

# Effect of Technological Capability on the Organizational Performance in NSE Listed Firms in Kenya

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Received: February 11, 2025    Accepted: June 25, 2025    Published: July 9, 2025

doi:10.5296/ber.v15i3.23005    URL: <https://doi.org/10.5296/ber.v15i3.23005>

## Abstract

Utilizing new technology fosters the development of innovative goods and services and offers a fresh approach to problems that arise within businesses. The main goal of the study is to ascertain how organizational performance in NSE-listed companies in Kenya is impacted by technological capability. The following disruptive innovation theory served as the basis for this investigation to explain this study. This study employed a cross-sectional correlation research approach. All 60 of Kenya's listed companies were examined in this study. Data for this study was gathered using the census survey method. To acquire the data, convenience sampling was employed. A total of 240 people were the target population of the study. The questionnaire is the main data source used in this investigation. There were both open-ended and closed-ended questions on the survey.

Following the coding of questionnaire replies in Microsoft Excel, the data was transferred into SPSS package 21 for analysis. The study employed structural equation modelling analysis (SEM) with IMB SPSS Amos 26. The results demonstrated that an organization's performance is influenced by its technological capacity.

**Keywords:** Technological Capability, Innovation Capability, Organizational Performance

## **1. Introduction**

### *1.1 Introduce the Problem*

Today's competitive and dynamic global economy is characterized by rapid technological change or growth (Gewe, Abebe, Azene & Bayu, 2016). Which leads to companies needing to adapt to changes in the technology. By them adapting they are able to mitigate risk involved in the changes therefore being able to continue being competitive. Within enterprises, technology is crucial to the creation of new inventions and products (Ravichandran et al., 2017). The invention and products ensure that the company is able to produce new products and services which would ensure that it achieve it organizational goals of profitability and sustainability. Organizations therefore need to build technological capability to achieve this ability to produce new product and services. According to Kang et al. (2017), technological capability is the capacity of an organization to employ a variety of technologies to carry out any pertinent technical function or volume activity within the organization, including the capacity to learn, use, and produce new knowledge. In order to improve operational competencies and achieve higher performance, it helps the company find, learn, and use new external information (Salisu & Bakar, 2019).

Zawislak, Fracasso, and Tello-Gamarra (2017) note that it includes the abilities, know-how, experience, and procedures that the company requires in order to create new goods and/or services. Technological capability leads to the creation of Technoligical competence. Gewe, Abebe, Azene, and Bayu (2016) define technological competency as the capacity to apply technological knowledge in engineering, production, and innovation in an efficient manner. According to the commonly accepted definition of technological capability, success in product innovation can be achieved by companies with strong technological capability since they can swiftly recognize technological opportunities and the value of technological resources, acquire them, and capitalize on them (Blomkvist et al., 2017). Accordingly, technological capability is defined as both inward-looking (technological mastery and application in product innovation based on the acquired technological resources) and outward-looking (recognition and acquisition of external technology resources and opportunities) (Danneels, 2016). These skills can encourage a company to pursue ongoing innovation (Kang et al., 2017).

Technology capability helps an employee's to understand the use of technology by the company to achieve the production of goods and services (Willy, 2017). This is done by a) the ability to develop new products that meet market needs; b) the ability to apply appropriate process technologies to produce new products; c) the ability to develop and adopt new product and process technologies to fulfil future needs, and d) the ability to respond to the

technology and activities created by competitors" are the four components of technological innovation capability, according to Incea, Imamoglu, and Turkcan (2016).

Research has indicated a strong correlation between the proximity of technology and the pursuit of external knowledge. For instance, Lakemond et al. (2016) discovered that the level of technological proximity between the partners' knowledge bases may determine the unique values of external knowledge search operations. According to Yang, Xie, Liu, and Duan (2018), technological capability is a critical dynamic capability that helps firms attain and maintain a legitimate competitive edge and improve performance in a cutthroat global corporate environment. However, ineffective capabilities have limited the business operations and performance of SMEs, particularly in African economies where the sector's competitiveness and performance are disrupted by human capital, technological, collaborative, and innovative capabilities (Asante, Kissi, & Badu, 2018; Akeyewale, 2018).

Innovations in any organization are greatly impacted by technological development, transfer, eco-technology, inter-disciplinary scientific approaches, and socio-economic technological policies (Donou-Adonsou et al., 2016; Guerrero & Urbano, 2019). One of the most important elements in helping firms achieve their commercial and customer-oriented objectives is technological innovation. Lancker, Mondelaers, Wauters, and Huylenbroeck (2016) assert that because of the growing need for resource-efficient and sustainable manufacturing methods, it is critical for the organization to prioritize technological innovation. An organization must implement innovation in its technology from time to time, as it will bring a significant and positive impact on the organizational performance (Atalay, Anafarta, & Sarvan, 2013; Ayuningrat, 2016). Innovation is a major force behind social welfare and long-term economic growth. When production operations are reduced and research and development (R&D) costs rise, innovations become essential. By doing this, the production process's duration and technological complexity can be decreased (Dasig Jr, 2017; Lancker et al., 2016). Numerous studies have proven the link between technological innovation and economic development (Akhmetshin et al., 2018; Yuniss et al., 2017; Maradana et al., 2017), demonstrating the importance of innovative activities in determining economic growth.

### *1.2 Statement of the Problem*

Technical expertise and intangible assets offer tremendous strategic potential for the business, as businesses are constantly looking for methods to obtain a competitive advantage. Despite these limitations, research on technological capacity is carried out for both industrialized and developing countries at the national, industry, and corporate levels. The three elements of technological capability are the soft components skills, knowledge, and experience and the hard components systems, machinery, and equipment. Gaining a competitive edge requires technological capabilities (Aqua, 2002; Teece, Pisano & Schuen, 1997; Tsai, 2004). Rapid technological innovation, increasing globalization, shifting demographics, and heightened regulatory oversight are all causing fundamental changes in the business environment. In addition to new opportunities, this poses risks and challenges for managers.

Additionally, by enabling firms to reorganize their skill sets and frameworks, organizational alignment lays the groundwork for competitive advantage. The ability of an organization to

carry out a variety of productive tasks that improve its ability to carry out specific operations and compete in particular markets and industries is referred to as technological aptitude in technical terms. According to the 2016 NSE annual bulletin, a number of Nairobi Securities Exchange businesses have experienced financial trouble since the NSE's founding and have either been delisted from the NSE, undergone statutory management, or undergone financial restructuring.<sup>15</sup> listed companies in the Nairobi stock exchange reported losses, 25 reported declining earnings, and 26 failed to declare dividends, leaving investors with nothing (Otieno, 2017). Otieno continues to say that while 23 businesses, or a third, reported higher earnings, 25 businesses, or 39% of the total, reported declining after-tax profits. This indicates that for the 2016–2017 year, two-thirds of these businesses did not report a division. ARM lost ksh2.8 billion, Transcentuary lost 863 million, Mumias lost 4.731 billion, and Kenya Airways lost 10.2 billion, making them the largest losers. ARM and E.A. Cables had increases in losses of 134% and 14%, respectively, in 2017 alone.

The losses of Mumias Sugar Company and Eveready East Africa also experienced the largest increases in 2018, 144% and 375%, respectively (NSE, 2020). Even while academic studies on companies' innovation capacities have improved our understanding of them, not much has been done to look at these qualities in Kenyan listed corporations, despite their importance to the nation's economy. For this reason, the study examines 60 listed corporations to demonstrate how technological capability has an influence of innovation skills impact a firm's inventive performance.

### *1.3 Explore Importance of the Problem*

### *1.4 Objectives of the Study*

The objective of these study was to establish the effect of Technological Capability on the Organizational performance in NSE listed firms in Kenya.

## **2. Theoretical Review**

### *2.1 Disruptive Innovation Theory*

The concept of disruptive innovation originally surfaced in the literature on innovation management during the 1980s and 1990s. According to Zhou, Zhang, Chen, and Tian (2018), disruptive or competence-destroying innovation is viewed as a fundamental component of entrepreneurial activity that transforms industries. Clayton M. Christensen's work introduced the idea, defining disruptive innovations as goods and services that may perform worse than those that are currently on the market but offer additional advantages to consumers, like ease of use or convenience, and reach new user groups (Cubero, Gbadegeshin & Consolaci, 2021). According to Si, Chen, Liu, and Yan (2020), a disruptive innovation is any technological advancement that modifies the features of currently available goods and services, giving them more value.

According to Hair, Krupka, and Vlašić (2021), disruptive innovation is the process by which a company that starts in a low-end or new market moves from the periphery to the mainstream by providing cutting-edge technologies, goods, services, or business strategies.

According to Perez, Paulino, and Cambra-Fierro (2017), understanding the complete value network and keeping customers at the center are crucial for disruptive innovation. By deliberately targeting customers in low-end or new sectors, disruptive innovation gives small, entrepreneurial businesses the opportunity to enter fiercely competitive marketplaces (Opute, 2020). Disruptive innovation has been talked about, particularly in relation to classifying disruptive companies according to the elements that affect their ability to cause disruption (Chen, Zhu & Zhang, 2017).

According to Hopp et al. (2018), disruptive technology products and intermittent innovation shifts are the primary characteristics of high technology-driven economies. According to Beltagui, Rosli, and Candi (2020) and Yu et al. (2020), disruptive innovation is the process by which new technology changes a performance improvement trajectory or reinterprets performance. According to Rasool et al. (2018), disruptive innovations target new customers and offer a variety of features and values when compared to sustained innovations, which are built on current services and goods for current clients. According to Cozzolino, Verona, and Rothaermel (2018), this type of innovation leads to the development of new goods and services that interfere with established market practices in an attempt to find a more sophisticated market association.

A disruptive innovation, according to Petzold et al. (2019), presents an offer that is typically less expensive, simpler to use, and more convenient than offers from the main market, but its performance is inferior to the qualities that the primary clients evaluate. As the disruptive technology grows, it begins to take up specialized markets that the more established technologies leave behind. By doing so, it is able to grow its market share and "invade" the main markets (Guo, Pan, Guo, GU & Kuusisto, 2019). Technology is constantly altering and reshaping business models, which forces firms to come up with creative ways to handle its unpredictable and rapidly evolving nature. Disruptive technologies are one of its negative effects; they continue to present difficulties for organizations globally, and they must constantly adapt to survive (Arifin, 2021). Various types of innovations are what propel technological change (Coccia, 2020c).

Disruptive innovations are among the most crucial kinds, having a big and lasting effect on markets and society (Coccia 2017b, 2017c, 2018a). Disruptive innovations' effects on markets are linked to how they have changed throughout time in relation to other innovations. Theories based on the competitive substitution of a new technology for an old one can be used to explain technological progress in this setting (Coccia 2019a, 2020b; Utterback, Pistorius, and Yilmaz 2020). The expansion of new services and goods that increase consumer value and lead to better market share and performance can be explained by this notion. A business that has technological capabilities can adjust to changes in the external environment and develop new products and services that will help it keep clients.

Managers could take steps to transform a potential disruption in the market into a new opportunity or, at the very least, avoid their organization's demise if they are able to recognize these disruptive innovations before they have an impact on markets (Zubizarreta, Ganzarain, Cuadrado & Lizarralde, 2021). Both operational and technological competence are explained

by this paradigm.

### 3. Research Method

#### 3.1 Research Design

A research design is "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings," according to Burns and Grove (2003). The researcher can employ any type of research design to carry out the study. This study employed a cross-sectional correlation research approach. This approach was helpful for characterizing a link between two or more variables and allowed the researcher to observe two or more variables at the same time (Breakwell, Hammond & Fife-Schaw, 1995).

#### 3.2 Target Population

Sugiono (2010) claims that the population is a geographic generalization and that each object or subject has qualities and specific features that the researcher sets in order to learn more and draw conclusions. Furthermore, according to Sekaran (2000), a population frame is "a list of all the elements in the population from which the sample is drawn." The study's population consisted of Kenyan listed enterprises.

Information will be gathered for the study from a variety of people in management roles, including middle and senior managers in the different listed companies. All 60 of Kenya's listed companies will be examined in this study. Data for this study was gathered using the census survey method because the population included 2 senior level management and 2 middle level management. The approach was selected for the tiny sample of the population. A total of 240 people from the aforementioned will be included in the study.

Table 1. Target Population

Respondents	Target Population	Percentage (%)
Senior Level Managers	120	50
Middle Level Managers	120	50
Total	240	100

#### 3.3 Data Collection Instruments

##### 3.3.1 Questionnaires

Respondents were able to fill out the self-administered questionnaire in an anonymous manner. Respondents were asked to answer closed-ended questions by choosing the response that best reflected how much they agreed with a particular proposition. They achieved this by employing a five-point rating system, with "not sure" serving as the middle and ranging from "strongly disagree" to "strongly agree."

Dundas (2004) demonstrated how the questionnaire approach proved beneficial by using the Likert Scale, which may differentiate between different attitude levels.



### *3.4 Data Analysis and Presentation*

The data needed to be ready for data entry after it was collected. Assigning numbers to the responses provided in each component of the questionnaire allowed for the coding of all the data. Following the coding of questionnaire replies in Microsoft Excel, the data was transferred into SPSS package 24 for analysis. SPSS was selected for data analysis due to its ease of use and compatibility with the majority of other software programs (Field, 2009).

To prevent the findings of statistical analysis from being distorted, the dataset was checked for errors and inaccuracies prior to the commencement of the analysis. By looking at the frequencies for each variable, errors were cross-checked. According to Pallant (2001), this procedure is essential to the success of research. Data analysis was done using descriptive statistics, such as central tendency summary and frequency counting for percentage calculations. A frequency distribution displays the frequencies of each distinct data value in a methodical manner (Mulisa, 2022). Demographic data from Section A and later questionnaire sections were produced by frequency analysis.

### *3.5 Structural Equation Modelling Analysis (SEM)*

A statistical method for examining structural models with latent variables is structural equation modelling (SEM) (Meyers, Gamst & Guarino, 2013). In order to estimate a number of interrelated dependence relationships at once, structural equation modelling (SEM) is a multivariate technique that combines elements of multiple regression (which looks at dependence relationships) and confirmatory factor analysis (which represents unmeasured concepts—factors with multiple variables) (Rashid, Rasheed, Amirah, Yusof, Khan & Agha, 2021; Ghaleb & Yaslioglu, 2022). Because structural equation modelling (SEM) can be used to assess theoretical models that include direct (and indirect) interactions between independent and dependent variables, SEM is used in this work. SEM can be used to assess two different kinds of models: measurement models and structural models. The measuring model assesses how well the relationships between the observed variables match the predicted relationships between the variables. The degree of correlation between latent constructs and other measurable variables is measured by the structural model. The study's structural model serves to illustrate how the variables in the theoretical framework relate to one another.

Following CFA and Goodness of Fits, the structural model was created. The validity of the study's structural model was determined using SEM. The study employed structural equation modelling analysis (SEM) with IMB SPSS Amos 24. The structural model, which may be examined apart from the measurement model, was the main focus of this work (Hair, Hult, Ringle, Sarstedt, Danks, Ray, & Ray 2021). SEM analysis has been employed in other research on innovation. Rajapathirana and Hui (2018), for example, used SEM, CFA, and EFA analysis to examine the association between innovation type, innovation capability, and company performance. Additionally, Pundziene, Nikou, and Bouwman (2021) used structural equation modelling (SEM) to analyze the research hypotheses and the path relationships in the suggested model in their study on the relationship between dynamic capabilities and competitive firm performance: the mediating role of open innovation (Chin, Cheah, Liu, Ting,

Lim, & Cham, 2020).

## 4. Results and Discussion

### 4.1 Response Rate

Out of the 240 surveys that were sent to the listed companies, 188 were properly completed and returned, yielding a 76.6% response rate. A 50% response rate is deemed sufficient for statistical analysis, according Mugenda & Mugenda (2003). According to Babbie (2010), a response rate of 50% is sufficient for analysis and reporting, while 60% is regarded as good and 70% or more as very good. Therefore, a response rate of 76.6% was deemed sufficient for statistical analysis.

Table 2. Response Rate

Questionnaires	No. of respondents	Percentage (%)
Issued	240	100
Returned	184	76.6
Not returned	56	23.4

### 4.2 Background Information Demographics

The first section in this part will present demographic profile of participants which includes gender, age, educational background and company. These characteristics are shown in Table 3. 57.6 percent were male officers and 42.4 were female were respondents. The ratio of male respondents to female respondents was approximately 1: 1.358. The majority of aged from 36 to 40 which was 41.3 percent, 41-50 years was 22.3percent, 31-35 years were 7.6percent and Above 50 at 9.8 percent. 46.2 percent of the respondents received bachelor's degrees, and 30.4percent were master's degrees, diploma were 21.2percent, another 0.5percent were doctoral degrees.



Table 3. Background Information Demographics

Category	Frequency	Percentage (%)
Gender		
Male	106	57.6
Female	78	42.4
Total	184	100.0
Age of the Respondents		
26 – 30 years	14	7.6
31-35 years	35	19.0
36 – 40 years	76	41.3
41 – 50 years	41	22.3
Over 50yrs	18	9.8
Total	184	100.0
Level of Education		
Professional certificate	3	1.6
Diploma	39	21.2
Degree	85	46.2
Masters	56	30.4
Doctorate	1	0.5
Total	184	100.0

### 4.3 Study Variables Descriptive Results

#### 4.3.1 Technological Capability

The table 4 below shows the descriptive statistics for statements related to Technological Capability. The first objective of the study is to establish the effect of Technological Capability on the Organizational performance in Nairobi stock exchange listed firms. Several statements were used by the study to get response from the respondents. The first statement Our Company continuously uses technology to advance the superiority of its goods and services majority (51.6%) strongly agreed while also others (30.4%) agreed with a few 7.6% disagreed. This indicates that the use of technology is important to ensure the quality of goods and service with company since it increases the competitiveness of the company while competing with other companies in the same market segment. This collaborates with Rambe & Khaola (2023) study on enhancing competitiveness through technology transfer and product quality: the mediation and moderation effects of location and asset value. The study illuminates the critical importance of product quality for business. It also shows how important high-quality products are, even though technology transfer may have a direct impact on firm competitiveness. Our business frequently introduces innovative goods and services to the market first. Majority (60.9%) agreed while other (24.5%) strongly agreed with 6.5% disagreeing with the statement. This shows that there is a benefit received by a business that launches a good or service first. This is supported by Mariani & Wamba (2020)

study exploring how consumer goods companies innovate in the digital age.

Many sectors and businesses are searching for innovative solutions to accelerate their innovation efforts without sacrificing their capacity to react quickly to volatile, competitive, and dynamic global marketplaces.

Our company has made numerous changes to the current services majority (59.2%) agreed while others (31.5%) strongly agreed, a few 3.8% were neutral. This indicates that the companies are willing to try new innovation and new methods to enhance customer experiences. The study collaborated with Kurtmollaiev, Lervik-Olsen & Andreassen (2022). Competing through innovation: Let the customer judge! As the actual recipients of innovation, customers are its best judges. Our firm is prepared to try new methods of production and seek uncommon, novel solutions for our consumer's majority (78.3%) strongly agreed with (13.0%) agreeing and 4.3% being neutral. This shows when business adapt to new technology to produce goods cost of production reduces. The findings agree with Amesho, Edoun, Naidoo & Poee (2021) study managing competitive advantage through technology and innovation systems and its impacts on service delivery. The evaluation of accessible options with regard to technological competencies takes into account inventive and technology components. They are viewed by many organizations as an essential tool for improving operations and functions.

Price are inexpensive because its items are self-manufactured using a state of the art facility (55.5%) strongly agreed while others (33.2%) agreed with 4.3% being neutral. The responses of the respondent show that good products lead to customer satisfaction. This is also echoed by Álvarez-García, González-Vázquez, Del Río-Rama, & Durán-Sánchez (2019) study on Quality in customer service and its relationship with satisfaction: an innovation and competitiveness tool in sport and health centres. The study showed that there is a strong correlation between perceived quality and satisfaction with service. In comparison to other firms in this industry, our brand is highly respected majority (67.9%) strongly agreed while others (40.2%) agreed with 10.9% being neutral. Our company regularly launches innovative products Majority (53.5%) strongly agreed while others (40.4%) agreed with 2.2% being neutral. The responses show that through constant introduction of goods and service companies are able to improve sale as customers have a variety of goods to select from. This is observed by Choo, Narayanan, Srinivasan & Sarkar (2021) in their study Introducing goods innovation, service innovation, or both? Identified firms gained about 13–14% higher performance relative to those firms to those that did not introduce any innovation.

In conclusion the results showed that organizations relied on using technology to enhance product and services within the companies. This is consistent with mutie (2018) study on the effect of technological innovation on organizational performance in government agencies which showed that digital tools did improve service delivery in the government agencies that used them. The results also agreed with omollo (2020) study on effect of technological innovation on the value of manufacturing firms listed in the Nairobi stock exchange which showed manufacturing firms relied on technological innovation to improve quality of products. The study sought to find out whether the company was able. This was also

identified by Karimi (2021) who in his study on strategy implementation capabilities and performance of Nairobi securities exchange in Kenya.

His findings showed that the company's technological capabilities were also enhanced by meticulously managing its ICT infrastructure, workflow procedures, change management, having the appropriate systems, maintaining a robust cyber security posture, and being resilient. This study were able to show that proper use of technology can result to improved performance by improving products and services.

Table 4. Technological Capability

<b>Statements</b>	<b>SD %</b>	<b>D %</b>	<b>N %</b>	<b>A %</b>	<b>SA %</b>	<b>Mean</b>	<b>Std. Deviation</b>
Our company continuously uses technology to advance the superiority of its goods and services.	6.5	7.6	3.8	30.4	51.6	4.1304	1.19852
Our business frequently introduces innovative goods and services to the market first.	3.8	6.5	4.3	60.9	24.5	3.9565	0.94566
Our company has made numerous changes to the current services.	2.7	2.7	3.8	59.2	31.5	4.1413	0.83085
Our firm is prepared to try new methods of production and seek uncommon, novel solutions for our consumers	1.6	14.7	2.2	20.7	60.9	4.2446	1.14518
Price are inexpensive because its items are self-manufactured using a state of the art facility	0.5	3.8	4.3	13.0	78.3	4.9293	0.47953
Customers are generally happy with our brand's goods and services.	6.5	3.8	1.1	33.2	55.4	4.2717	1.11231
Compared to other businesses in this sector, our brand is well-known.	2.7	1.1	10.9	17.4	67.9	4.4674	0.92861
In last five years, the company has introduced more new products and services.	0	1.1	2.2	40.2	56.5	3.8478	0.89241
Our company regularly launches innovative products	3.3	3.8	17.4	56.0	19.6	4.5217	0.60015

#### *4.4 Structural Equation Model and Hypothesis Testing on Technological Capability*

This section will look at the first objective and the hypothesis of the study.

- i. To establish the effect of Technological Capability on the Organizational performance in NSE listed firms in Kenya.

$H_{01}$  : Technological Capability has no significant positive on the Organizational performance in NSE listed firms.

#### 4.5 Technological capability and Performance

The structural model presented in Figure 4.1 below shows the relationship between Technological capabilities and Organizational performance.



Figure 1. Theoretical Model: Proposed Structural Model for Technological capability and Performance

The figure 2 below show the measurement models for Technological capability and Performance.

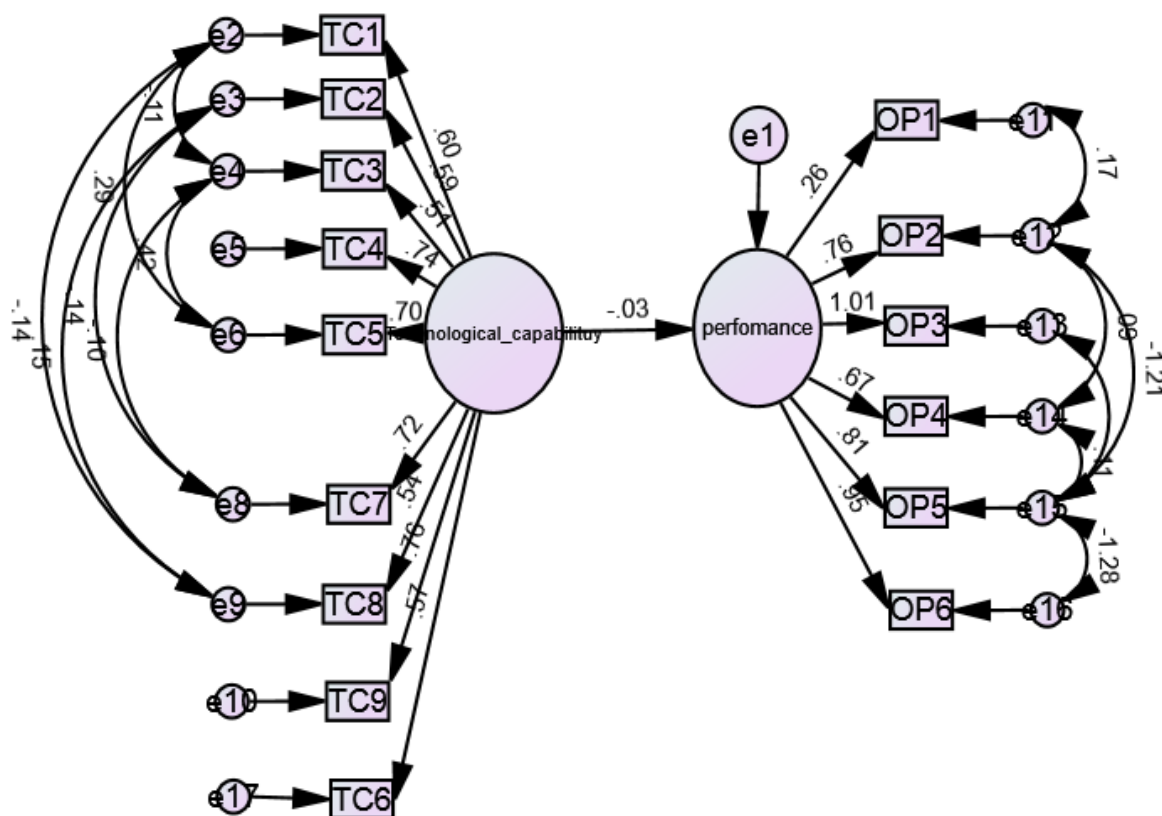


Figure 2. Model: Structural Model for Technological capability and Performance

The table 5 below shows the Standardized Regression Weights for the Technological capability and Performance. From the structural model Figure 2.

Table 5. Standardized Regression Weights for the Technological capability and Performance structural model

Path			Estimate
Perfomance	<---	Technological capability	.507
TC1	<---	Technological capability	.599
TC2	<---	Technological capability	.589
TC4	<---	Technological capability	.737
TC5	<---	Technological capability	.702
TC7	<---	Technological capability	.718
TC8	<---	Technological capability	.543
TC9	<---	Technological capability	.762
OP1	<---	Performance	.256
OP2	<---	Performance	.756
OP3	<---	Performance	1.000
OP4	<---	Performance	.668
OP5	<---	Performance	.811
OP6	<---	Perfomance	.954
TC6	<---	Technological capability	.568

The table 5 below show the Fit indices for the Technological capability and Performance structural model. Hair et al (2010), Kline (2011) and Byrne (2010) suggested that a model should satisfy the requirement of at least one index from each of the index categories, that is, absolute fit, incremental fit and parsimonious fit indices. In respect of the RMSEA, Results indicated a good fit for the model presented including RMSEA of 0.072, CFI of 0.959, N-NFI or TLI of 0.936 and CFI of 0.936. The model achieved fitness.

Table 6. Fit indices for the Technological capability and Performance structural model

Index	Recommended values for a good fit	Recommended values for very good fit	Value	Interpretation
RMSEA	< .08	< .05	0.072	Excellent
NFI	> .8	> .9	0.911	Excellent
N-NFI or TLI	> .8	> .9	0.936	Excellent
CFI	> .8	> .9	0.959	Excellent
$\chi^2/df$	> 1 and < 5	> 1 and < 3	1.950	Excellent

The table 6 below shows the Regression Weights. Technological capability and Performance. There was a significant positive relationship between technology capability and organizational performance ( $b = 0.631$ ,  $p < 0.000$ ), a significant positive relationship between technology capability and strategic orientation ( $b = 0.251$ ,  $p < 0.05$ ).

The positive regression weights all pointed to a positive correlation between the technological capability and Organizational performance. Furthermore, as stated by the column labelled "p," the table demonstrates that all of the regression coefficients for the model are substantially different from zero beyond the 0.01 threshold.

Table 7. Regression Weights Technological capability and Performance

Path			Estimate	S.E.	C.R.	P
Perfomance	<---	Technological capability	.631	.106	5.946	***
TC1	<---	Technological capability	.972	.133	7.322	***
TC2	<---	Technological capability	.729	.107	6.844	***
TC4	<---	Technological capability	.996	.110	9.027	***
TC5	<---	Technological capability	.969	.113	8.582	***
TC7	<---	Technological capability	1.000			
TC8	<---	Technological capability	.662	.099	6.690	***
TC9	<---	Technological capability	.945	.102	9.300	***
OP1	<---	Perfomance	.299	.083	3.599	***
OP2	<---	Perfomance	.775	.051	15.245	***
OP3	<---	Perfomance	1.000			
OP4	<---	Perfomance	.701	.058	11.990	***
OP5	<---	Perfomance	.947	.278	3.408	***
OP6	<---	Perfomance	.948	.026	36.943	***
TC6	<---	Technological capability	.851	.120	7.062	***

\*\*\*<.05, \*\*<.01, \*<.001

This shows that technological capability has an influence on Organizational performance. The result agree with Wu, Liang, & Zhang (2022) study on Technological capabilities, technology management and economic performance: the complementary roles of corporate governance and institutional environment. According to the empirical findings, corporate economic performance was positively correlated with the interaction between TC and TM, and this correlation was reinforced by corporate incentives and monitoring systems. The beneficial moderating effects of corporate governance were more pronounced in an environment with more developed corporate external institutional frameworks.

## 5. Discussion of The Findings

### 5.1 Summary of Findings

The study analyse the descriptive for study variables. The findings showed that a majority of the respondents agreed with statements on technological capability. The results showed that organizations did really on using technology to enhance product and services. One of the most important organizational attributes that can affect how well an organization performs is its technological competence. The data distinctly showed that technological capability and organizational performance had a statistically significant positive association.



The creative and technological components are taken into consideration when evaluating the available possibilities in relation to technological competencies. Many firms see them as a vital tool for enhancing processes and activities. The study agreed with the hypothesis that technological capability did have a significant effect on the Performance of the organizations. The performance of the enterprises increases when they use technology to create innovation compared to the firms that made no innovations. One of the main factors contributing to the increasing significance of technology in business is information technology (IT). For efficient business planning, smart marketing, real-time monitoring, customer support, and long-term growth, IT integration has grown in significance.

### *5.2 Conclusion*

In the objective the effect of technological capabilities on organizational performance it was observed that technological capabilities have a significant effect on the performance. It was evident that the use of technological capabilities led to better products and services, led to brand improvement and satisfied customers. The use of technology led to better service to customer leading to improved customer satisfaction. Through this improvements the organization is able to realize improved performance.

### *5.3 Recommendations*

The study recommends improvement and investment in technology. In recent decades, technology has grown exponentially and has been evolving at a faster rate ever since. Technological advancements are reshaping entire industries and opening up previously unheard-of commercial chances. Investing in technology allows one to take advantage of this dynamism and place themselves in a market that is continuously changing. Innovation in product and service development, process automation, efficiency enhancement, and customer satisfaction are all made possible by technology. Through process automation or simplification, technology helps you get more out of your employees by saving time and lowering stress. When it comes to employee morale another important factor that influences the performance and expansion of businesses this is incredibly beneficial.

### **Competing interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### **Informed consent**

Obtained.

### **Ethics approval**

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

**Provenance and peer review**

Not commissioned; externally double-blind peer reviewed.

**Data availability statement**

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

**Data sharing statement**

No additional data are available.

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