http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

# Does Financial Technology influence Financial Performance? Assessment of the Kenyan Insurance Service Sector

By: Martin Mugambi Miriti[1] & Lucy Wamugo Mwangi (PhD)[2]

***Abstract***

***Purpose –*** *The purpose of the study was to assess the effect financial technology on financial performance of insurance companies in Kenya.*

***Methodology*** *- The study was conducted through explanatory research design. The study population comprised of 56 registered insurance companies as per IRA (2021). Since the population was small, a census was considered for this study. Primary data was collected by a semi-structural questionnaire sent through emails and hand delivery as secondary data was gathered for five years from 2017-2021 from Insurance regulatory authority and individual insurance companies. Correlation to test the strength and direction of the relationships was conducted and regression analysis was run to establish the causal effects and data was presented in tables and figures.*

***Findings –*** *Based on the findings, it was established that financial technology does have a significant but adverse effect on financial performance of insurance companies in Kenya*

***Implications*** *- Findings of this study are beneficial to managers and scholars by offering direction in the managerial practice, policy and contributing to theoretical discourse. Based on findings of the study objective that indicated that financial technology has significant but adverse effect on financial performance, it is recommended that insurance companies should conduct a sensitization on its mode of delivery particularly financial technologies available and how the customers can access them with ease to reap maximum benefits from costs of financial technology taken by companies. In order for them to gain an understanding and appreciate the financial technology and essence of having the financial technology and its benefits should start with the internal stakeholders.*

***Keywords:*** *Financial technology, Financial Performance, Kenyan Insurance Service Sector*

## Introduction

In pursuit to offer an organized protection of property values and human lives, insurance system bridges this gap (Che & Liebenberg, 2017). Globally, the insurance industry has been faced by multiple challenges that threaten business profitability and survival (Harris & Emilio, 2016). Increased competition for example impends the industry attractiveness and lessens the profitability of the sector players. It puts pressure on insurance providers to take the initiative and develop solutions that work well by taking the proactive approach to changes that are both predicted and actual in the new market realities. Adapting to the new changes in market must correspond to company's strategic imperatives, whether they are to enhance customer experience or increase operational efficiency and profitability. In every situation, insurers must reevaluate their strategies and operational models (Agbenyo, 2020). According to Association of Kenya

[1]*MBA Candidate, Department of Finance and Accounting, Kenyatta University. Email:martomugambi@gmail.com*
[2] *Senior Lecturer, Department of Finance and Accounting, School of Business, Economics and Tourism, Kenyatta University.Email:wamugo.lucy@ku.ac.ke*

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Insurers (AKI) (2019), across the globe, consumers have been well immersed in the digital world especially post covid-19 and are now habituated to highly refined online experiences.

Insurance firms are at a loss due to clients' rising demands for personalized communications and exceptional experiences hence need to respond to this new reality and adapt into the shifting markets (Agbenyo, 2020). Online sales are becoming more commonplace as products and services to customers need to be made more autonomous. Shifts in the market have a cost and therefore a return is expected which means, for insurers to move forward digitally at the lowest cost there is a need for balancing act so as to retain the existing clients and still reach new ones (Liebenberg & Lin, 2019). In the emerging markets and Africa in particular, lots of challenges for insurance industry are manifested. Most of challenges are region specific aspects that have affected performance of insurers. The most delicate issue in the selling of insurance stands out, and variances in insurance product prices cause confusion to clients leading to avoidance of purchasing insurance (Liebenberg, & Sommer, 2008). These factors have resulted to diminishing profitability in the insurance industry especially in the emerging economies. A challenge for the insurance sector is maintaining contact with its clients which call for the need of companies to invest in digitized business processes. With the changing world, customer behaviour and preference for online transactions, has also become a major modifier of insurance consumption (Arkadiy, 2020).

Research work by Malik (2018) in their model postulated that financial technology frictions hamper the expansion of the range of activities of incumbent firms. Technological advancement, declining sales, global movements in the labor and capital markets, variations in the availability of information, and variations in supply and demand are frequently the causes of diminishing returns (Harris & Emilio, 2016; Bergen, & Humph, 2017). According to OECD (2015), financial technology comprises original items and processes that have undergone significant modification or have been created entirely from scratch. Because of obsolescence of skills, financial technological growth is considered a major factor in bringing about system change, products, and permanent changes in revenues (Wilson, 2018). Financial technology changes can be sparked by dynamics in resource availability due to war or natural disaster such as covid-19 pandemic which has pushed businesses to adapt online and cashless transactions amid existing constraints. Financial technology adoption is therefore viewed as the act or process of using new idea, or more effective processes or new application of better resolutions that can meet new requirements (Ngahu, 2009).

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Organizations that embrace financial technology can easily generate, develop, and adapt to new practice or operational ideas either as an anticipatory act to control the market, or as a response to the market that can completely change the nature of an organization (Dodgson, Gann, & Salter, 2011). Aligning with the right financial technological innovation is believed to stimulate growth, improve organizational performance and assure survival of the organization. Many factors at play can either permit or block insurers from grabbing the advantages of financial technology such as, strategy, size, customer and supplier relations, technical capabilities, innovative costs and support (Mbizi, Hove, Thondhlana, & Kakava, 2013). However, financial technology innovation is an economic development moving force. Due to the increased global competition, insurers are compelled to find innovative, adaptable, creative, and inventive ways to thrive. This offers a basis for insurers to adopt financial technologies so as to meet delivery schedules, among other business practices with an aim of improving superiority of life and building better, stronger organizational systems. Adoption of technology in business enterprises increase interest, avail resources and accelerate effort (Ndemo, 2015). Financial Technology adoption in particular is vital in developing financial service settings (Doherty & Schlesinger, 2017).

According to Cooperman et al. (2002) performance can either be financial or non-financial. Melville, Kraemer and Gurbaxani, (2019) opinions regarding the values offered and received by customers play a role in how well a business performs. There are various ratios that can be used to gauge an organization's financial stability. The importance of Gross income, Net income, Debt, and asset book value present a robust picture of the financial condition of an organization (Poongavanam, Mohammed & Rengamani, 2017). Thus, performance measures firm's actual results as assessed against its projected output and is thus related to its overall health over a given time period. Financially, firm performance is habitually denoted as an organizational ability to convert assets to returns (Pasanen, 2013).

The Kenyan insurance industry is among the key financial sectors in the country and it offers a pivotal role in business and economic progress. Insurance enables continuance of business after occurrence of risks insured against by preventing loss of capital. In the past, insurance has been distributed through a range of marketing channels such as direct marketing of products to consumers by mail, telemarketing or sales representatives. This notwithstanding, the Kenyan insurance industry has continually encountered challenges which include low profitability and competition among others. The industry profit before tax was on a decreasing trend from 2016 to 2018 as profits after tax dropped by 61.56% but increased

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

significantly in 2019 then significantly dropped with over 68% in 2020. While Kenya is comparatively doing better in the insurance industry compared to the East Africa region, the industry is not spared of challenges of the new market realities that have resulted to shrinkage in profitability and low premium growth among others. Despite a large untapped market, the industry has not aligned itself with the new market trends so as to reach out to the large uninsured group. New modifications on how to sell insurance to the right customer at proper time and through the right channel need are unavoidable to help the industry to realize steady growth in Return on Assets (Angima, 2017).

**Research Problem**

Premium growth in Kenyan insurance sector has remained low with about 3% of the population consuming the insurance products hence translating to low sales and low ROA (AKI, 2020). According to a recent publication by Association of Kenya Insurers (2021), the insurance sector profits have remained low with some insurance firms reporting losses hence unable to offer commensurate ROA to investors. The business volume generated by the Kenya Insurance Industry has consistently remained low with some insurance companies either opting for mergers and acquisitions to improve ROA invested in. In the last five years (2016-2021), the Kenyan insurance industry profit before tax was on a decreasing trend with profits after tax drop of between 61.56%-68% being recorded in 2018-2020 which had adverse effects on ROA. According to (IRA, 2021), insurance sector has reported declining ROA of 2.69% in 2017, 1.36% in 2018, and 1.80%, 1.74% and 1.22% in 2019, 2020 and 2021 respectively hence face constraints to meet obligations to the shareholders.

In the Kenyan insurance sector, the long-term insurers' asset base grew by 13.0% to KES 638.23 billion and largely funded through shareholders' equity, hence the concern for declining ROA. This reflects heavy investment in assets despite declining profits that has been recorded overtime. In 2018, the insurance industry performance, slowed to register a 3% growth as compared to 6.5% in 2017 that resulted to reduction of ROA from 2.69% to 1.36%. In the last 5 years, the lowest ROA (1.22%) was recorded in 2021. Although small increase in ROA was recorded in 2019, still, total general insurance business indicated a decline of 1.7% translating to an underwriting loss of Kes 1.26 billion and incurred loss ratio of 67.9%. Thus, the industry is unable to generate sufficient returns to recover the high investment on assets which result to low ROA. It is therefore important to assess the practical challenges facing the sector as far as growth in premiums and returns are concerned which are critical improving ROA and for overall

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

progress of this important sector. Several studies have previously been done in this area. AKI (2019) highlighted that low product range and lack of innovation, low market awareness and perceived low rate of return for life insurance policies as major hindrances to performance of insurance industry that adversely affect Return on Assets.

Conceptually, most of the study carried in the financial service sector have not specifically explored into financial institution changes and financial performance. Although empirical research has attempted to explicate the connection between product innovation and performance, the findings are inconsistent and no agreement has yet been reached (Danneels, 2017). Most studies have singly concentrated on innovation or products as opposed to the wider financial institution dynamics. Studies by Mehari & Aemiro (2013); Damanpour and Aravind (2019) and Ombaka (2014) focused on product innovation, innovation practices and firm resources against performance of insurance companies respectively. As evidenced by the low insurance penetration rate, which is still only 3.5%, the insurance companies need to devise better ways to upturn performance. The majority of the research under examination was conducted in businesses in developed nations including the United States, India and Jordan. These results might not be relevant to businesses operating in Kenya.

Eginga (2020) focused on emerging markets customers demand and use of electronic media influence on long run objectives of insurance company industry. The study relied on primary data a surveyed and companies in general insurance only. Current study linked financial technologies and financial performance in the Kenyan context and utilize both primary and secondary data. The study by Rafaela and Ortt (2018) assessed how technology adoption impacted on performance of both private and public sectors and analyzed primary data gathered by interview guide and questionnaires, however, evidence from multi-sectors cannot be generalized since private and public sectors have distinct operational features. This study therefore sought to investigate the effect of financial technology on the financial performance in the insurance industry, Kenyan context through an empirical investigation guided by the following research question: Does financial technology influence financial performance of insurance industry in Kenya?

**Research Objectives**

The objective of the study is to determine the effect of financial technology on financial performance of insurance companies in Kenya.

## Literature Review

### Theoretical Review

The financial technology and financial performance relationship is premised on Adaptive Market Hypothesis (AMH) that was formalized by Lo (2004) based on tenets of efficient market hypothesis (EMH) and behavioral finance theory (BFT). According to authors such as Malkiel (2003) and Lo, Harry, and Jiang (2008), any ambiguity regarding the efficiency of the market is reduced over the long term because, over larger time horizons, any price inequalities is addressed when anomalies tend to offset one another. By integrating evolutionary concepts like competition and natural selection to financial interactions, the Adaptive Markets Hypothesis (AMH) proposes a novel method for the analysis of financial events. The theory substitutes the notion of satisfaction, a suboptimal outcome, with the notion of resource optimization from neoclassical theory. Thus, any change in market conditions brought about by technology advancement may subsequently lead to a shift in conditions.

Lo (2004) compared financial markets to system of market participant of different size and form focusing on profits. In accordance with this concept, changes in the composition and quantity of current participants are driven by the availability of profits. As portrayed by Verheyden et al. (2013), the evolutionarily based view of the financial market is consistent with the evolution in efficiency degree over time. In the framework of AMH, financial markets level of efficiency fluctuates throughout time in response to changes in the functional, structural, or institutional market features rather than being either absolutely efficient or inefficient. AMH offers a more adaptable framework that allow the use of more deviating methods explaining changes in financial technology since organizational outcomes are the result of a match in adaptation of financial technology, which yields higher organizational performance. Whatever works in one insurance company may not essentially function in another company thus industry is hypothesized to explore and rejoin to their situations so as to attain their anticipated goals.

The study is also founded on Technology Acceptance Theory (TAM). The theory explains acceptance of technology at organizational level. Baker (2012) explains that the apparent usefulness and ease of use are

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

the two factors that influences technology acceptance. The two constructs determine the benefits that accrue to the user on using the technology. From the viewpoint of Venkatesh and Davis (2000), the extent to which a given technology will improve performance is known as perceived utility, the adopting organization whereas PEOU construct is derived from Bandura's Self-Efficacy theory (1982) and is defined as the judgment of how well an adopter believes adopting target technology would be free of effort. These factors determine users' attitude towards new or improved technology. Attitude determines behavior which in turn influences acceptance and actual usage.

Priyanka and Kumar (2013) observed that technology acceptance model is ease to use because it considers only two variables. However, its simplicity has been its biggest weakness. One of the factors suggested by the theory that influences acceptance is the perceived usefulness. Financial technology adoption will be useful to an insurer if it improves its efficiency and financial performance. It is a key determinant of whether an insurance company will accept or reject a change in market arrangements. Customers and insurance' staff would readily adopt an innovation if it is easy to understand and use. Insurers would invest in training of personnel and users on the new financial technology. The initial cost of investment would adversely impact the financial performance. However, when the innovation is diffused, efficiency is enhanced leading to improvement of performance. The theory assumes that adoption of financial technology may have positive or negative relationship with performance depending on the users.

**Empirical Review**

Advances in financial technology, in some parts of the world, has allowed for speedier monitoring and procession of several activities at much lower costs, has made financial services provision more flexible, while repackaging and introduction of new products has improved profitability and encouraged rivalry amongst banking organizations (Berger and DeYoung, 2016; and Artikis et al., 2018). Thus, financial technology is a function of financial market activity, in whereby new combinations occur to shape organizational goals. Rafaela and Ortt (2018) sought to investigate how technology adoption impacted on performance of both private and public sectors through primary data gathered by interview guide and questionnaires. Findings of Rafaela and Ortt (2018) on statistical analysis of the public and private sectors indicate that technology adoption impacts on performance positively.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Eginga (2020) examined emerging markets customers demand and use of electronic media influence on long run objectives of insurance company industry. The study relied on primary data a surveyed a population of 30 insurance companies in general insurance business. Findings by Eginga (2020) indicated that the absence of circumstances like economic and political pressures, insurance businesses with creative teamwork and qualified human capital perform better. Early investments in frontier technologies, components, and distribution methods were found to create a complete cost advantage over competitors since first-time customers show high loyalty to innovative businesses by making subsequent purchases. The study however failed to entrench more innovation into insurers operations and strategies and focused on operational perspective. Current study linked financial technologies and financial performance in the Kenyan context.

The weight of the evidence points to the use of technology as improving performance, despite the fact that it is expensive, dangerous, and its success is not assured. It supports ideas advanced by resource dependency and contingency theories that organizations are adaptable systems that introduce change to operate efficiently (Kropp & Zolin, 2015). Despite the lack of large sample empirical studies on the connection between organizational performance and technology adoption, evidence from multi-sectors cannot be generalized since private and public sectors have distinct operational features. Comparing private and public sector brings methodology gaps because of inconsistence of data. This study also focuses on insurance context. Performance was measured by opinions from managers and directors while this study utilized financial measures that provide more factual quantitative indicators of performance.

Study by Omar (2018) examined effects of cyber security on development of digital channels by property-liability insurers in Malaysia. Study adopted a cross sectional design on all property–liability firms registered and were operative for 10 years. Study findings projected a while promoting digital channels, there is an increasing necessity to modify or innovate security approaches to prevent fraud. Additionally, they advanced the customization of products that shield clients from risk of cyber-crime. Findings further revealed that adopting a digital strategy can transform businesses through an innovation that underpins the firm's business model across key focus areas. The study however focused on cyber security as the frontier for digital development. The current study main focus is financial technology and how it influences financial performance. The study also explored broad context of both long term and general insurers in Kenya.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Oyeyinka and Lal (2004) evaluated the effect of financial technology and advancement in the insurance sector impacted on competitiveness. According to findings by Oyeyinka and Lal (2004), it is evident that new technology has been and continues to be essential for the growth of all economic sectors, both in terms of increasing productivity and resource utilization effectiveness. Financial technology also aids in enhancing the use of rapid, and comprehensive decision-making at the policy level, information flow, and entire planning. Findings however did not provide conclusions on whether financial technology continues to be demanded by the competitive need in a global environment. In addition, embracing of financial technology by organizations positively adds towards augmenting competitiveness within business setting (Republic of Kenya, 2004).

## Conceptual Framework

Figure 1 depicts a conceptual model that indicates effects of financial technology on performance of insurance companies.

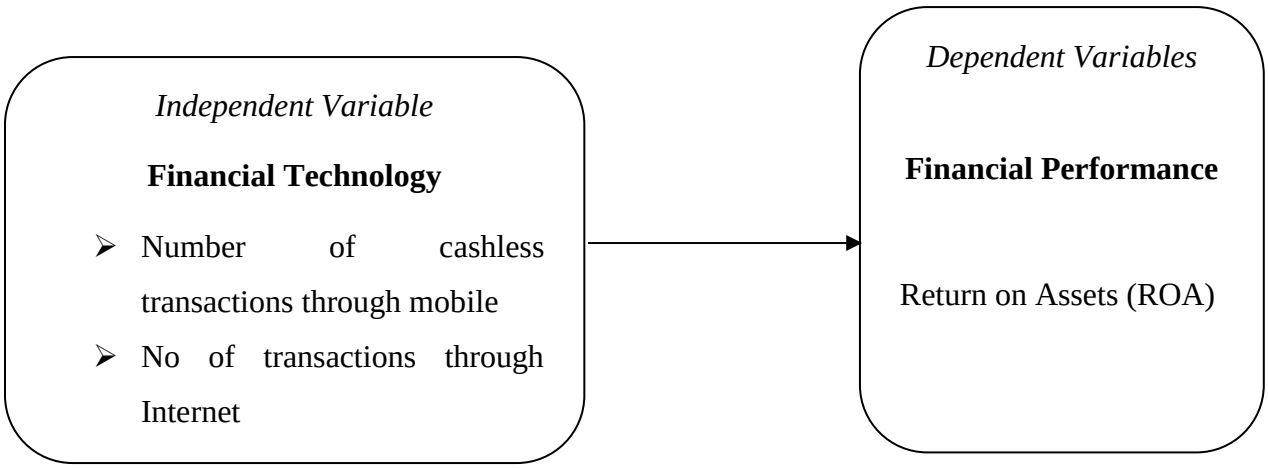


**Figure 1:** Conceptual Model

## Research Hypothesis

***H0₁:*** *There is no significant effect of financial technology on financial performance of insurance companies in Kenya.*

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

**Research Methodology**

The research design used for the study was explanatory research design. The target population of this study was fifty-six insurance companies registered and operating in Kenya as per Appendix III (IRA, 2021). The study undertook a census of the entire population of 56 companies which is considered small population, uniformity in reporting and there was no time constrain.

Primary data on financial technology was gathered using a questionnaire. The use of questionnaires is encouraged by their benefits, which include their ability to identify and explain the variability in various phenomena, the ease with which they may be delivered by email, and the fact that they provide written confirmation of the research findings.

Secondary data was collected to support primary data collected to capture financial performance using data collection form. The secondary data sets which is longitudinal was collected for a five-year period (2016-2021) and average was computed for all the companies to harmonize analysis with the cross-sectional data collected by questionnaires.

Financial technology measurement took the dimension of number of transactions made via mobile and internet in a year. This measure was found probable since most consumers of insurance products was easily make transactions via smart phone and also the insurance companies can easily channel their services via smart phones. Financial performance was measured by Return on Assets computed as an aggregate ratio of total earnings to total company assets. ROA is also widely used by practitioners and academicians in insurance industry.

Descriptive data analysis was conducted to provide mean, minimum, maximum and standard deviation. Correlation analysis was done to reveal the direction and strength of relationships of study variables. Regression analysis was conducted to produce inferential statistics. Each company had longitudinal data collected for five years for performance. To convert time series data, the average for the five years was computed and compared to cross-sectional data set on financial technology. The properties of the location, distribution, and shape of a collection of data were shown using descriptive statistics. Measures of central tendency and dispersion measures were the two basic descriptive statistics that could be utilized for the investigation. Data was presented using both tables and figures.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

*Empirical Model*

Simple Liner regression model was adopted as follows:

$FP = \alpha + \beta_1 FT + \varepsilon_1$……...(1)

Where;

α Intercept/ constant

$\beta_1$, is regression coefficient

$\varepsilon_1$ is the Error term

FP= Financial Performance

FT = Financial Technology

**Results and Discussions**

The response rate was therefore computed based on the fifty-two (43) duly filled questionnaires as a percentage of the study population. This response rate, totalling to 76.78%, was presumed adequate for analysis and comparable to past studies such as Ngahu (2009) and Angima (2017). The scale was reasonably reliable with financial technology scale reported Cronbach alpha coefficient of 0.753. To present the results of the quantitative data, descriptive statistics included Mean (M) and Standard Deviation (SD). The outcomes are shown in tables 1.

**Table 1: Financial Technology Descriptive statistics**

| **Statement** | **N** | **Mean** | **Std. Dev** |
|---|---|---|---|
| Most of our cashless transactions are done through: Mobile and Internet | 43 | 4.10 | 0.772 |
| All receipt of premium are through mobile banking | 43 | 3.63 | 0.884 |
| We discourage customers from paying for services in cash | 43 | 3.92 | 0.940 |
| We bill our customers electronically | 43 | 3.95 | 0.908 |
| We make payment for supplies using other means than cash | 43 | 3.80 | 1.000 |
| Cashless system provides clients the convenience of services | 43 | 4.02 | 0.824 |
| Client claims arising from human errors has decreased significantly with digital transactions | 43 | 3.57 | 1.030 |
| **Mean Score** | | **3.86** | **0.908** |

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Table 1 above shows how respondents rated various items of the financial technology scale. When respondents were asked whether they cashless transactions are done through: Mobile and Internet most respondents agreed (Mean=4.10, SD=0.772). Similarly, when respondents were asked if all receipt of premium are done through mobile banking, the mean score was high (Mean=3.63, SD=0.884). When asked if the company discourage customers from paying for services in cash, the response was (Mean=3.92, SD=0.940). The response on whether customers are billed electronically was high (Mean=3.95, SD=0.908). Other items were also rated high by the respondents and they include; we make payment for supplies using other means than cash (Mean=3.80, SD=1.00); cashless system provides clients the convenience of services (Mean=4.02, SD=0.830) as well as if client claims arising from human errors has decreased significantly with digital transactions (Mean=3.57, SD=1.03). On the basis of this study results, most respondents scored high on financial technology.

In assessing the associations between the study variables, Pearson correlation method was applied. This provided the direction of relationship between the study variables. The correlation test outcomes are contained in Table 2 below.

**Table 2: Correlation Results for Financial Technology and Financial Performance**

| Scale | | 1 | 2 |
|---|---|---|---|
| Financial Performance | Pearson Correlation | 1.000 | -0.307* |
| Financial Technology | Pearson Correlation | | 1.000 |

**Correlation is significant at the 0.05 level (2-tailed)*

As shown in table 2 above, results of correlation analysis between financial performance (ROA), and financial technology. There is negative correlation between financial performance (ROA) and financial technology which is statistically significant (r=-0.307, p value<0.05).

The research employed regression analysis to assess the connection between the dependent variable, ROA, an indicator of financial performance and the independent variable; financial technology. Model summary is as depicted in Table 3.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

**Table 3: Model Goodness of Fit for financial technology and Financial Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .307 | .0942 | .076 | 1.0665 |

a. *Predictors: (Constant), financial technology*

The adjusted R square from the model summary presented in Table 3 is 7.6 % which implies that financial technology contributes to the financial performance of insurance companies in Kenya by 7.6% whereas 92.4% of financial performance can be explained by other aspects other than the variables explored in this research study. The analysis of ANOVA was as presented in Table 4.

**Table 4: Analysis of Variance**

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 22.015 | 1 | 22.015 | 3.250 | 0.0501 |
| Residual | 201.278 | 41 | 4.909 | | |
| Total | 223.293 | 42 | | | |

a. Dependent: Variable: Financial Performance

b. Predictors: *(Constant), financial technology*

According to the Anova results, the model's p value was 0.0501 which is less than the alpha of 0.05 hence proved that this model was statistically significant and could be utilized in the future to predict improvement in the organization's financial performance. With a statistically significant F- value of 3.290, it proves that the correlation or the R squared value from the model summary is equal to zero. The results depict that the financial technology was statistically significant in predicting the financial performance of insurance companies in Kenya.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

**Model Coefficients**

Regression coefficients results were as presented in table 5.

**Table 5: Model Regression Coefficients**

| **Model** | Unstandardized Coefficients | | **t** | **Sig** |
|---|---|---|---|---|
| | **B** | **Std. Error** | | |
| (Constant) | -.165 | .471 | -2.750 | .046 |
| Financial Technology | -.208 | .187 | -2.819 | .044 |

The results shown in Table 5 indicate that financial technology has a negative and statistically significant relationship ($\beta = -0.208$, $t = 2.819$, $p<.05$) with financial performance.

The regression model was presented as follows;

*FP = -0.165 - 0 .208 FT*

The study objective sought to determine the effect of financial technology on financial performance of insurance companies in Kenya. Stemming from the objective, the null hypothesis was tested which stated;

*$H0_1$: There is no significant effect of financial technology on financial performance of insurance companies in Kenya.*

Based on results in Table 5, findings suggested that when the coefficient of this model was kept constant, financial performance of insurance companies would be -0.165 at the intercept. A significant change in financial technology brought about adverse changes in financial performance of the company by 0.208 and still the relationship was statistically significant having a ($p<.05$) which was less than the critical p value 0.05. Based on these findings, the null hypothesis was rejected and it was held that financial technology does have an adverse but significant effect on financial performance of insurance companies in Kenya. Study findings are congruent with technology acceptance theory suggestion that technology influences acceptance is the perceived usefulness and stresses that financial technology adoption is a factor that improves efficiency and financial performance of insurers. Aligning organizations to financial technology therefore allows building of digitally connected distribution models that are particularly of importance as remote work and virtual operations become the standard across the sector, ensuring a smooth client experience, especially post-Covid 19.

## Conclusions and Recommendations

Based on findings of the study objective that indicated that financial technology has significant effect on financial performance, it is recommended that insurance companies should conduct a sensitization on its mode of delivery particularly financial technologies available and how the customers can access them with ease. In order for them to gain an understanding and appreciate the financial technology and essence of having the financial technology and its benefits should start with the internal stakeholders. Companies should therefore put into place strong team well versed with ICT that support other employees and operations to enable the company perform effectively and extend the financial technology to consumers and other stakeholders.

The management of the insurance companies could utilize the findings made through this study to make suitable options regarding the financial technology impact on financial performance. It is apparent from the study the importance of the financial technology in its enhancement of financial performance in the insurance sector in Kenya trough improved service delivery.

The policy setters such as the IRA, AKI and the legislators in enacting laws and regulations may use the research findings when developing insurance industry standards and operational requirements to aid the industry in tapping to the large uninsured market and enhance service delivery.

Furthermore, because the study context was insurance companies in Kenya, it is suggested that other studies can be conducted to focus on a different industry contexts and locations. Given that the R squared was not 1.00, it emerges that there are other elements that influence financial performance that the study did not explore. More studies should consequently be focused on other aspects that influence financial performance, such as insurance industry ethics, reputation or capital requirements.

## References

Agbenyo, J. S. (2020). The structural change theory- an analysis of success and failures of technology. *International Journal of Research and Innovation in Social Science*, *4*(I), 1-6.

Angima, B. C (2017). Actuarial risk management practices, underwriting risk, firm characteristics and performance of property and casualty insurance firms in East Africa. PhD thesis in business administration, University of Nairobi.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Arkadiy, V. S. (2020). Corporate diversification, economies of scope, and the risk return relationship. University of Illinois at Urbana-Champaign

Artikis, G., Mutenga, S., & Staikouras, S.K. (2018), A practical approach to blend insurance in the banking network. *The Journal of Risk Finance, 9*(2), 106–124.

Association of Kenya Insurers (2019). Insurance industry annual report, 1(34), 1-68.

Association of Kenya Insurers (2020). Insurance industry annual report, 1(35), 1-70.

Bergen, A.M., & Humph, W.B. (2017). Efficiency of financial institutions: international survey. *European Journal of Operation Research, 206*,1175–1212

Berger, A.N., & DeYoung, R. (2016). Technological progress and the geographic expansion of the banking industry. *Journal of Money, Credit and Banking, 38*, 1483-513.

Che, X., & Liebenberg, A. P. (2017). Effects of business diversification on asset risk-taking: evidence from the U.S. property-liability insurance industry. *Journal of Banking and Finance, 77*, 122-136.

Damanpour, F., & Aravind, D. (2019). Managerial innovation: Conceptions, processes, and antecedents. *Management and Organization Review, 8* (2), 423–454.

Danneels, E. (2017). The dynamics of product innovation and firm competences. *Strategic Management Journal, 23*, 1095-1121

Dodgson, M., Gann, D., & Salter, A. (2011). *The Management of Technological Innovation*, Oxford University Press.

Doherty, N.A. & Schlesinger, H. (2017). Optimal insurance in COVID-19 markets. *Journal of Political Economy, 39(1)*,1045-1054.

Eginga, L. (2020). The Factors that Influence the Consumer Buyer Behavior of Kenyans to buy insurance products. *Journal of Economic Theory, 96*, 967-1009.

Harris, S., & Emilio, V. (2016). Insurance markets profits, market structure, and consumer welfare. *Journal of Economic* ,117(29),1127-1138.

Insurance Regulatory Authority (2020/2021). Embracing digital disruption: Consumer buying preferences and life insurance in a digital age. Deloitte Development LLC, 2019.

Liebenberg, A.P., & Sommer, D.W. (2008). Effects of corporate diversification: Evidence from property-liability insurance industry. *Journal of Risk and Insurance, 75*(4), 893-919.

Liebenberg, I. A., & Lin, Z. (2019). Financial innovation under different ownership structures and economic conditions: evidence from the great recession. *Journal of Risk*

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Lo, A. W. (2004). The adaptive markets hypothesis: market efficiency from an evolutionary perspective. *Journal of Portfolio Management*, 30, 15–29.

Malik, H. (2018). Determinants of insurance companies profitability: an analysis of insurance Sector of Pakistan. *Academic Research International, 1*(3), 315-321.

Malkiel, B. (2003). Review of Robert J. Shiller's Irrational Exuberance. *Wall Street Journal*, 4, 10

Mbizi, R., Hove, L., Thondhlana, A., & Kakava, N. (2013). Innovation in SMEs: A review of its role to organizational performance. *Interdisciplinary Journal of Contemporary Research in Business, 4*(11): 370-89

Mehari, D,. & Aemiro, T. (2013). Firm specific factors that determine insurance companies' performance in Ethiopia. *European Scientific Journal, 9*(10), 57- 74.

Melville, N., Kraemer K.L., & Gurbaxani V., (2019). Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly, 38*(2): 283–322.

Ndemo, B., & Weiss, T. (2015). Digital Kenya: an entrepreneurial revolution in the making.

Ngahu, B. (2009). Targeting low-end market to increase insurance penetration. *The Kenya Insurer, 7*(1), 13-14.

Oyeyinka, K., & Lal, G. (2004). Effect of financial technology and advancement in the insurance sector impacted on competitiveness. *Social and Behavioral Sciences, 44* 134 – 142

OCDE (2015). Guidelines for Collecting and Interpreting Technology Innovation Data

Omar, H. (2018). Cyber security and development of digital channels by property-liability insurers in Malaysia. *MIS Quarterly, 36*(1): 203–210.

Ombaka, B. E. (2014). *Resources, external environment, innovation and performance of insurance companies in Kenya*. PhD thesis. University of Nairobi. Retrieved December 15, 2019, from University of Nairobi Digital Thesis

Pasanen, M. (2013). In search of factors affecting SME performance: the case of Eastern Finland. (Unpublished Ph.D Thesis). Kuopio: University of Kuopio.

Poongavanam, S., Mohammed, I. S., & Rengamani, S. (2017). Financial Performance of Amana Bank. *International Journal of Mechanical Engineering and Technology, 8*(7),969– 975.

Priyanka, S., & Kumar, A. (2013). Understanding the evolution of technology acceptance model. *Journal of Advanced Research & Management Studies, 1*(6), 144-148.

Rafaela, J., & Ortt, R. (2018). Adoption of technological innovations and firm performance: the role of firm resources. *Management Research Review Journal*, *44*(7), 870-889.

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: four longitudinal field studies. *Management Science*, *46*(2), 186-204.

Wilson, P.A. (2018). A model of insurance markets with incomplete information. *Journal of Economic Theory*, *Vol. 86*, 767-809.