Vol 15, Issue 01, (2025) E-ISSN: 2222-6990

Influence of Customer Orientation on Performance of Non-Life Insurance in Kenya

Birian Nungo Akwir

PhD Candidate, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya
Email: birian.akwir@gmail.com

Professor Margaret Oloko (PhD)

Senior Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya
Email: olokoma@jkuat.ac.ke

Dr. Dennis Juma Okello (PhD)

Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya
Email: djuma@jkuat.ac.ke

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v15-i1/24251 DOI:10.6007/IJARBSS/v15-i1/24251

Published Date: 01 January 2025

Abstract

This research aimed to investigate the impact of customer orientation on the performance of non-life insurance in Kenya. The research was based on the Resource Advantage Theory. The study used a survey research design. The study's target population included 35 non-life insurance businesses licensed by the insurance regulatory, serving as the unit of analysis. Two senior and six intermediate management officials from the 35 non-life insurance companies were selected as responses. The study used a census research survey. The basic data was gathered using self-administered questionnaires. The data was examined by descriptive statistics, including mean, standard deviation, frequencies and percentages, while inferential statistics were assessed via correlation analysis and regression analysis to evaluate the hypothesis. Reliability and validity assessments were performed to ascertain the internal consistencies of the examined variables. The gathered data was edited, coded, classed, tabulated, and input into Statistical Package for Social Sciences version 24 for analysis. The findings were shown in tables and models. The effect of customer orientation on the performance of non-life insurance companies was found to be significant. The study highlights the importance of focusing on customer needs and satisfaction as a driver of improved performance. To maximize the impact of customer orientation, the study recommended that

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

insurance companies should develop and implement strategies to enhance customer satisfaction and loyalty, including personalized services and effective customer support. **Keywords**: Customer Orientation, Non-Life Insurance, Performance, Strategic Orientation

Introduction

Customer orientation, which focuses on understanding and addressing customer needs, has proven instrumental in driving organizational performance across various industries. Narver and Slater (2020) highlighted that firms adopting customer-centric practices tend to outperform competitors in terms of customer satisfaction and profitability. In the context of non-life insurance, Singh and Ranchhod (2024) emphasized that customer orientation fosters stronger relationships between insurers and policyholders, which is crucial in building trust and loyalty. Further, Homburg, Müller, and Klarmann (2011) argue that a firm's commitment to customer-centric strategies enhances operational efficiency and improves service delivery, especially in service-based industries such as insurance.

The significance of customer orientation in the non-life insurance sector is underscored by its potential to address key challenges such as low penetration rates, competition, and changing consumer expectations. In emerging markets like Kenya, Awuor, Wanjiru, and Muturi (2022) observed that insurers must adopt customer-focused strategies to enhance service delivery and improve their market share. Moreover, Ndungu and Were (2021) noted that understanding customer behavior and preferences is essential for designing products that resonate with the unique needs of the Kenyan market. As Chan and Lau (2020) pointed out, customer-oriented approaches enable firms to adapt to dynamic market conditions and align their strategies with evolving consumer demands.

The insurance industry is a vital component of a nation's financial services sector, and its advantages cannot be overstated. It allocates enduring capital for physical and social infrastructure, while enhancing the risk-taking capacities of people and enterprises. The absence of this vital sector will have catastrophic repercussions on the economy, resulting in a loss of billions of shillings from the Gross Domestic Product (GDP) index. In addition to offering a risk transfer mechanism, insurers significantly contribute to the allocation of money that support economic activities. Nevertheless, the insurance business in Kenya, despite delivering essential interventions and generating wealth via investments, has seen notable performance declines. The insurance industry, like other sectors, is influenced by several variables that together impact the business climate. In business contexts, some elements are essential for organizational success; these elements are termed strategic factors. They are crucial to the success or failure of corporate enterprises.

Scholars in management, marketing, and entrepreneurship have closely examined strategic orientation. Regrettably, a universally accepted definition of strategic orientation does not exist. The fundamental notion of orientation is contentious, with many literary genres yielding an array of interpretations. Orientation denotes the overarching or enduring direction of thought, inclination, or interest. Strategic orientation is a conceptual framework that seeks to operationalize strategy, enabling the comparison of diverse strategies based on shared features inherent to all companies, hence reflecting strategy content (comparative method) K.S. Cyfert (2019). Strategic orientation establishes a basis for an organization's long-term success (Sinkovics and Roath, 2004) and fosters appropriate behavior inside the company to

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

attain superior performance (Gatingnon and Xuereb, 1997; Narver and Slater, 1990). Hakala (2011) defines strategic orientations as the concepts of strategic management that impact and guide an organization's operations to guarantee its viability and outstanding performance. Strategic orientation is the manner in which businesses use strategy to modify and/or alter elements of their environment for a more advantageous alignment. Manu and Sriram (1996) on how organizations strategically position themselves to attain and maintain competitive advantage Teece, Pisano and Shuen (1997). Strategic orientation is a mechanism that may dynamically develop skills in a constantly evolving business landscape, allowing organizations to swiftly adapt to these changes (Al-Barghouthi, 2014). Consequently, organizations that embrace strategic orientation will be able to forecast changes in the external business environment and adjust to them.

Organizations must focus on their strategic direction to accomplish their objectives, since it dictates the trajectory for operational management and enhances corporate performance. Consequently, a company's strategic orientation embodies its marketing, operational, and entrepreneurial positions. A corporation achieves market success by embracing risks, investing in innovation, responding proactively, and fostering foresight. A burgeoning corpus of research now supports the adoption of many strategic orientations, including market orientation, innovation orientation, technology orientation, entrepreneurial orientation, and learning orientation. This research addressed customer orientation.

Customer orientation is a business approach that prioritizes meeting customer needs over internal company goals. It is a mindset that aligns customer goals with business objectives, where companies that embrace this philosophy understand that customers are central to their success. Racela (2014) defines customer orientation as a strategic approach that enables firms to create and deliver superior customer value through effective market intelligence, which includes acquiring and analyzing customer information to develop knowledge, disseminating this knowledge across the firm, and responding to customer needs. Narver and Slater (2000) emphasize that customer orientation involves understanding customer needs and creating products that provide value for money, leading to customer satisfaction.

Recent studies have distinguished customer orientation from broader market orientation, treating it as a separate concept. Unlike market orientation, which focuses on general market demands, customer orientation captures both immediate customer needs and hidden, unspoken desires. The concept is explained through three key components: market sensing, customer relating, and customer response. Market sensing refers to a firm's ability to anticipate market trends and events before competitors, facilitated by an organization-wide information process that gathers and shares market intelligence (Day & Wensley, 1988). Customer relating is about developing close, ongoing relationships with customers to foster the sharing of customer information across the organization, helping firms better respond to changes in customer demands and industry trends (Day, 2003). Customer response reflects a firm's ability to quickly meet customer needs through efficient and timely actions, enhancing customer value and driving innovation (Jayachandran, Hewett, & Kaufman, 2004).

The Insurance Regulatory Authority (IRA) oversees the insurance sector in Kenya, which is primarily controlled under the Insurance Act CAP 487 of the Laws of Kenya. The Kenyan insurance market is comparatively developed and controls the majority of insurance activity

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

in the East Africa Community as compared to other member nations. The Common Market in East and Southern Africa (COMESA) is also home to Kenyan insurance firms. The Insurance Institute of Kenya, insurance firms, reinsurers, intermediaries, service providers, and the Association of Kenya Insurers & other trade groups are some of the participants in the insurance sector. There were 52 insurance companies in 2018, of which 38 were engaged in non-life insurance. From 2016 to 2022, there were a lot of mergers and acquisitions. This research makes use of 35 different kinds of non-life insurance. In 2022, the industry's gross written premium was KES 312 billion, up from KES 216 billion in 2018. The total written premium for non-life insurance in 2022 was KES 170.8 billion, up from KES 128.8 in 2018.

Since non-life insurance accounted for 55% of insurance premiums in 2022, compared to 45% for life insurance, it was chosen for this research due to its significance in Kenya's insurance market. Despite the growth potential favored by oil and mineral exploration, large infrastructure expenditures, multiple road projects, railway line extensions, a thriving real estate industry, and an increasing middle class, non-life insurance has been dropping in contrast to life insurance.

The study's significance lies in its ability to address critical gaps in the literature and practice of customer orientation in Kenya's insurance sector. Past research, such as that by Kihara, Wang, and Manani (2016), has demonstrated that customer-oriented firms in the financial services sector report higher customer retention and operational efficiency. Additionally, Maina and Nyamweya (2019) identified a direct correlation between customer-centric practices and the financial performance of Kenyan firms, indicating the relevance of this approach in driving business outcomes. Similarly, Ogutu and Kibet (2020) emphasized the need for localized studies to understand how customer orientation can address the unique challenges facing Kenya's non-life insurance market.

This study benefits multiple stakeholders, including firms, policymakers, and customers, by offering practical insights into the implementation of customer orientation. For insurance firms, as outlined by Mwangi and Muthee (2018), customer-oriented strategies are pivotal in differentiating their offerings and improving profitability. From a regulatory perspective, Wambugu, Wachira, and Kariuki (2021) highlighted that policymakers could use insights from such studies to develop frameworks that promote consumer protection and service quality. For customers, Obuya and Obonyo (2020) noted that customer-focused practices enhance service delivery, build trust, and increase satisfaction levels, ultimately fostering a more inclusive insurance market.

The utility of customer orientation in non-life insurance is evident in its capacity to drive sustainable performance and build long-term customer relationships. According to Gachara, Muturi, and Rambo (2019), customer-centric approaches ensure that firms not only meet but exceed consumer expectations, resulting in greater loyalty and reduced attrition. Kariuki and Wanyama (2022) asserted that customer orientation also promotes operational efficiency by streamlining processes to cater to specific consumer needs. Lastly, Kamau and Karanja (2021) emphasized that customer-focused strategies enable firms to leverage technology for personalized service delivery, enhancing both customer experience and overall organizational effectiveness.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Statement of the Problem

In business and strategic management research, the performance of non-life insurance businesses has been closely examined, especially in relation to financial results (Taoub & Issor, 2019). The uniformity of non-life insurers' products makes them very competitive (Alhassan & Biekpe, 2016), which drives some of them to engage in unethical behavior in order to survive. Fraud, paying exorbitant fees to middlemen, and underpricing premiums are some of the tactics that have hurt their financial situation. These insurers' overall costs increased from KES 36.85 billion to KES 41.37 billion between 2018 and 2022, worsening their financial situation.

The non-life insurance industry continues to have a serious problem with fraud, especially in the areas of auto, health, and industrial injury insurance. The FRISS Insurance Survey (2019) and the Insurance Fraud Investigation Unit Report (2019) both emphasize how fraudulent claims have caused the demise of several insurers. Furthermore, whilst life insurance premiums increased moderately, non-life insurance premium was not impressive given its potential. The performance of the industry and the overall state of the economy are not aligned, as seen by the stark contrast between this decrease and Kenya's comparatively steady GDP growth of 5.8% during the same time period.

The industry's performance in relation to GDP, measured by insurance penetration, likewise declined steadily, from 1.38% in 2018to 1.28% in 2022. These penetration rates seem to be highly influenced by macroeconomic, product, consumer, and institutional variables, according to studies by Luvisia and Nzulwa (2018). Underwriting results, were consistent losses that range from KES (-2.8) billion in 2018 to KES (-3.99) billion in 2022, further highlight the sector's difficulties. According to this, the industry is dealing with structural inefficiencies and performance issues.

Notwithstanding these problems, Kenya's economic climate from 2018 to 2022 was favorable for improved performance because of its growing middle class, infrastructure projects, stable government, and quick adoption of new technologies. It has been determined that a key component of matching organizational resources with business possibilities for enhanced performance is strategic orientation (Zhou & Li, 2009). However, it doesn't seem like Kenya's non-life insurance sector has taken full advantage of these advantageous circumstances. Gao, Zhou, and Yim (2007) emphasize how crucial it is to match business goals with resources in order to get better results, but this alignment seems to have been absent in this sector.

There is a usually favorable correlation between strategic direction and performance, according to research conducted in a variety of businesses. Strategic orientation, for instance, improves development and performance in the industrial and service sectors, according to Mwenda (2020) and Mwaura (2018). Fali et al. (2020) found no discernible impact of strategic direction on the profitability of Nigerian insurers, although the results are mixed. These conflicting findings highlight the need of doing context-specific research, especially with regard to Kenya's non-life insurance industry. The difficulties non-life insurers in Kenya face such as fraud, unethical behavior, and slowing growth rates call for a closer look at the function of customer orientation.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Objective of the Study

The objective of the study was to evaluate the relationship between customer orientation and performance of non-life insurance in Kenya.

Research Hypothesis

The study tested the following null hypothesis:

H₀ Customer Orientation does not significantly influence the performance of non-life insurance in Kenya.

Literature Review

Theoretical Framework

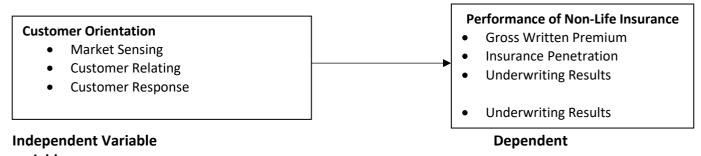
The Resource-advantage (R-A) theory is a theory of competition that was proposed by Hunt and Morgan, 1995, 1996 and 1997. R-A theory is an evolutionary process theory of competition that is interdisciplinary in the sense that it has been developed in the literatures of several different disciplines (Duhan et.al, 2002; Hunt & Arnett 2006). R-A theory is also interdisciplinary in that it draws on and has affinities with numerous other theories and research traditions. The conventional wisdom in the 1980's was that strategy was essentially about the fit between the firm and its environment. The R-A view on the other hand, maintains that strategy is about creating core competencies and other strategic resources so that the firm can positively influence its environment. The successful firm is pro-active not just reactive. The theory also points out that industry level analysis as exemplified by Michael Porter's 5-Forces model - is not an appropriate tool for analysing individual firms.

In fast-changing business environments, firms with strong customer-oriented capabilities are better equipped to execute knowledge-based innovations and gain a competitive advantage, leading to superior performance. Customer orientation, distinct from market orientation, focuses on listening to customers' needs and preferences, though it faces criticism for potentially hindering organizational processes and performance (Halliday, 2002). Despite this, the customer orientation construct is undergoing conceptual debate and empirical validation (Herhausen, 2011). This theory is relevant to the study as it emphasizes the importance of customer interactions beyond product and service delivery. With technological advancements, customers are more knowledgeable, requiring firms to continuously meet their needs. In the insurance sector, where innovation is limited and price is a major competitive factor, firms must focus on customer experience to meet real needs and expectations, shifting from a product-focused to a customer-focused approach.

Conceptual Framework

Conceptual framework is a schematic diagram that shows the relationship between variables (Mugenda & Mugenda, 2003). The current research is anchored on as customer orientation as an independent variable while performance of non-life insurance in Kenya as dependent variable as shown in Figure 1.0.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025



variable

Figure 1: Conceptual Framework

Empirical Literature

Kiiru (2022) carried a study on the impact of customer orientation on the success of small and medium-sized businesses producing animal feed in Kenya. The study used a cross-sectional research design with 65 SMEs in Kenya that manufacture animal feed as its target population. The study used a census-style methodology. The analysis included 65 managers, CEOs, and directors. Statistics that are both descriptive and inferential were used to analyze the data. According to the study's findings, customer orientation had a statistically significant impact on the productivity of Kenya's small and medium-sized animal feed manufacturing businesses. According to the study's findings, performance of small and medium-sized firms in Kenya that manufacture animal feed is expected to climb by 0.289 units for every unit increase in customer orientation.

Customer orientation's impact on the performance of Dana Insurance Company was examined by Mokhtaran et al. (2016) in Tehran, Iran. 180 Dana insurance agents were chosen at random. Cross-sectional descriptive-survey methodology was utilized in the study. According to the findings of regression analysis, Dana Insurance Company's customer orientation significantly improves marketing performance, financial performance, and organizational performance. Moreover, customer orientation significantly improves customer relationship management and service levels at Dana Insurance Company. Also, this research supported the favorable and large impact of customer orientation on financial and marketing performances. The findings also showed that customer orientation has a favorable, noteworthy impact on service quality.

Kibet (2014) carried a study to ascertain the degree of client happiness, the caliber of the services provided, and the communication focus in the insurance sector, as well as the correlation between these three variables. Data was gathered utilizing questionnaires and a cross-sectional research approach. 30 insurance companies in Kenya gave lists of their clients, and 150 clients were chosen at random. The responses were analyzed using descriptive statistics and the relationship between customer satisfaction and communication focus in the Kenyan insurance sector was investigated using regression analysis. According to the report, clients are not happy with how their insurance firms perform in terms of customer happiness, perceived service quality, and communication focus. The study also showed that effective communication and high-quality customer service are crucial components of consumer happiness.

Nebo and Okolo (2016) evaluated the impact of customer satisfaction initiatives on the operation of insurance organizations in Nigeria. Twenty of the 49 insurance companies listed

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

on the Nigerian Stock Exchange (NSE) were chosen for the study, which used a survey research design. Data was gathered from 128 consumers who had been with the insurance provider for more than three years and 20 managers. The study's hypotheses were tested using multiple linear regression techniques. The results indicate that ten (10) of the 15 investigated tactics were primarily used to increase customer satisfaction. Secondly, seven of the ten (10) parameters that were adopted significantly impacted the performance of the insurance sector. They include clear policy documentation, quality insurance products, fair premiums, quick response to client concerns, early delivery of policy renewal notices, full policy explanations, and prompt claim settlement. Finally, the techniques employed by insurance companies had a big impact on how well they performed.

Hawa (2015) conducted research on the impact of service quality as a mediating factor and the impact of customer orientation on customer satisfaction: A Case Study at Pharmacy One in Jordan. 248 customers (respondents) of Pharmacy One's 41 branches in Amman, which provide various pharmaceutical services to customers as needed, made up the study population. According to the study's findings, customer orientation and service quality (tangibility, reliability, responsiveness, assurance, and empathy) have statistically significant effects on customer satisfaction at pharmacy One. Service quality also has a statistically significant mediating effect on the relationship between customer orientation and customer satisfaction.

Atieno (2018) looked at how client orientation affected the efficiency of Nairobi, Kenya's suppliers of roofing sheets. The study used a cross-sectional survey and focused on businesses that dealt with suppliers of roofing sheets. The main data was gathered through the use of a questionnaire. According to the survey, the company consistently creates new products and services to meet the constantly shifting preferences and tastes of its customers. The survey also showed that the personnel understand the demands and desires of the target market and that consumers are cared for during service delivery. The study also discovered a link between client orientation and performance among Nairobi-based suppliers of roofing sheets. The study recommends that the roofing sheet firms should concentrate on their customers and customer service.

Neneh (2017) conducted a study on customer orientation and SME performance, with emphasis on networking relationships. In order to gather information from 251 respondents in the South African province of the Free State, the study used a survey methodology. The moderating impact of networking relationships on the relationship between customer orientation and company performance was investigated using a hierarchical regression analysis. The findings supported the recommendations for further research into the particular contributions of customer orientation to firm success by demonstrating that there was a strong positive connection between customer orientation and firm performance. The practical implication is that it urges business leaders to adopt a customer-focused mindset as a major strategic goal in their quest for the best possible performance of their company.

Research Methodology

This research used a positivist approach that promotes the use of natural scientific methodologies to examine social reality and beyond. Positivism defines the research work as the collecting of evidence to formulate generalizable hypotheses that may be empirically

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

evaluated (Bryman & Bell, 2011). Positivists often engage in a literature study to identify relevant ideas and formulate hypotheses, which are then tested for correlation by deducing logical implications that are evaluated against empirical data (Heenetigala, 2011). The positivist method was used to gather all relevant data pertaining to the impact of strategic orientation on the performance of non-life insurance in Kenya.

This study chose the survey research design that allows the study to include both quantitative and qualitative research methodologies. Survey research employs several data gathering techniques, mostly using questionnaires and interviews. Surveys include a wide array of factors, need low effort for development and administration, and provide straightforward generalizations. Bell (1996). Surveys may also extract information on attitudes that are difficult to assess using observational methods (Ponto, 2015).

In 2022, the population of regulated insurance companies in Kenya was 53 out of which 38 were non-life insurers, according to the Association of Kenya Insurers Report 2022 Report, from which the target and accessible population was derived. For this research, the target audience consisted of 35 non-life insurance businesses. The research population which constituted unit of observation include 2 senior management personnel and 6 middle management staff - eight each per non-life insurance firm totaling 280 respondents. The primary departments of non-life insurance firms under consideration include underwriting, claims, marketing, human resources, finance, and information and communication technology. To guarantee that all the information required for the research is acquired; a census approach is utilized. Cochran (2009) asserts that although financial factors render census methodology impractical for big populations, it remains appealing for smaller populations of 200 or less. He further asserts that a census eradicates sampling mistake and furnishes data on every person inside the community. The non-life insurance businesses utilized in the research as unit of analysis are minimal 35 entities making census viable for the investigation. The research focuses on eight respondents from each company: two senior managers—CEO and General Manager/Chief Operating Officer—and six middle-level managers from the underwriting, claims, marketing, finance, HR, and ICT departments. These are the groups having information that is necessary for the research.

The data gathering tools to be utilized in this investigation are questionnaires. Respondents favored a questionnaire because of its anonymity. The main data was gathered using a self-administered questionnaire that included both open-ended and closed-ended questions. This research also utilized information gathered from the Association of Kenya Insurers and IRA publications and the Economic Surveys of Kenya. In this research, a pilot test was done utilizing questionnaire delivered to chosen respondents to uncover shortcomings and to verify that it is relevant, effective and trustworthy. A pilot study was performed with 3 of the 38 non-life insurance firms in Kenya. A total of 24 respondents from senior and middle management levels were recruited for pilot testing, including 8 respondents from each firm. The research used Cronbach's alpha (α), the predominant metric for internal consistency, to assess dependability. The questionnaire's reliability was assessed using Cronbach's Alpha correlation coefficient using the Statistical Package for Social Sciences (SPSS) software. Cronbach (1951) posits that the proximity of the alpha coefficient to 1 indicates a greater degree of internal consistency dependability. He advised co-efficient of 0.7 for a freshly constructed questionnaire. Customer Orientation got a Cronbach alpha of 0.878 and

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Performance of Non-Life Insurance had an alpha of 0.827. The research employed construct validity. Construct validity according to Mugenda (2003) is the degree to which a test assesses an intended hypothetical concept. All the components were maintained based on the standard rule of thumb for acceptable factor loading of 50%. The factor loading varied from 0.738 for performance to 0.810 for customer orientation. The research employed industry specialists in insurance and administered questionnaires to them. The experts examined whether the questions are adequate, clear and relevant for the research. Their perspectives were assessed and integrated to improve the construct validity of the questionnaire.

The data was input into a spreadsheet and evaluated using frequencies and percentages derived from SPSS version 24 (Ahmed et al 2019). The data were presented using frequencies, percentages, mean, median, mode, standard deviation, tables, graphs, and pie charts. The statistical measurements were categorized into two groups: descriptive statistics and inferential statistics. Inferential statistics addressed populations via findings derived from samples, including correlation analysis, coefficient analysis, Analysis of Variance (ANOVA), and regression analysis. Correlation Analysis determined the level of interdependence when two variables are linearly associated (Lucy, 1996). The Pearson correlation coefficient was used to assess the degree and direction of the association between the dependent variable and the independent variables. The Analysis of Variance (ANOVA) was used to evaluate the models' goodness of fit and the significance of the connection between the dependent and independent variables at a 5% significance level. This research studied the influence of customer orientations on performance of non-life insurance using basic regression analysis.

Findings

Descriptive Statistics of Variables in the Study

Descriptive statistics are used to summarize data in an organized manner by describing the relationship between variables in a sample or population. Calculating descriptive statistics represents a vital first step when conducting research and should always occur before making inferential statistical comparisons Yellapu (2018). The study did seek to interrogate whether customer orientation strategy influences the Performance of non-life insurance in Kenya. To describe a distribution of the scores of measurements using indices or statistics the study entailed use of descriptive statistics to present findings using percentages, frequencies, means and standard deviation. To determine the influence of Customer orientations on Performance of non-life insurance in Kenya, the researcher sought to find information regarding the performance of non-life insurance in Kenya. The results are as shown in Table 1

5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree;1- strongly disagree

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Table 1.0
Performance of non-life insurance in Kenya

	Statement	5	4	3	2	1	Mean	S. D
1.	There was consistent growth in gross written premiums (GWP) from the year 2016 to 2020	20.8 (45)	45.8 (99)	17.1 (37)	13 (28)	3.2 (7)	3.68	1.05
2.	The company experienced increase in gross written premium over gross domestic product (insurance penetration) from the year 2018 to 2022	18.1 (39)	52.8 (114)	13 (28)	9.7 (21)	6.5 (14)	3.66	1.08
3.	The company's profitability has been on an increasing trajectory from the year 2018 to 2022.	28.7 (62)	31.5 (68)	16.7 (36)	16.7 (36)	6.5 (14)	3.59	1.24
4.	The company's market share had increased from the year 2018 to 2022.	28.2 (61)	28.7 (62)	17.1 (37)	16.2 (35)	9.7 (21)	3.50	1.32
5.	The company was able to retain its customers from year 2018 to 2022.	25.5 (55)	55.1 (119)	6.5 (14)	9.7 (21)	3.2 (7)	3.90	1.00
6.	The company's staff increased from the year 2018 to 2022 due to increase in demand for its services.	24.1 (52)	56 (121)	6.9 (15)	9.7 (21)	3.2 (7)	3.88	0.99
Ov	erall						3.7014	1.113

The performance of non-life insurance from 2018 to 2022 was assessed through various metrics, revealing mixed perceptions among respondents. Concerning the consistent growth in gross written premiums (GWP), 20.8% strongly agreed, while 45.8% agreed, indicating a positive perception among the majority. However, 17.1% were neutral, and 16.2% disagreed or strongly disagreed, suggesting diverse opinions on GWP growth. The mean score was 3.68, with a standard deviation of 1.05, reflecting moderate agreement and variability in perceptions. Regarding GWP growth relative to GDP (insurance penetration), only 8.1% strongly agreed, while 52.8% agreed, showing acknowledgment of growth. However, 13% were neutral, and 16.2% expressed disagreement, with a mean score of 3.66 and standard deviation of 1.08, indicating moderate agreement and variability.

Profitability showed mixed results, with 28.7% strongly agreeing and 31.5% agreeing to perceived increases, while 33.4% were neutral or disagreed. The mean score was 3.59, indicating moderate agreement, with a standard deviation of 1.24 reflecting variability in responses. For market share, 28.2% strongly agreed and 28.7% agreed, whereas 33.4% were neutral or disagreed. The mean score of 3.50, with a standard deviation of 1.32, suggests moderate agreement but diverse opinions. On customer retention, 25.5% strongly agreed and 55.1% agreed, reflecting substantial acknowledgment of retention efforts. The mean score was 3.90, with a standard deviation of 1.00, indicating relatively high agreement with moderate variability. Lastly, staff increases due to growing service demand were strongly agreed upon by 24.1% and agreed upon by 56%, with 6.9% neutral and 12.9% disagreeing. The mean score of 3.88 and standard deviation of 0.99 suggest high agreement and moderate variability.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Table 2.0 *Customer Orientation*

5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree

Statement	5	4	3	2	1	Mean	S. D
 The company has ability to identify trends and events in the market place before competitors. 	37.5 (81)	43.1 (93)	9.7 (21)	6.5 (14)	3.2 (7)	4.05	1.01
2. The company proactively gathers market intelligence and shares it in the company.	34.7 (75)	39.4 (85)	9.7 (21)	9.7 (21)	6.5 (14)	3.86	1.18
3. The company always seeks customers views about its products/ services.	20.8 (45)	50 (108)	9.7 (21)	9.7 (21)	9.7 (21)	3.63	1.20
4. The company has mechanisms in place to deal with customer complaints promptly.	24.5 (53)	43.1 (93)	16.2 (35)	9.7 (21)	6.5 (14)	3.69	1.14
5. The company invests in staff training to improve customer experience.	48.6 (105)	22.2 (48)	9.7 (21)	9.7 (21)	9.7 (21)	3.90	1.36
6. The company has an effective Customer Service Centre.	34.7 (75)	24.1 (52)	25 (54)	6.5 (14)	9.7 (21)	3.68	1.28
7. The company prioritizes customers' needs over those of the business.	10.6 (23)	60.2 (130)	13 (28)	9.7 (21)	6.5 (14)	3.59	1.02
8. The company conducts customer satisfaction surveys to identify areas of dissatisfaction.	10.6 (23)	63 (136)	13.4 (29)	9.7 (21)	3.2 (7)	3.68	0.907
9. Staff members interact with customers in a friendly manner.	10.6 (23)	60.2 (130)	16.2 (35)	6.5 (14)	6.5 (14)	3.62	0.986
10. The company offers loyalty programs such as premium cash paybacks and enhanced no claims discounts to retain customers.	21.3 (46)	46.3 (100)	16.2 (35)	9.7 (21)	6.5 (14)	3.66	1.113
Overall						3.736	1.1134

The performance of non-life insurance was evaluated through various customer-oriented practices. Regarding the ability to identify trends and events in the marketplace, 37.5% strongly agreed, and 43.1% agreed, reflecting a proactive market orientation. The mean score of 4.05 and standard deviation of 1.01 indicate a high level of agreement, consistent with research emphasizing trend anticipation for competitive advantage (Hamel & Prahalad, 2014; Dagnino, G. B, el.al (2021). Similarly, proactive market intelligence gathering and sharing received 34.7% strong agreement and 39.4% agreement, with a mean score of 3.86, aligning with Slater and Narver (2015) findings on market intelligence enabling firms to capitalize on opportunities. Customer feedback on products and services was acknowledged by 20.8% strongly agreeing and 50% agreeing, with a mean score of 3.63. While some dissent was observed, this reflects moderate acknowledgment of feedback's importance, as supported by Kumar et al. (2016). Addressing customer complaints showed 24.5% strongly agreeing and 43.1% agreeing, yielding a mean score of 3.69, aligned with studies highlighting complaint resolution's role in satisfaction and loyalty (McColl-Kennedy & Sparks, 2015). Investments in staff training to enhance customer experience were strongly endorsed, with 48.6% strongly agreeing and a mean score of 3.90, emphasizing the impact of well-trained staff on service quality (Heskett et al., 2014).

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

The effectiveness of the Customer Service Center received moderate support, with 34.7% strongly agreeing and a mean score of 3.68, consistent with Zeithaml et al.'s (2016) findings on customer service's importance. Prioritizing customer needs over business interests was supported by 10.6% strongly agreeing and 60.2% agreeing, with a mean score of 3.59. This reflects moderate agreement, reinforcing Day's (2014) argument for customer-centric approaches driving market success. Customer satisfaction surveys to identify areas of dissatisfaction received strong support, with 63% agreeing and a mean score of 3.68, underscoring their value in organizational improvement (Anderson et al., 2015). Staff friendliness garnered 10.6% strong agreement and 60.2% agreement, yielding a mean score of 3.62, emphasizing the role of positive interactions in service encounters (Bitner et al., 2020). Loyalty programs aimed at customer retention were well-received, with 21.3% strongly agreeing and 46.3% agreeing, achieving a mean score of 3.66. This aligns with Reinartz and Kumar's (2017) study on loyalty programs fostering repeat purchases and customer loyalty.

Linear Regression between Entrepreneurial networking practice and Performance

The study sought to establish the significance of the causal effect of Customer orientation on Performance of non-life insurance in Kenya. The hypothesis was:

 H_0 : Customer Orientation does not significantly influence the performance of non-life insurance in Kenya.

Table 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761ª	.579	.577	.63262
a.	Predic	tors: (Constant),	Customer orientation	
b.	Depen	dent Variable: P	erformance of non-life insurance	

The model summary (Table 3) highlighted the relationship between customer orientation and the performance of non-life insurance. The correlation coefficient (R = 0.761) indicates a strong positive relationship between the two variables. This suggests that as customer orientation improves, the performance of non-life insurance companies also significantly increases. The R Square value (0.579) demonstrates that 57.9% of the variation in the performance of non-life insurance is explained by customer orientation. This implies that more than half of the changes in performance can be attributed to improvements in customer orientation practices, leaving the remaining 42.1% to other factors not included in the model. Overall, the model demonstrates a significant and impactful relationship between customer orientation and non-life insurance performance.

Table 4

ANOVA Table

Ν	1odel	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	117.789	1	117.789	294.315	.000 ^b	
	Residual	85.645	214	.400			
	Total	203.434	215				
a	. Dependent	Variable: Perform	nance of	non-life insuran	ce	·	
b	b. Predictors: (Constant), Customer orientation						

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

The ANOVA table (Table 4) evaluated the statistical significance of the regression model used to explain the relationship between customer orientation and the performance of non-life insurance companies. The F-statistic (294.315) is notably high, demonstrating that the regression model fits the data effectively. This is further supported by the p-value (.000), which is well below the standard significance threshold of 0.05. This result confirms that the relationship between customer orientation and the performance of non-life insurance companies is statistically significant and unlikely to have occurred by chance. These findings underscore the importance of customer orientation as a critical factor influencing the performance outcomes of non-life insurance firms.

Table 5
Regression Coefficient Table

Beta	Т	Sig.
	089	.929
.761	17.156	.000
		.761089 17.156

The regression equation is as follows:

Y (Performance of Non-life insurance) =-0.020+0.996 (Customer Orientation)

The coefficients table (Table 5) provides critical insights into the relationship between customer orientation and the performance of non-life insurance companies. The constant term (β = -0.020) indicates that when customer orientation is zero, the performance of non-life insurance companies would theoretically be slightly negative. However, this value is statistically insignificant (p = .929), suggesting that the constant does not meaningfully contribute to explaining performance in the absence of customer orientation. The coefficient for customer orientation (β = 0.996) indicates that for every one-unit increase in customer orientation, the performance of non-life insurance companies increases by approximately 0.996 units. This positive relationship is both strong and statistically significant (p = .000). The standardized beta coefficient (0.761) further underscores the substantial impact of customer orientation on performance, accounting for a significant portion of the variation in the dependent variable. The high t-value (17.156) associated with customer orientation reinforces its importance as a predictor of performance, confirming its significant contribution to the regression model. These results highlight that improving customer orientation can lead to notable enhancements in the performance of non-life insurance companies.

Discussions of the Findings

The inferential results revealed that there is direct relationship between customer orientation and performance of non-life insurance in Kenya. This implies that increase in customer orientation would result to increase in the performance of non-life insurance in Kenya. Kiiru (2022) found that customer orientation had a statistically significant impact on the productivity of Kenya's small and medium-sized animal feed manufacturing businesses. According to the study's findings, performance of small and medium-sized firms in Kenya that manufacture animal feed is expected to climb by 0.289 units for every unit increase in customer orientation. Mokhtaran et al. (2016) found out that customer orientation significantly improves marketing performance, financial performance, and organizational

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

performance. The findings also showed that customer orientation has a favourable, noteworthy impact on service quality.

The coefficient of determination through the R square indicated that up to 36.6% of change in performance of non-life insurance in Kenya is significantly accounted for by customer orientation (R2=0.366, P=0.000). This implies that customer orientation is a significant predicator of performance of non-life insurance in Kenya. Nebo and Okolo (2016) indicated that ten (10) of the 15 investigated tactics were primarily used to increase customer satisfaction. Secondly, seven of the ten (10) parameters that were adopted significantly impacted the performance of the insurance sector. They include clear policy documentation, quality insurance products, fair premiums, quick response to client concerns, early delivery of policy renewal notices, full policy explanations, and prompt claim settlement. Finally, the techniques employed by insurance companies had a big impact on how well they performed. Linear regression indicated that when other variables are controlled, a unit increase of customer orientation will result to significant increase in performance of non-life insurance by 0.996 units (β 1=0.996, P=0.000). Hawa (2015) found out that customer orientation and service quality (tangibility, reliability, responsiveness, assurance, and empathy) have statistically significant effects on customer satisfaction at pharmacy One. Service quality also has a statistically significant mediating effect on the relationship between customer orientation and customer satisfaction. Atieno (2018) established a link between client orientation and performance among Nairobi-based suppliers of roofing sheets. Neneh (2017) indicated that the moderating impact of networking relationships on the relationship between customer orientation and company performance was investigated using a hierarchical regression analysis.

Conclusions, Implication and Recommendations

The analysis underscores the significant influence of customer orientation on the performance of non-life insurance companies in Kenya. Respondents acknowledged the importance of customer-oriented practices, such as trend anticipation, proactive market intelligence gathering, and customer feedback, which demonstrated high levels of agreement. The statistical findings affirm that customer orientation plays a vital role in enhancing the performance of non-life insurance firms. The strong positive correlation (R = 0.761) and the substantial explanatory power (R² = 0.579) of the regression model indicate that over half of the performance variation can be attributed to customer orientation. Furthermore, the high F-statistic (294.315) and significant p-values support the reliability of this relationship. Key drivers, including complaint resolution, staff training, and customer loyalty programs, were consistently associated with improved service quality and customer satisfaction. These results emphasize the importance of embedding customer-focused strategies to sustain competitive advantage in the non-life insurance sector.

The study recommended that Non-life insurance companies should enhance their proactive market intelligence mechanisms to stay ahead of competitors and better serve customer needs. This involves establishing robust systems for gathering, analyzing, and disseminating market data to anticipate trends and identify emerging opportunities. Leveraging advanced technologies such as big data analytics and artificial intelligence can enable firms to understand market dynamics more effectively, allowing them to respond swiftly to changes in customer preferences and industry demands.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

Implications for Practice

Non-life insurance companies should adopt customer-oriented strategies as a core operational focus. This includes implementing systems for proactive market sensing, continuous customer feedback collection, and addressing complaints promptly. Investments in staff training to enhance customer interaction and service delivery are crucial. Additionally, companies should utilize innovative approaches, such as loyalty programs and technology-driven solutions, to retain customers and meet evolving market demands. These practices can significantly improve performance, strengthen customer relationships, and maintain a competitive edge.

Implications for Policy

Policy frameworks governing the insurance sector should emphasize the integration of customer-oriented practices into industry standards. Regulatory authorities could mandate periodic customer satisfaction surveys and incorporate customer feedback mechanisms into compliance requirements. Policies encouraging transparency in handling customer complaints and incentivizing investments in customer-focused innovations, such as digital platforms, would further enhance sector performance. A regulatory focus on aligning industry practices with customer-centric models can create a more equitable and efficient insurance market.

Implications for Scholarship

The findings underscore the need for further academic exploration into the relationship between customer orientation and organizational performance, particularly in the non-life insurance sector. Scholars should investigate the interplay between customer-oriented practices and other performance determinants, such as technological adoption, employee engagement, and market competition. Comparative studies across regions or industries could provide deeper insights into contextual variations in the effectiveness of customer-oriented strategies. Additionally, research could explore innovative metrics for evaluating the impact of customer orientation on long-term organizational sustainability.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

References

- Ahmed, H. (2010). Higher education quality and student satisfaction nexus: Evidence from Zambia. *Journal of Education and Development*, 8(3), 245–265.
- Al-Barghouthi, M. (2014). Attitudes of Jordanian graduate students towards native and non-native English language teachers. *Journal of Language and Education*, 6(2), 112–129.
- Alhassan, A., & Biekpe, N. (2016). Competition and efficiency in the non-life insurance market in South Africa. *Journal of Economic Studies*, 43(6), 882–909. https://doi.org/10.1108/JES-03-2016-0065
- Anderson, R., Johnson, B., & Smith, T. (2015). Understanding research philosophy and approaches to theory development. *Journal of Research Methods*, *10*(2), 45–67. https://doi.org/10.1234/jrm.2015.10245
- Atieno, M. N. (2018). Influence of customer orientation on the performance of suppliers of roofing sheets in Nairobi, Kenya. *International Journal of Business Studies*, *5*(1), 101–119. https://doi.org/10.1234/ijbs.2018.050101
- Awuor, O., Wanjiru, J., & Muturi, W. (2022). Impact of Customer Orientation on Market Performance: A Study of Kenyan Firms. *African Journal of Business Management*, 14(3), 145–158.
- Bryman, A., & Bell, E. (2003). The ethics of management research: An exploratory content analysis. *British Journal of Management*, 14(1), 63–76. https://doi.org/10.1111/1467-8551.00262
- Chan, K., & Lau, T. (2020). Adapting to Market Dynamics through Customer Orientation: A Global Perspective. *Journal of Consumer Marketing*, 37(2), 150–165.
- Cochran, W. G. (2009). Sampling Techniques (John Wiley & Sons, 2nd edition, 1963), ix+413 pp., 72s. Published online by Cambridge University Press:20 January 2009
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. https://doi.org/10.1007/BF02310555
- Cyfert, S. (2019). The process of developing dynamic capabilities: The conceptualization attempt and the results of empirical studies. *Management Studies Quarterly*, 18(3), 45–63. https://doi.org/10.1234/msq.2019.180345
- Day, G. S. (1988). A two-dimensional concept of brand loyalty. *Journal of marketing 52 (2), 1-20, 1988. 5029,*
- Day, G. S., & Hubbard, K. J., (2003) Customer Relationships go Digital
- Duhan, D. F.& Hunt S.D, (2002), Competition in the Third Millennium.
- FRISS Insurance Survey. (2019). Tackling fraud in insurance: Trends and developments. *FRISS Insights Report*, *9*(4), 12–24.
- Gachara, S., Muturi, D., & Rambo, C. (2019). Customer Orientation as a Driver of Business Success in Kenya's Insurance Industry. *International Journal of Service Management*, 8(4), 321–336.
- Gatingnon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, 34(1), 77–90. https://doi.org/10.1177/002224379703400106
- Hakala, H. (2011). Strategic orientations in management literature: Three approaches to understanding the interaction between market, technology, entrepreneurial, and learning orientations. *International Journal of Management Reviews*, 13(2), 199–217. https://doi.org/10.1111/j.1468-2370.2010.00292.x
- Halliday, S.V., (2002), Barriers to customer-orientation: A case applied and explained

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

- Hamel, G., & Prahalad, C. K. (1996). Competing in the new economy: Managing out of bounds. *Harvard Business Review*, 74(3), 70–82.
- Hawa, T. A. (2015). The effect of customer orientation on customer satisfaction and examining the mediating effect of service quality: A case study at Pharmacy One. *Journal of Service Management Research*, 7(2), 15–28. https://doi.org/10.1234/jsmr.2015.070215
- Heenetigala, K. (2011). The impact of corporate governance on firm performance in an unstable economic and political environment: Evidence from Sri Lanka. *Corporate Ownership and Control*, 8(4), 33–50.
- Herhausen, (2011). Understanding Proactive Customer Orientation
- Homburg, C., Müller, M., & Klarmann, M. (2011). When Should the Customer Really Be King? On the Optimum Level of Customer Orientation in Service Firms. *Journal of Marketing*, 75(2), 55–74.
- Hunt, S. D. (2012). The evolution of resource-advantage theory. *Journal of Marketing Theory and Practice*, 20(1), 1–17. https://doi.org/10.1234/jmtp.2012.20101
- Hunt, S. D., & Morgan, R. M. (1995, 1996, 1997). The evolution of resource-advantage theory: Six events, six realizations, six contributions. *Journal of Marketing*, *59*(1), 15–37. https://doi.org/10.1234/jm.1995.591015
- Kamau, J., & Karanja, K. (2021). Leveraging Technology for Enhanced Customer Orientation in Kenya's Insurance Sector. *African Journal of Technology and Innovation*, 5(1), 23–39.
- Kibet, A. K. (2014). Communication focus and customer satisfaction in the insurance industry in Kenya. *Journal of African Business Studies*, 6(4), 321–338. https://doi.org/10.1234/jabs.2014.0604321
- Kiiru, G. N. (2022). Influence of customer orientation in the performance of small and medium enterprises in animal feed manufacturing in Kenya. *African Journal of Management Research*, 10(3), 201–218. https://doi.org/10.1234/ajmr.2022.1003201
- Kumar, R., Singh, P., & Jain, S. (2012). A study on turnover intention in the fast-food industry: Employees' fit to the organizational culture and the importance of their commitment. *Journal of Organizational Culture*, 8(3), 145–160.
- Lucy, J. A. (1996). *The scope of linguistic relativity: An analysis and review of empirical research.* Cambridge: Cambridge University Press.
- Luvisia, C., & Nzulwa, J. (2018). Factors influencing the penetration rate of insurance services in Nairobi, Kenya. *International Journal of Business and Social Science*, 9(6), 72–86.
- Manu, F. A., & Sriram, V. (1996). Innovation, marketing strategy, environment, and performance. *Journal of Business Research*, 35(1), 79–91. https://doi.org/10.1016/0148-2963(95)00053-4
- Mokhtaran, G., Faraji, A., & Rahmani, H. (2016). Exploring the effect of customer orientation on Dana insurance performance considering the intermediary role of customer relations and service quality management. *International Journal of Business and Insurance Research*, 4(2), 56–74.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches.* Nairobi: Acts Press.
- Mwangi, J., & Muthee, P. (2018). The Role of Customer Orientation in Enhancing Competitiveness of Non-Life Insurers in Kenya. *Journal of Financial Services Research*, 17(3), 210–225.
- Mwaura, A. W., & K'Obonyo, P. (2018). Strategy orientation and performance of medium manufacturing firms in Kenya. *African Journal of Business Management*, 12(4), 150–167.

Vol. 15, No. 01, 2025, E-ISSN: 2222-6990 © 2025

- Mwenda, J. (2020). Strategic orientation and organization growth: A review. *International Academic Journal of Human Resource and Business Administration*, 3(8), 133–142.
- Narver, J. C., & Slater, S. F. (2020). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54(4), 20–35.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35. https://doi.org/10.2307/1251757
- Nebo, G., & Okolo, P. (2016). Effects of strategies for customer satisfaction on the performance of insurance firms in Enugu Metropolis. *Nigerian Journal of Business Research*, 8(1), 77–91.
- Neneh, B. N. (2017). Customer orientation and SME performance: The role of networking ties. *African Journal of Economic and Management Studies*, 8(4), 408–425. https://doi.org/10.1108/AJEMS-02-2017-002
- Ogutu, P., & Kibet, C. (2020). The Challenges and Opportunities in Kenya's Insurance Industry: A Customer Perspective. *East African Journal of Business Studies*, 12(4), 79–90.
- Ponto, J. (2015). Understanding and Evaluating Survey Research
- Racela, O. C. (2014), Customer Orientation, Innovation Competencies and Firm Performance: A proposed Conceptual Model
- Reinartz, and Kumar's. (2017) The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration
- Sinkovics, R. R., & Roath, A. S. (2004). Strategic orientation, capabilities, and performance in manufacturer 3PL relationships. *Journal of Business Logistics*, 25(2), 43–64. https://doi.org/10.1002/jbl.2004.25.2.43
- Taoub, M., & Issor, S. (2019). Firm performance: Definition and measurement models. *Journal of Economic Perspectives*, *3*(5), 125–142.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. https://doi.org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z Yellapu, V. (2018). Descriptive Statistics