inflows towards economic and financial growth (Shawar & Siddqui, 2019). The financial performance of insurance industry is therefore very important to various stakeholders including agents, policyholders, and policy makers.

Despite elaborate innovations in the insurance sector, insurance companies continue to post poor financial performance. Deloitte (2020) reports that the industry continues to grapple with low penetration rates, obscure and complex products, a high cost of doing business as an insurer, and a slow-down in the economy. According to their audited financial results, Britam Holdings Plc, UAP Holdings PLC, CIC Insurance Group and Occidental insurance (2021) registered losses in the financial years 2018/2019 and 2019/2020. In Nyeri County, companies have also been struggling in performance and this has led to some companies closing their branches in the town. This has dropped the number of insurance companies in Nyeri town from 24 to 19. The poor performance has resulted into loss of trust among clients forcing insurance companies to maintain cash for transaction reasons, form mergers and other types of corporate restructuring. This calls into question the role of innovation strategies adopted by the insurance companies.

Innovation has been generally regarded as a key factor affecting firm performance (Tuan et al., 2016). The early concept of innovation in economic development and entrepreneurship was popularized by Joseph Schumpeter, a German economist (Saebi & Foss, 2015). Business Innovation, in his view,

comprises the elements of creativity, research and development (R&D), new processes, new products or services and advance in technologies. Business Innovation is the creation of new wealth or the alteration and enhancement of existing business resources to create new wealth. Innovation is also seen as a process of idea creation, a development of an invention and ultimately the introduction of a new product, process or service to the market (Feng et al., 2020). At present, this concept is applied in every facet of social lives and activities. This makes the innovation concept become more multidimensional and intricate.

Martin and Namusonge (2014) argue that business innovation strategy is one of the most important competitive weapons and generally seen as a firm's core value capability. No two innovation strategies are the same. But they should all, at the very least, outline the goal of an organization's innovation activities and define the key initiatives that will help it achieve that goal. Kanagal (2015) posits that the capability in product innovation, process innovation market innovation as business innovation strategies are crucial for a firm to exploit new opportunities and to gain competitive advantage.

Process innovation is the implementation of a new or significantly improved production or delivery method (Un & Asakawa, 2015). This includes significant changes in techniques, equipment and/or software. It is about implementing a new or improved production or delivery approach, including changes in operational methods, the techniques used and the equipment or software. Ashok et al. (2016) explain that it is an innovation development process that allows companies to align, redesign, and improve their business processes in a customer-oriented manner by using advanced digital tools and technologies. According to Fynes et al. (2015), process innovation is the improvement in production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, maintenance and computing. This study assessed the effect of process innovations on performance of insurance companies in Nyeri County.

2. MATERIALS AND METHODS

2.1. Research Design

Data collection, measurement, and analysis are all guided by research design, which is an overarching approach adopted by the researcher to make sure that all aspects of their study work together in harmony and logically to solve their specific research topic (Eden & Nielsen, 2020). A descriptive design was used in this investigation. In a descriptive study design, a subject's behavior is observed and described without any intervention on the part of the researcher. Descriptive studies are used to describe, explain, and validate study findings (Lambert & Lambert, 2012). This design was preferred for this study because a descriptive research design confers several advantages such as the fact that it is less time-consuming than quantitative experiments.

2.2. Target Population

The target population for this study comprised insurance companies in Nyeri County. The unit of analysis is the insurance companies while the unit of observation in this study were the heads of departments. There were 28 insurance companies that have a branch in Nyeri (AKI, 2021). Heads of departments were the respondents in the study. Heads of departments were preferred because they are senior employees who are knowledgeable on the business strategies of their companies including innovation and performance. The total population of heads of departments is 302.

2.3. Sampling Techniques and Sample Size

A census of all 28 insurance companies in Nyeri was conducted. This ensured that the study has a large sample size. Purposive sampling was used to sample respondents in the study. When conducting a research study, the researcher depended on his or her own judgment to pick participants from the population, which is known as purposive sampling (Ames et al., 2019). In this study, the researcher purposively sample 5 managers including the branch managers, operation managers, finance managers, marketing managers and information and communication technologies (ICT) managers. This study therefore had 140 respondents.

2.4. Data Collection

The study employed a self-administered questionnaire to collect data from respondents. The questionnaire was semi-structured and had several sections according to the variables in the study. 5-point Likert scales were used in the questionnaire. A pretest was used to assess reliability in the study. In this study, Cronbach's alpha coefficients of 0.7 and above were accepted as measures of reliability. Items scoring 0.69 or less were deleted or rephrased. Expert judgement was used to establish face validity in this study. The researcher submitted the questionnaire to his supervisor who reviewed it and judges as to whether items in the questionnaire measure what they are intended to measure. The drop-off-pickup method was used to collect data. The researcher employed 5 research assistants to aid him in the process.

2.5. Data Analysis and Presentation

Collected data was cleaned, sorted and coded and then entered into a computer using SPSS version 24. Descriptive statistics and regression analysis were used to analyse data. Prior to conducting regression analysis, the researcher conducted diagnostic tests to ensure that the data met the assumptions of regression analysis. The results were presented using tables.

3. RESULTS AND DISCUSSION

A total of 129 heads of departments drawn from 28 insurance companies took part in the study. This represents a 92.1% response rate. Majority (68.2%) of the respondents in the study had acquired a bachelor's degree. As shown in Table 1, 45% of the respondents were in management while 22.5% were in the marketing profession. Slightly above half (55%) of the respondents had a working experience between 6 and 10 years. These results demonstrate that majority of the sample were highly educated and experienced to provide resourceful information in business innovation strategies and performance of insurance companies.

Table1. Demographic Characteristics of Respondents

Characteristic	Categories	Frequency	Percent
Level of education	Diploma	18	14.0
	Bachelor's degree	88	68.2
	Postgraduate degree	23	17.8
	Total	129	100.0
Profession	Accountant	12	9.3
	Management	58	45.0
	Marketing	29	22.5
	IT	9	7.0
	Human resource	14	10.9
	Others	7	5.4
	Total	129	100.0
Working experience	1-5	34	26.4
	6-10	71	55.0
	11-15	15	11.6
	16-20	9	7.0
	Total	129	100.0

3.1. Process Innovations

The study also sought to establish the nature of process innovations in the insurance companies in the study. The vast majority (92%) of the respondents indicated that there changes in service delivery methods in our company compared to earlier years. The results showed that 87.6% and 96.9% of the respondents agreed that products are developed quicker and services are delivered quicker compared to earlier years respectively. The vast majority (91.5%) agreed that they are now able to serve more clients. In addition, 82.9% of the respondents agreed that their staff had more skills. As shown in Table 2, 53.5% of the respondents agreed that there is determination and elimination of non-value adding activities in production process in this company. The results show that process innovations in the study were implemented to a large extent among the insurance companies in the study. This result agrees with Kiarie and Lewa (2019) who found that implementation of process innovation positive effect had a positive effect on organizational performance in health insurance service providers in

Kenya. It also agrees with Kowo et al. (2018) who found out that process innovation has a significant effect on organisational performance and there exist a significant relationship between service modification and sales volume.

Table2. *Process Innovations*

	Agree	Uncertain	Disagree
There are changes in service delivery methods in our company compared to earlier years	92.2	0.0	7.8
Products are developed quicker compared to earlier years	87.6	2.3	10.1
Services are delivered quicker compared to earlier years	96.9	0.0	3.1
We are now able to serve more clients	91.5	3.9	4.7
Our staff have more skills	82.9	2.3	14.7
There is determination and elimination of non-value adding activities in production process in this company	53.5	16.3	30.2

3.2. Performance

In order to establish the effect of process innovations on performance of insurance companies in Nyeri County, Kenya, the researcher sought to establish performance. Results in Figure 1 show that 37.9% of the companies in the study had a claims ratio of between 51% and 75%. The results show that 17.2% of the companies had a ration of between 76% and 100% while an equal number (17.2%) had a ratio of between 101% and 125%. The average claims ratio was 78.4%. Performance of the companies was also assessed through returns on assets.

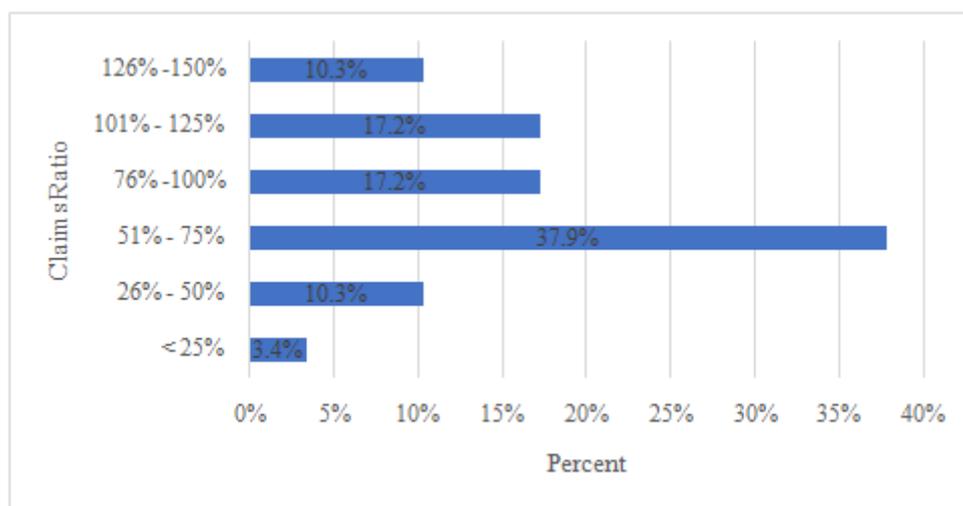


Figure1. *Claims Ratio*

Results in Figure2 show that 44.8% had an ROA less than 1% while 34.5% had an ROA between 1% and 5%. Performance of the companies was also assessed through returns on equity.

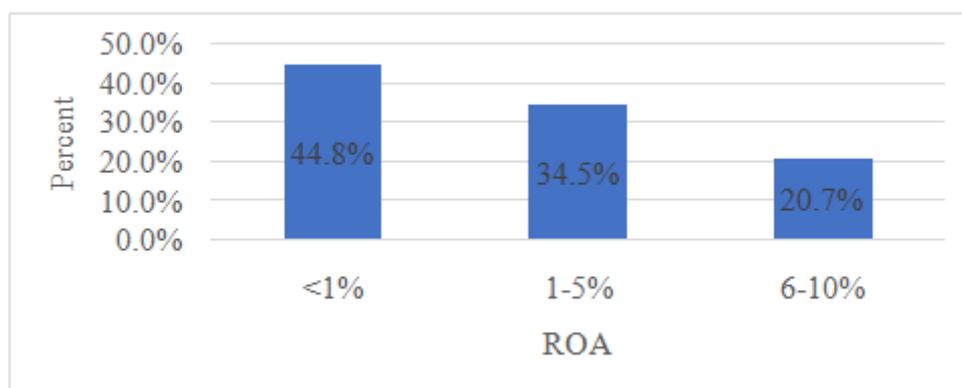


Figure2. *Returns on Assets*

Majority (65.5%) of the companies in the study had an ROE of between 1% and 5% while 34.5% had an ROE of between 6% and 10%.

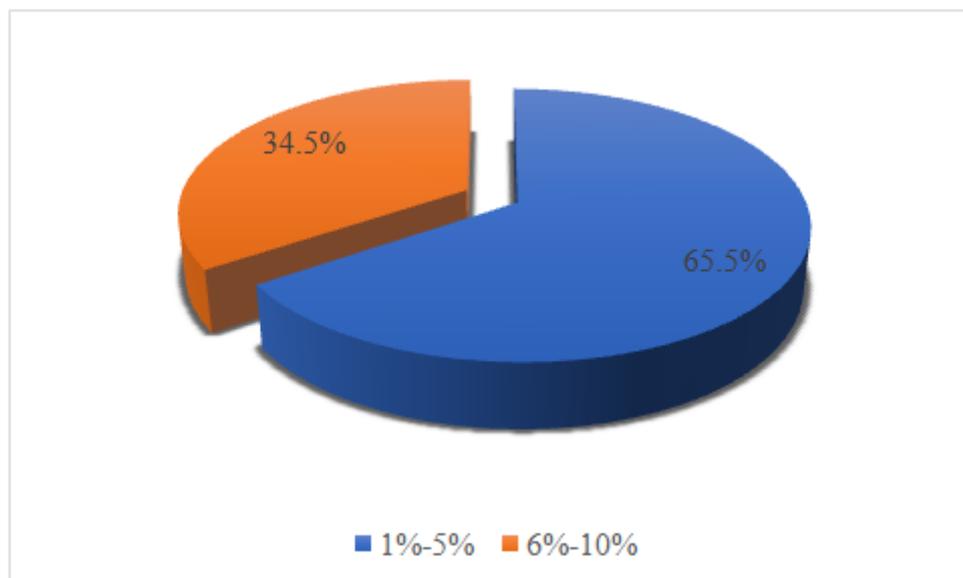


Figure3. Returns on Equity

3.3. Effect of Process Innovations on Performance

Regression was conducted between the score of process innovations and performance. Results demonstrate that there was strong and positive correlation ($r=0.798$) between process innovations and performance. The coefficient of determination (R Square) is 0.637, which means approximately 63.7% of the variability in the performance of insurance companies can be explained by the process innovations included in the model. The ANOVA output suggests that the regression model, with process innovations as the predictor variable, is a good fit for explaining the variability in the performance of insurance companies $F(1, 1240) = 223.234, P<0.001$. Process innovations were significant ($p<0.001$). A unit change of process innovations would lead to 0.758 increase in performance. This result therefore demonstrate that innovations have a positive influence on performance through market and process innovations. This result is similar to Letangule et al. (2012) study which found that process innovation strategies such as reduction of costs and conformance to regulations contributed to profitability. This result is also similar to Cascio (2011) results which confirmed innovation ‘s powerful ability to predict firm performance, even in the presence of a multiple of control variables. However, the results differ from Nandwa et al. (2016) finding that there was no significant relationship (0.075) between the process innovations and the innovative performance measures.

Table3. Regression Results

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
1	(Constant)	.293	.084		3.493	.001
	Process	.798	.053	.798	14.941	.000
R=0.798, R2= 0.637, Adjusted R2= 0.635, F= 223.234, P=0.000						
a. Dependent Variable: Performance						

4. CONCLUSION

There was a significant relationship between process innovations and performance of insurance companies in Nyeri County. This was due to changes in service delivery methods in our company compared to earlier years. As a result, products were developed quicker and services were delivered quicker compared to earlier years respectively. Managers of insurance companies ought to commit themselves to determination and elimination of non-value adding activities in production process in their companies. This will enhance the companies’ efficiency and enable them offer cheap products thereby improving the performance of the companies.

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