



Performance of Insurance Companies in Kenya: Does Transformation Capacity Matter?

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Abstract: Despite the significant role played by the insurance industry in supporting the national economy, there has been a notable decrease in insurance penetration trend. Similarly, the insurance industry has registered an increase in the number of complaints lodged by customers in relation to delayed settlement, erroneous deductions, and unsatisfactory offers. This study therefore examined the effect of transformation capacity on performance of insurance companies in Kenya. The study was grounded on dynamic capabilities theory. Positivism research paradigm and explanatory research design were adopted in this study. The target population of this study comprised of 59 insurance companies operating in Kenya. Cross-sectional data were collected using a semi-structured questionnaire from 216 heads of functional areas in 27 insurance companies which were selected using proportionate stratified random and simple random sampling. Face, construct and content validity of the research instrument were confirmed accordingly. A pilot study was conducted to aid in the statistical test of reliability using Cronbach alpha index of at least 0.7. Administration of the questionnaire was done using drop-and-pick later method. The study had a response rate of 81 percent. Quantitative data were analyzed using descriptive and inferential statistics. Descriptive analysis involved the use of frequency count, percentages, sample mean, sample standard deviation and coefficient of variation. Simple linear regression analysis was used to estimate the population parameters and facilitate testing of hypotheses at 95 percent level of confidence. Results of data analysis were presented in tabular form as well as using figures. Qualitative data were analysed using content analysis. The study found out that transformation capacity has a positive effect on firm performance. The manager in charge of operations should enact policy guidelines that bolster practices for sharing, reconfiguration, combination and adaptation of new knowledge to the reality and specific needs of the firm.

Keywords: Transformation Capacity, Knowledge Assets and Firm Performance

1. INTRODUCTION

The potential success of any given business enterprise is contingent upon its organizational performance, which entails the ability to efficiently and effectively execute strategies that are linked to realization of institutional objectives (Randeree & Al Youha, 2009). In essence, firm performance can be considered as the actual output as measured against the corresponding intended outputs (Tomal & Jones, 2015). Similarly, performance is viewed as the degree to which a company, as a social system endowed with a bundle of tangible resources, intangible resources and capabilities, is able to actualize both the short term and long-term objectives. Javier (2002) posited that firm performance is more or less equivalent to economy, efficiency and effectiveness of execution of intended social activities.

Notably, competitive performance that is based on intangible resource may need to be complemented with deployment of dynamic capabilities which take cognizance of the dynamism of internal and external environment (Teece, Pisano & Shuen, 1997; Teece, 2007). These dynamic capabilities is what any firm would require to effectively address the rapidly-changing environment. As a dimension of dynamic capability, transformation capacity may be considered instrumental for enhancing the strategic posture for generation of new ideas, products, services and processes in a dynamic business environment by leveraging on external knowledge.

Transformation capacity entails the ability relating to developing and refining firm's routines and as such supports the transfer and combination of existing knowledge with the one that has been newly acquired and assimilated (Lichtenthaler, 2009). As a key dimension of absorptive capacity, transformation capacity is concerned with the firm's ability to find out the mechanisms for reconfiguring or adapting the new knowledge to match the reality and distinct needs of the organization (Zahra & George, 2002; Camisón & Forés, 2010). Transformation of knowledge and information in an organization involves sharing, combination and innovation of absorbed knowledge ((Xun & Xuehan, 2014). It is concerned with recodification of knowledge, challenging established operations, practices and thinking, and adaptability (Gruenfeld, Martorana, & Fan, 2000).

According to Cummins and Venard (2008), the insurance markets have changed radically and deeply in the last couple of years. The shift of emphasis to liberalization and deregulation of insurance institutions, coupled with adoption of electronic commerce and globalization practices have intensified competition posing significant challenges at both global and local landscapes. As has been noted by Njegomir & Malovic (2012), operations and performance of firms in the insurance industry has historically been influenced by factors that are internal as well as external nature, presenting both opportunities and threats in equal measures. Moreover, cross-industry integration has seen commercial banks typically combining provision of insurance and banking services as they seek to provide intermediation services in financial markets consequently compounding the intensity of competition and potentially posing a great risk of financial contagion as has been demonstrated in the global financial crisis.

At the national scene, it has been noted that the insurance industry was relatively stable in 2018 albeit with a marginal growth KES 209 billion attained in 2017 which translated to a nominal growth of 3.5 percent but with a real growth of -0.5 percent (IRA, 2019). However, the industry net profit suffered a significant drop of 46.7 percent from KES 13.6 billion attained in 2017 to the KES 7.3 billion associated with 2018. The report by Ernst and Young (2017) indicates that technological disruptions have continued to change the nature of risk and opening doors to new entrants as these disruptions drive convergence of sectors creating new business ecosystems. It is therefore necessary for players in this industry to embrace collaborative initiatives as they seek to tap and leverage on the huge amount of information possessed by the various stakeholders and which is an imperative for development of innovative processes and offerings.

2. STATEMENT OF THE PROBLEM

The insurance industry is a key player in the financial services sector that offers financial security, encourages direct and indirect investment and mobilizes saving thus promoting sustainability and growth of national economies the world over (Kaya, 2015; AKI, 2018). Notably, in 2017 and 2018 there has been a marked decline in the growth of insurance activities in the Kenyan context from 6.5 to 5.2 per cent respectively (KNBS, 2019). The slowed level of insurance activities has been aggravated by decreasing insurance penetration trend from a high of 2.88 per cent in 2014 to a low of 2.4 per cent in 2018, a marked departure from the global average insurance penetration of 6.1 percent (IRA, 2019; KNBS, 2019). In addition, the insurance coverage relative to total population at the national level was 9.0 percent in 2018 compared to 9.1 percent that characterised 2017 for life insurance.

The vast body of relevant empirical literature provides substantial evidence that transformation capacity has potential to enhance firm outcomes. Essentially, as a key dimension of absorptive capacity, transformation capacity is concerned with the firm's ability to find out the mechanisms for reconfiguring or adapting the new knowledge to match the reality and distinct needs of the organization (Zahra & George, 2002; Camisón & Forés, 2010). Transformation capacity entails routines and processes that facilitate sharing, reconfiguration, combination and adaptation of new knowledge to the reality and specific needs of the firm. Critical interrogation of existing empirical literature reveals research gaps that do not support generalization of findings to the Kenyan context of the Insurance Industry (Shin, Kim & Jeong, 2018; Welo & Ringen, 2018; Lungu, 2020). This study therefore examined the effect of transformation capacity on performance of insurance companies in Kenya.

3. LITERATURE REVIEW

3.1. Dynamic Capabilities Theory

The concept of dynamic capabilities begun to gain traction amongst scholars after the publication of the seminar paper by David Teece, Gary Pisano, and Amy Shuen (Teece *et al.*, 1997) on ‘Dynamic Capabilities and Strategic Management’. This concept is developed as to address the weaknesses of the resource-based view in providing plausible explanation to the concept of competitive survival of in the face of rapidly changing business environment (Teece, 2007). The dynamic capabilities theory is viewed as a theoretical link between the economics-based strategy literature and contemporary evolutionary approaches to organizations (Douma & Schreuder, 2013).

In the views of Grobler (2007), it is difficult for an organization to maintain its competitive advantage whenever its competitive environment is in a constant state of change. Dynamic capabilities signify organizational capacity to deliberately create, extend, or modify its resource base’ (Helfat *et al.*, 2007). In essence, these capabilities are embedded on collective activities undertaken in the firm which promotes adaptation in the value creating mechanisms no matter the pace of change in environmental conditions (Helfat & Winter, 2011). Moreover, dynamic capabilities aid in modifying existing organizational capabilities and resources and /or develop new capabilities (Teece *et al.*, 1997; Winter, 2003). The underlying assumption of this theory is that firms, which are able to sense as well as seize new opportunities and in addition reconfigure their resources and capabilities in line with identified opportunities have potential to build and sustain competitive advantage (Teece, 2012).

In the theoretical perspective of dynamic capabilities, a firm is conceptualized as a social entity concerned with processing and utilizing of knowledge (Jantunen, 2005). This proposition raises a strategic implication that it is possible to create as well as maintain competitive advantage through exploiting new information and existing resources. Helfat and Winter (2011) contend that a firm that’s in possession of operational capabilities is able to execute activities on an on-going basis using fairly the same resources, techniques and procedures on the same scale to support existing services and products for the same group of customer. However, dynamic capabilities are an imperative for aligning the organization with the environment and leveraging on knowledge and informational resources.

In order to discern changes in the environmental variables, threats and new opportunities, business enterprises must have relevant processes and practices for acquiring and assimilating new information into the organizational knowledge base, and acting on it (Harvey, Skelcher, Spencer, Jas & Walshe, 2010). Consequently, utilization of absorptive capacity as a primary dynamic capability provides a potent driving force for attainment of sustainable competitive advantage and enhanced corporate performance. According to Zahra and George (2002) absorptive capacity is considered as the capacity of a firm to acquire, assimilate, transform and exploit knowledge. In essence, absorptive capacity is an imperative for organizations to be able to identify, assimilate, as well as apply new knowledge to facilitate effective adaptation to changing environments (Buenstorf & Murmann, 2005).

In this study, the theory of dynamic capabilities was used to provide the theoretical grounding of the constructs of transformation capacity as independent variable and firm performance as dependent variable. Transformation capacity is considered as a dynamic capability relating to competences of a firm (Zahra & George, 2002; Noblet, Simon & Parent, 2011; Teece, 2012) Furthermore, it has been noted that competitive, dynamic and multifaceted business landscapes require organizations to be adaptive in the process of executing strategies through allocating resources effectively and rapidly in response to emerging opportunities and challenges in both global and local markets (Fjeldstad, Snow, Miles & Lettl, 2012; Bennett & Lemoine, 2014).

3.2. Empirical Literature

An empirical study conducted by Lungu (2020) investigated the role of knowledge transformation on firm performance amongst Information Technology Companies in Romania. The study demonstrated that knowledge transformation has a positive contribution on firm performance. This survey collected data from a small sample of 100 participants. Notably, sample statistics associated with a small sample are not suitable for estimating population parameters due to the resultant sampling error (Zikmund & Babin, 2009; Gill, Johnson & Clark, 2010; Taherdoost, 2016). Furthermore, the central

limit theory holds that increasing the size makes the observed sample to tend towards a normal distribution making the sample statistics become unbiased estimator of population parameters (Gupta, 2007; Khadka, 2019).

Shin, Kim and Jeong (2018) surveyed firms in biopharmaceutical industry in United State of America and revealed that performance is positively affected by transformation capacity. However, Kale, *et al.* (2017) found out that transformation capacity has no statistically significant effect on firm performance. These inconclusive findings raise implications on the need for replicative research in varied contexts so as to establish an objective position regarding the empirical link between transformation capacity and firm performance.

Welo and Ringen (2018) investigated knowledge transformation capabilities in integrated manufacturing and product development companies. In this study, only companies that had manufacturing and product development as central parts of their business strategy were included in to sample. Towards this end, data was gathered from nine knowledge-intensive multinational companies operating in Norway which were selected through purposive sampling technique. It was noted that firms regularly create, capture, synthesize and store knowledge with the overall purpose of using it for problem-solving and developing new products. Furthermore, the process of sharing and transforming knowledge is standardized. The survey concluded that there is a statistically significant capability maturity gap within product development operations involving knowledge transformation and retrieval.

Ahn, Mortara and Minshall (2013) undertook a survey on the effect of open innovation on organization performance. Open innovation was deconstructed into absorptive capacity, inventive capacity, connective capacity, transformative capacity, innovative capacity and desorptive capacity. Transformative capacity was conceptualized as a distinct construct alongside absorptive capacity and measured on the basis of patents and protection activities of product innovation. On the basis of structural equation modelling, transformative capacity was found to have the most dominant contribution to firm performance relative to other dimensions of open innovation. Even though the test of assumption of multicollinearity was performed, other key assumptions of structural equation modelling as normality were not subjected to statistical testing.

Feghali and El-Den (2008) undertook a conceptual review of literature on knowledge transformation among virtually-cooperating group members. The study sought to explore how individuals in a virtually-cooperating group could transform tacit knowledge in a virtual setting and what were the enablers of such transformation. The review identified opinions and ideas as fundamental aspects involving transformation of knowledge which can be developed into explicit knowledge by virtually dispersed group members through sequential and progressive building of shared knowledge. Setting of objectives and goals by members was observed to be a vital phase in transformation of knowledge. The current study made use of empirical data for validating the hypothesized relationships among the research variables.

3.3. Conceptual Framework

The extensive critical review of existing theoretical and empirical literature was instrumental in the development of the conceptual framework shown in Figure 1.

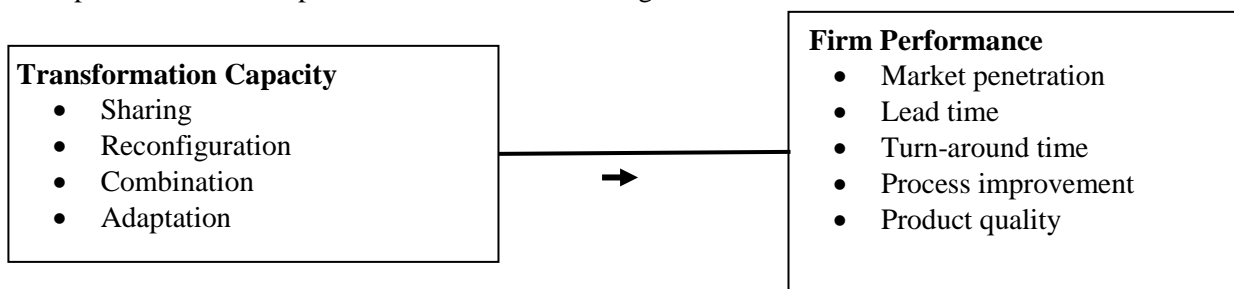


Figure1. Conceptual Framework

Source: Author (2020)

The conceptual framework provides a schematic illustration of the effect transformation capacity on firm performance. In Figure 1, transformation capacity is hypothesized as an explanatory variable for firm performance amongst insurance companies. Transformation capacity was operationalized as the routines and processes that facilitate sharing, reconfiguration, combination and adaptation of new

knowledge to the reality and specific needs of the firm. Furthermore, firm performance was operationalized as market penetration, lead time, turn-around time, process improvement and product quality.

3.4. Research Hypotheses

The study was guided by the following research hypotheses;

H₀: There is no significant effect of transformation capacity on performance of insurance companies in Kenya.

H₁: There is a significant effect of transformation capacity on performance of insurance companies in Kenya.

4. RESEARCH METHODOLOGY

This thesis made use of positivism paradigm for its research philosophy. Positivism paradigm is a variant of objectivism epistemology which is founded on the assumptions that the social reality that is subjected to research is external to social actors (Saunders, Lewis & Thornhill, 2009). The object of this research philosophy is to unearth the truth concerning the social world, through observation and measurement of facts, from which inferences can be made regarding the universal social reality (Gill & Johnson 2010). Insights provided by empirical inquiries that are anchored on positivism paradigm are likely to have high level of validity and reliability facilitating generalization to the population (Johnson & Onwuegbuzie, 2004; Cohen, Manion & Marison, 2011).

This study made use of explanatory research design to ensure that the empirical evidence obtained in the research process sufficiently addresses the research problem by testing the research hypotheses that have been formulated. As has been observed, explanatory research design is useful for addressing the questions 'why' and 'how' by providing corresponding explanations as well as accounting for descriptive information regarding social phenomena (Saunders, *et al.*, 2009; Grey, 2014). In particular, explanatory research design seeks to provide empirical explanations on existence of associations between research variables and if the relationship is causal. It's necessary to make use of the explanatory research design as the researcher sought to sufficiently respond to the dominant questions 'why' and 'how' concerning the research variables adopted in this study.

Explanatory research design has been adopted and successfully used in empirical study (Kimaru & Kinyua, 2018; Kiprotich, Kahuthia & Kinyua, 2019; Gatuyu & Kinyua, 2020; Ontita & Kinyua, 2020).

The researcher targeted 59 insurance companies in Kenya. The choice of insurance companies was supported by the revelation of existence of problem of performance through the review of contextual literature and the fact that the head offices of these companies are in Kenya. These companies that comprises the target population of this study are further classified into non-life insurance, life insurance, reinsurance and composite insurance.

The unit of analysis in the proposed theses is insurance companies. However, the unit of observation comprises functional areas in insurance companies including information technology, research and development, finance, human resource management, strategy and innovation, public relations, operations and sales. These functional areas are headed by senior managers who sit in the head office and are directly answerable to the chief Executive officer or managing director. In addition, the functional heads are essentially involved in making strategic decisions and thus informing the practices and behavior of employees in these companies. In this case, 472 heads of functional areas in the 59 insurance companies constituted the population size.

Multi-stage sampling technique was adopted for the purpose of selecting a representative sample in this study. In particular, proportionate stratified random sampling and simple random sampling was successively executed to attain an appropriate sample for the purpose of collecting empirical data. Since the sample size is above 5% of the target population, the appropriate sample size was established using Yamane formula which assumes a normal distribution, 95% level of confidence and precision level of 0.05 (Yamane, 1967) and has been used widely in empirical studies (Muthoni & Kinyua, 2020; Ocharo & Kinyua, 2021)

$$n = \frac{N}{1 + N \cdot e^2}$$

Where; n = Sample size,

N = Population size

e = level of precision

The Yamane formula is appropriate for parametric tests such as linear regression which essentially obeys the assumption that sample data set is drawn from a population that can be sufficiently modelled using a probability distribution with fixed set of parameters (Neideen & Brasel, 2007).

In the case where the population, level of confidence and level of precision are 472, 95 percent and 0.05 respectively, the sample size is thus given;

$$n = \frac{472}{1 + 472(0.05)^2} = 216$$

Consequently, the sampling factor that was employed in the process of selecting the sample is given as follows;

$$k = \frac{n}{N} = \frac{216}{472} = 0.46$$

This sampling factor was used for establishing the number of insurance companies that were involved in this study on the basis of the categories established by the Insurance Regulatory Authority.

Table1. *Distribution of the Sample*

Category	Total Number of Companies	Sampling Factor	Number of Companies Sampled	Percentage
Non-life	28	0.46	13	48.2
Life	17	0.46	8	29.6
Reinsurance	5	0.46	2	7.4
Composite	9	0.46	4	14.8
Total	59		27	100

Source: *Author (2020)*

The proportions of the sample attained in the respective categories fairly agree with the distribution of the target population as depicted in Table 1. The 27 insurance companies comprising the sample and spread across the four categories were systematically chosen using simple random sampling technique and all managers of the identified functional areas participated in this study. This implies that data was gathered from a total of 216 corporate level managers in the head offices of the sampled 27 insurance companies.

This study predominantly relied on primary data which were gathered using a semi-structured questionnaire. Notably, semi-structured questionnaire is the most widely used research instrument, since its mixed format involving closed-ended and open-ended questions makes it suitable for use in a diverse range of situations (Ngetich & Muchemi, 2018; Muthaura & Kinyua, 2021). Expert opinion was sought to verify that the research instrument had face validity. In accordance with Kothari (2004), sound instrument for purpose of collecting research data must meet the criteria of validity and reliability. Content validity signifies the degree to items on a test are a fair representation of the

domain of the construct of interest (Kothari, 2004; Bölenius, Brulin, Grankvist, Lindkvist & Söderberg, 2012). Moreover, construct validity is appraise the degree to which scores on a test can be attributed or associated with the explanatory constructs of a sound theory for purpose of supporting transformation of a given concept into a functioning reality (Kothari, 2004; Taherdoost, 2016). In this study extensive review of existing and relevant body of theoretical and empirical literature was used to ensure both content validity and construct validity.

A small-scale preliminary study was carried out on twenty subjects drawn from the management team that is directly answerable to the heads of functional areas. The object of this pilot study was to provide empirical data for the purpose of testing the reliability level of the instrument for collecting empirical data. Reliability is particularly concerned with the internal consistency of assortment of test items constructed for measuring a given a research variable (Tomioka, Iwamoto, Saeki & Okamoto, 2011). The results of reliability test are depicted in Table 2.

Table2. Reliability Statistics

Research Variable	Cronbach's Alpha	Decision
Transformation Capacity	.747	Reliable
Firm Performance	.732	Reliable
Aggregate Score	.739	Reliable

Source: Pilot Data (2021)

The reliability statistics for the research variables ranged between 0.732 for transformation capacity to 0.747 for firm performance. The aggregated Cronbach’s alpha index for the two research variables was 0.739. The index reported for the distinct research variables as well as the overall reliability statistics exceeded the adopted threshold of 0.7 considered appropriate for confirming reliability of a research instrument for purposes of statistical inquiries (Cooper & Schindler, 2006; Field, 2009). Accordingly, the set of items for the distinct research variables were therefore found to be reliable for use in the final study. The benchmark alpha index of 0.7 has been adopted by past research for making decision on reliability of research instrument (Njeru, Muathe & Muchemi, 2013; Kinyua, Njoroge, Wanyoike & Kiiru, 2015; Gacheru & Muchemi, 2016; Gituma, Kimencu & Muchemi, 2018; Mogaka & Muchemi, 2021).

The letter of approval of from Kenyatta University was used for processing a research permit from the National Council of Science, Technology and Innovation. The researcher also sought informed consent for taking part in the research study from the heads of functional areas in the sampled insurance companies before embarking on collection of research data. The data collection instrument was administered by the researcher through drop-and -pick latter method so as to accord the participant sufficient time to relate with and complete the research instrument. The researcher maintained a register of questionnaires to facilitate tracking of movement of the research instrument.

Empirical modelling provides a useful approach for analysis of different problems across numerous fields of knowledge. This study made use of simple linear regression to model the relationship among the predictor and response variables. Linear regression model is considered appropriate for statistical inquiries involving a single continuous outcome variable and at least two categorical or continuous predictor variables (Thompson, 2006). The empirical model adopted for this study is displayed in equation 3.1.

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y =Firm Performance

X_1 = Transformation Capacity

β_0, β_1 = Beta coefficients

ε = error term

In model, transformation capacity was regressed on firm performance. This regression analysis was useful for testing research hypotheses H_0 and H_1 respectively.

5. DESCRIPTIVE RESULTS

5.1. Response Rate

The research instrument was administered to a total of 216 corporate level managers in the head offices of the sampled 27 insurance companies. Amongst the selected 216 participants, the researcher collected 176 questionnaires for analysis. The response and non-response rates were 81% and 19% respectively. This proportion of response exceeded the 60% that allows for extrapolations of sample characteristics to the entire population as recommended by Fincham (2008). Consequently, the effective proportion of participants in this research facilitated statistical analysis and generalization of findings to the population of interest.

Transformation capacity was measured on the basis of activities undertaken to facilitate sharing, reconfiguration, combination and adaptation of new knowledge to the reality and specific needs of the organization. The measures of central tendency and spread for transformation capacity are presented in Table 3.

Table3. Descriptive Measures for Transformation Capacity

Transformation Capacity	n	Mean	Std. Dev	CV
The company organizes frequent informational meetings	176	3.99	0.55	0.14
Informational memos are written to organizational members after holding meetings with or visiting external partners	176	3.90	0.64	0.16
Employees have accesses to relevant functional information held in the company’s data base	176	4.16	0.78	0.19
Managers and employees analyze knowledge gaps and the ways to fill them with external knowledge	176	4.08	0.88	0.22
Information technology systems are deployed in dissemination of knowledge	176	3.82	1.04	0.27
Internal trainings are organized for reskilling	176	4.11	0.73	0.18
Internal trainings are organized for upskilling	176	4.04	0.81	0.20
Conformity of functional activities with emerging practices is monitored and evaluated	176	3.90	0.75	0.19
Functional units are integrated through information technology systems to facilitate exchange of knowledge and information	176	4.05	0.93	0.23
Aggregate Measures		4.01	0.79	0.20

Source: Survey Data (2021)

The descriptive measures in Table 3 reveal that the sample mean responses for transformation capacity ranged between 3.82 and 4.16. This implies that all responses to aspects measured for transformation capacity in this study tended to a value of 4.00 on the rating scale. The corresponding sample standard deviations for the various aspects of transformation capacity were also relatively low essentially ranging between 0.55 and 1.04 which signifies that responses were generally close to their respective sample means. These measures confirms that the activities construed as transformation capacity were considered necessary for effective operations and were thus embedded in the practices of the insurance companies observed in this study.

Moreover, the overall sample mean response and sample standard deviation were 4.01 and 0.79 respectively affirming the trend established in the responses for the distinct aspects of transformation capacity. In addition, the variability of responses ranged between 14 percent for presence of information meetings and 27 percent for deployment of information technology systems in dissemination of knowledge. The low variability of responses confirms that the sample mean for transformation capacity is a good estimator of the population parameter.

5.3. Descriptive Characteristics for Firm Performance

Firm performance was operationalized as outcomes operational practices in insurance companies relating to market penetration, lead time, process improvement, turn-around time and product quality. The measures of central tendency and variation for firm performance are displayed in Table 4.

Table 4. *Descriptive Measures for Firm Performance*

Firm Performance	n	Mean	Std. Dev	CV
Bundled protection is used to enhance customer benefits	176	3.93	0.82	0.21
Sufficient resources have been made available to support the operations of the company's agencies	176	4.16	0.76	0.18
Collaborative initiatives have been used to enhance the company's market reach	176	4.03	0.94	0.23
The company is continuously enhancing its presence and visibility in social media platforms	176	4.18	0.73	0.17
The company is using referral marketing to enhance its market reach	176	4.09	0.93	0.23
Informational resources have been used to generate new processes that are friendly to end users	176	4.16	0.58	0.14
There is continuous improvement of operational processes in the company	176	3.98	0.84	0.21
Customers complaints are attended to in a timely manner	176	3.97	0.70	0.18
There is reduction of time taken to offer services to our stakeholders.	176	3.99	0.84	0.21
There is reduction of delays in receiving of supply of essential inputs to the company	176	4.13	0.66	0.16
Informational resources have aided the inclusion of product features that matter to the company's customers	176	4.30	0.72	0.17
The company is continuously introducing new innovative products	176	4.08	0.47	0.12
Aggregate Measures	176	4.08	0.75	0.18

Source: *Survey Data (2021)*

The results in Table 4 show that the sample mean response in respect of observed aspects of firm performance had a narrow range of between 3.93 for bundled protection and 4.30 for the role of informational resources in inclusion of product features. The implication of this typical behaviour is that there was agreement amongst the research participants that the performance outcomes under consideration were manifest in the observed insurance companies. The highest variability amidst the observed aspects of firm outcomes was 23 percent signifying that these responses were generally clustered around the reported sample means.

It was evident from the responses gathered that observed insurance companies were keen on introducing innovative products aided by informational resources as demonstrated by the sample mean of 4.30 and corresponding low variability of 17 percent. Presence and visibility of insurance companies in the social media is noted as a fundamental concern as denoted by the respective sample mean of 4.16 and narrow variability of 17 percent associated with responses to this aspect of firm performance. Moreover, all aspects of performance of insurance companies measured had aggregate sample mean of 4.08 and sample standard deviation of 0.75. Notably, the aggregate variability of responses regarding firm performance was narrow at 18 percent signifying that the observed sample mean is appropriate for estimating the respective population parameter.

6. INFERENCE ANALYSIS

In this study linear regression was used as an approach for modelling the relationship between the set of research variables chosen. The research hypotheses drawn from the independent and dependent variables were modelled on the basis of simple linear regression analysis. As a result, transformation capacity was regressed on firm performance. The output of this regression analysis is displayed in Table 5

Table 5. Multiple Regression for Direct Relationship

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.671 ^a	.450	.412	.42193	1.811
ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.668	4	2.167	12.172	.000 ^b
Residual	29.908	171	.178		
Total	38.575	175			
Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.388	.581		.668	.505
Transformation Capacity	.150	.062	.176	2.438	.016
a. Dependent Variable: Firm Performance b. Predictors: (constant), Transformation Capacity					

Source: Survey Data (2021)

The model summary in Table 4.13 reveals that the adjusted R-square is 0.412 implying that transformation capacity explains 41.2 percent of performance of insurance companies. Conversely 58.8 percent of performance of insurance companies can be attributed to other factors outside the scope of this study. The F-test on overall statistical significance of the estimated model and signified by the output of analysis of variance (ANOVA) reveals an F statistic of 12.172 at 0.001 level of significance. This statistical test confirms that the estimated model provides the best fit for the observed data, and is statistically significant at 95 percent level of confidence and $p \leq 0.05$. The estimated statistical model is depicted by equation 4.1.

$$\text{Firm Performance} = 0.388 + 0.15\text{Transformation Capacity}$$

In this model it's evident that when all the independent variables are held at a constant value of 0, firm performance would be 0.388. However, the corresponding p value is 0.505 exceeding the 0.05 threshold for affirming statistical significance of the respective parameter. Consequently, estimated value of beta coefficient for the intercept is not statistically significant at 95 percent level of confidence.

The study sought to establish the effect of transformation capacity on performance of insurance companies in Kenya. The output of multiple linear regression analysis reveal a beta coefficient of 0.150 and p value of 0.016 for transformation capacity. Considering that the calculated p-value lies below 0.05, the parameter for transformation capacity is confirmed to be statistically significant. As a consequence, the null hypothesis that there is no significant effect of transformation capacity on firm performance was rejected. The implication of this is that at 95 percent level of confidence transformation capacity has a positive effect on performance of insurance companies in Kenya. In particular, a unit increase in transformation capacity is attributed to an increase of 0.150 in firm performance.

The conclusion of this study is aligned to the findings of the study carried out by Lungu (2020) that demonstrated that knowledge transformation has a positive contribution on firm performance. Moreover, the findings are in agreement with the conclusion that transformation capacity contributes positively to firm performance (Ahn, *et al.*, 2013). However, the inferences made in this study are not consistent with conclusion by Shin, *et al.* (2018) to the effect that transformation capacity has no statistically significant effect on firm performance. In relation to reviewed theoretical literature, the conclusion of this study corroborates the proposition of the systems theory that emphasises complementarities among different elements of a social entity, integration of such elements, and the outcomes resulting from such interactions (Bertalanffy, 1968; Teece, 2018).

7. ANALYSIS OF QUALITATIVE DATA

The study sought the opinion of respondents regarding transformation of knowledge in insurance companies. It was observed that transformation of knowledge facilitates access to and sharing of information amongst employees within and between the functional areas of the insurance companies.

There was consensus that informational meetings organized at different levels were promoting transfer of information received from the environment of insurance companies to the members of organization. These meetings provide opportunities for interpretation and integration of the information acquired from the environment.

8. CONCLUSION

The study intended to establish the effect of transformation capacity on performance of insurance companies in Kenya. Output of inferential analysis demonstrated that the parameter for transformation capacity was statistically significant. Specifically, these statistical results verified that transformation capacity has a positive effect on firm performance. Subsequently, there was no enough statistical evidence to fail to reject the null hypothesis that there is no significant effect of transformation capacity on firm performance.

9. RECOMMENDATIONS

The manager in charge of operations should enact policy guidelines that bolster practices for sharing, reconfiguration, combination and adaptation of new knowledge to the reality and specific needs of the firm. Similarly, human resources managers should provide policy guidelines in support of activities that promote internalization of knowledge through simulation as this has potential to strengthen the contribution of transformation capacity in insurance companies. This study was confined to transformation capacity and firm performance as independent and dependent variables respectively. The coefficient of determination manifested by the regression analysis confirmed that besides transformation capacity there are a host of other factors that are integral to explaining variation in performance of insurance companies. Consequently, future researches can be directed towards unearthing these other factors in order to enhance the empirical literature on the concept of firm performance.

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