

Digital Literacy and Firm Performance of Small and Medium Enterprises in Nairobi County Kenya

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Abstract— During the Covid-19 pandemic, the actors in Small and Medium Enterprises had confirmed low turnover in sales. This impact gave the SMEs a wake-up call to change for their survival rapidly. The customer tendency is currently more digital with limited interactions and reduced activities as they were forced to adopt during the Covid-19 pandemic. The digitization process has provided both challenges and opportunities for Small & Medium Enterprises (SMEs) to be well-connected to the digital ecosystem. The study's main objective was to examine the contributions of digital literacy on the firm performance of SMEs in Nairobi County. The study was limited to Nairobi Central Business District (CBD) and involved SMEs. The study was focused on Digital Culture and Technical Capacity as components of digital literacy. The study was anchored on the Diffusion of Innovation Theory. The target population was 21,000 SMEs licensed by Nairobi City County, where a sample of 100 SMEs was drawn. The study conducted the both descriptive and inferential analysis. The findings revealed that Digital Literacy significantly influences the Firm Performance of SMEs. Digital Culture and Technical Capacity strongly correlated with Firm performance of SMEs However, they only explained 31.2% of the variation in the Firm Performance of SMEs in Nairobi. The study found a weak significant correlation between Firm Performance Digital Culture and Technical Capacity. Technical capacity, however, had a negative correlation with Firm Performance. The study found a significant positive relationship between the Firm Performance of SMEs with Digital Culture. Technical Capacity had a significant negative relationship with the Firm Performance of SMEs. The study concluded that Digital Literacy significantly influences the Firm Performance of SMEs in Nairobi County. The study recommended embracing Digital Literacy to cultivate a digital culture in SMEs. The study further recommends similar study be done in other geographical areas.

Index Terms—Digital literacy, Digital culture, Technical capacity, Firm performance of SMEs

I. INTRODUCTION

During the Covid-19 pandemic, the actors in Small and Medium Enterprises (SMEs) had confirmed low turnover in sales. This gave the SMEs a wake-up call to change for their survival rapidly. The customer tendency is currently more digital with limited interactions and reduced activities as they were forced to adopt during the Covid-19 pandemic.

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The digitization process has provided both challenges and opportunities for SMEs to be well-connected to the digital ecosystem [1]. In this era of revolution, anything related to digital is a must-do. All life aspects require the use of digital technology in their implementation. The use of digital technology in the other eras was only meant for the big companies, and SMEs rarely used digital technology to its optimal. In running any business, understanding digital technology is crucial for all sorts of companies. Thus, digital literacy is the ability to understand digital-related technology and to know, use and adapt to daily activities [1].

SMEs significantly contribute to the economies of many countries globally as they are essential for growth, social stability and job creation. Though SMEs increase early, they suffer enterprise churn, i.e., fail and go out of business quickly [2]. Though the definition of SMEs varies from countries, the definition and classification are based on annual turnover and the number of employees. In Sub-Saharan Africa, SMEs account for 60% of the enterprises and 41% of economic growth. Since few individuals and nature manage the SMEs, their sizes mean there is a high cost of having relevant information for decision-making. The use of digital technology can significantly enhance the decision-making process. Digital information technology has revolutionized business practices [3].

Paul Gilster introduced the concept of digital literacy [4]. In his argument, Gilster described digital literacy as the ability to effectively and efficiently use information and technology from digital devices for various career, academic, and everyday life activities [5]. There are four main competencies related to digital literacy: internet searching, hypertextual navigation, content evaluation, and knowledge assembly. Internet searching involves the ability to search information on the internet through the use of search engines and also perform other activities related to it. As for hyper textual navigation, this includes the skills for reading and dynamically understanding the hypertext environment [1].

A. Statement of the Problem

The Covid-19 pandemic significantly impacted all economic sectors and their ecosystems. Almost all SME sectors had a decline in sales turnover resulting from the lack of demand for goods and services caused by restrictions on mobility as a way to reduce the spread of COVID-19. The Central Statistics Agency survey in July 2020 revealed that more than 80% of SMEs experienced a sales decline [6]. In

this era, advances have changed how people produce, distribute, consume and reproduce information. The virtual environment, virtual work, and roles have affected the lifestyle of the modern individual [7]. Problems and constraints of small and informal businesses are also due to the difficulty of access to information and productive resources, including capital and technology. This has limited small businesses to thrive.

The COVID-19 pandemic led to the financial sector’s acceleration of digitization of financial services to achieve what would have taken decades to complete in weeks, not months. The use of digital channels helped to minimize health risks and also supported the stay-home protocols. Emergency measures were introduced to the financial institutions with the consultation with CBK to encourage mobile banking, and this increased the number of transactions outside bank branches to 94% from 90%. The financial institutions (56%) utilized digital channels as a critical strategy, especially internet banking and mobile banking, while 33% had to make alternative working arrangements and remote access to ensure business continuity [8].

Borrowing from the financial institutions, it cannot be denied that Kenya has a potential market large enough for a digital business where factors related to the demographic structure reach 50 million inhabitants and the most populated at a young age. Other factors are the penetration of internet users and mobile and smart phone use, which has also reached 60% of the total population [9]. Reflecting these conditions, it is time businesses (SMEs) utilize digital technology as part of the activities of their companies. Very visible from electronic money transaction activity increased significantly [8]. In addition, the research institute Deloitte Access Economics 2015 reveals that when SMEs can utilize digital technology will improve their acceptance reaches 80%. Then, for the national economy, when SMEs go online, is potentially accounted for a growth of 2% in the year 2025 [10]. Through digital, SMEs can market the product more efficiently at a more competitive price.

B. Objectives

The study's general objective was to examine the influence of digital literacy on the firm performance of SMEs in Nairobi County.

Specific Objectives

The specific objectives of this study included;

- i. To determine how Digital Culture influences the firm performance of SMEs in Nairobi County
- ii. To analyze how Technical Capacity influences the firm performance of SMEs in Nairobi County.

II. LITERATURE REVIEW

Technology acceptance theory is a very useful model that helps explain the behaviour of individuals' digital literacy in Kenya. A technology acceptance theory developed from another theory called rational behaviour theory. This is a theory for explaining and predicting the actual behaviour of an individual. According to [11], the use of the system is behavioural, and users are motivated to use the system by

factors such as attitude, usefulness, and ease of use. Rogers's theory of innovation diffusion is another theory that can help explain how innovation is accepted by users [12]. The theory is essential to communicating new technologies through the dissemination process. Ideas go through the steps from understanding to confirmation. From these six stages affecting the five categories of individuals, it's about education with innovation. These include Early Adopters, Early Majorities, Late Majorities and Late Comers. They all have different characteristics and attitudes towards the introduction of innovation [13].

A. Conceptual Framework

A conceptual framework shows the relationship between the dependent and independent variables in a pictorial representation (Kombo & Tromp, 2016) [14]. Figure I below shows the conceptual framework.

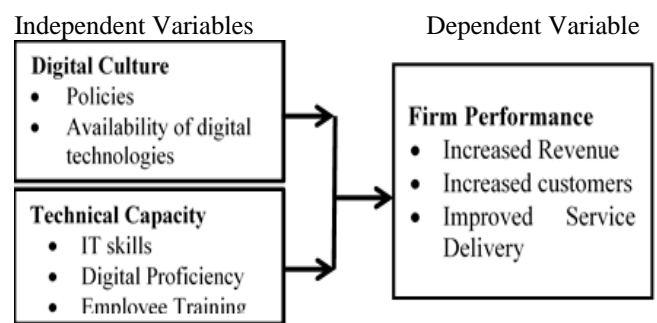


Figure I: Conceptual Framework

i. Digital Culture

Digital culture is the knowledge, beliefs, and practices of people interacting on digital networks that may recreate tangible-world cultures or create new strains of cultural thought and practice native to digital networks [15]. Digital culture is a workplace shaped and influenced by digital tools and technologies. In companies with advanced digital cultures, most employees use digital tech to collaborate, innovate and offer customers access to products, services and support. Companies with sophisticated digital cultures use digital communication tools, build genuine connections with employees that work remotely, have automated repetitive processes, have inclusive online environments, and enable meaningful customer experiences. Digital cultures allow you to grow, innovate quickly and adapt to customer needs. As the global marketplace heads toward digitalization, mature digital cultures help you stay agile and future-proof your business [16].

The European Union (EU) has several initiatives that help strengthen ICT skills development for its citizens. The digital Education plan for the EU was initiated to foster better use of digital technology for leaning and teaching, develop digital competencies for digital transformation, and use data analysis to improve education. The EU has recognized the importance of education in digitalization since education and training are considered very important for growth, job creation, and innovation [17]. The development of technological devices and solutions’ importance in policy-making necessitated the creation of an understanding of how to interact with technology. Digital culture reveals that the internet and technology have significantly shaped how individuals behave, interact, and communicate in online environments

such as social media. Digital culture deals with forecasting the changes in society. Digital technologies have fostered collaborative, participatory and networked forms of culture. The digital environment has changed cultural narratives; for example, the products are never complete, paths are hyperlinked and networked, and the products are the outcome of collaboration. The links between time, space, and the objects that are influenced by digital technologies allow the creation of spatial content, new products, or even a group of products [18].

The impact of ICT on employment is based on two perspectives of substitution and compensation mechanisms. A substitution is a form of destruction of traditional employment since technology is needed and less labour is required in this current job. Compensation propagates employment generation for the long term. With these two perspectives, their interrelationship has been adverse for developing countries. In contrast, developed countries have found a solution by establishing state-funded programmes focusing on ICT skills [19]. The disparities between the development and developing countries go back to access and the ability to use ICT. With the entry of ICT, individuals can accomplish interaction and produce information or even create new products. Individuals cannot participate and benefit from form learning and collaboration without access. Suppose the individual is not able to obtain products and ICT solutions. In that case, they cannot advance their digital literacy, and the gap widens between those who can access and interact with technology and those who are not. Thus, the inability to access and participate in digital literacy constrains an individual's ability to increase economic stability in this modern world [18].

Technological applications transform the way art is perceived and how digital solutions are applied to enact the human sense, thus, expanding visual art in a multimodal sense where digital installation art serves as an example of the digital equivalent of visual art. Another paradigm in digital skills fosters the generation of 2D and 3D art by introducing algorithms coded into computer software. Similar trends are observed in music, where digital audio workstations are used to record, edit and produce audio files, including music, speech, radio, television and podcasts [20]. Social media platforms have encouraged engagement in text-based communication by society. Users interact with representatives of various nations and cultures, which necessitates and benefits digital writing skills and also improves them. Proficiency in digital writing affects how individuals participate in intercultural discourse and create cultural awareness in society [18].

i). Technical Capacity

These are the technical capabilities, including knowledge and the technical skills that an individual requires to accomplish their tasks [21]. According to [22], digital literacy is not just the ability to use new technologies, learn to use a new device or even apply gadgets and technologies to the learning process. On the contrary, digital literacy is the ability of high adaptability that allows people to harness technical skills and navigate the diverse information in the internet network. Technical proficiency in accessing technology now can be changed later in the day. Still, digital literacy prepares a person in the present and the foreseeable future for any form

of technology that will exist afterwards. In Indonesia, conditions limit the entry of SMEs into the digital market due to a lack of capacity to develop digital marketing that is networked and the use of sophisticated technology [23]. Static websites were used at 32.5%, interactive websites at 25%, and 2% had not been involved digitally [24].

IT human resources gives knowledge and abilities to execute e-banking-related IT applications [25]. [26] have pointed out a group of investigations highlighting the help of IT skills, consultants and vendors, and their individual qualities are critical in adopting the IT process. In this case, their expert capacities can have a positive effect on the process of adoption of IT. At the same time, most firms experience the ill effects of lacking IT specialists and hiring external advisors [26]. The technological infrastructure availability and personnel capability have been connected to organizations' ability to absorb new technology [27].

Digital services can become a performance driver if SMEs have the necessary infrastructure and technological expertise. As a result, technologically competent SMEs are more prepared to utilize digital platforms. Digital platforms allow SMEs to increase their potential or add capabilities on the fly, though they have to invest in new infrastructure, hire new staff or train, or purchase new software. However, ultimately, it may save vast sums of money for businesses. As a result, there is little interest in the advantages of digital platforms among SMEs and a loss of expertise and technological competence [28].

Since much of the digital services involves the application of ICT knowledge, personnel who do not have formal ICT training would not be very effective in implementing the system. Hence training and re-skilling managers and other administrators in ICT facilities are paramount for a practical e-banking application [29]. The system's ease of use, flexibility, response time, learning ease and system integration plays an essential role in producing quality information, as perceived by the project team [30]. Involvement refers to the degree of user's relevance and importance in persuasion communication [31].

ii). SME Firm Performance

SME performance is work achieved by an individual adjusted to their role in a given period and is always associated with a measure of value or standard of the organization [32]. Performance may mean a failure or success of the organizational goals that have been applied. Performance is often associated with the growth of the business [1]. Some benefits of using digital technology on SMEs are that it can be a helpful business tool in reducing costs, creating more robust customer networks and links, facilitating market niches, and facilitating innovation. Adopting ICT can also be a powerful tactical and strategic tool for organizational competitiveness and thus increases economic performance [33].

B. Empirical Review

i). Digital Culture and SMEs Performance

A study by [24] to analyze digital literacy on the 'Go Online SMEs Movement program' in Indonesia launched by the government in 2017 found that only 5% of the SMEs could transact online. In a study of digital literacy, digital

culture and digitalization in Europe by [18], in the contrastive analysis of Romania and Norway, found that the two countries are extremes in daily internet users that have established the critical points in cultural transformation. The policies must be reviewed to help evaluate the cultural change in Europe. Norway has a high significant number of internet users as compared to Romania. And this is because Norway has a high income per capita and is top of the Human Development Index (HDI) [34]. Digital technologies have helped Norway to progress in art and music. Norway has recognized the importance of digital literacy in society by introducing digital literacy in education and the adult education system. Digital competence has been introduced at all education levels through policies and the unique skills programme for adults to help them acquire qualifications for basic skills to meet the changes in demand in modern society [35].

ii). Technical Capacity and SMEs Performance

A study by [33] on digital literacy, business uncertainty and the economic performance of small businesses in Sri Lanka found that technological human resource skills positively impacted the financial performance of SMEs in Sri Lanka. However, the study didn't find it to have a significant effect. [35] examined technology acquisition and SMEs performance in Kenya. 101 SMEs were sampled with their sale performance between 2017-2019. Technology acquisition positively influenced sales].

III. RESEARCH METHODOLOGY

The study employed a descriptive research design. This study targeted the owner-managers of SMEs in the CBD across all sectors categorized by the Nairobi city-county licensing department. There are about 21,000 that are licensed by Nairobi County. According to the Nairobi business licensing department, there are approximately 21,000 in the CBD area. Therefore, the target population of this study were 21,000 SMEs in the Nairobi CBD. Slovin's formula was used to determine the sample size [36] where 100 licensed SMEs in Nairobi CBD were sampled.

IV. RESEARCH FINDINGS AND DISCUSSIONS

The study sample size was 100 respondents from licensed SMEs in Nairobi CBD. Thus, the researcher distributed 100 questionnaires to the respondents were 91 were dully filled and returned giving a response rate of 91% which according to [37] is considered excellent for making conclusion and recommendations.

A. Descriptive Statistics

The section attempts to establish the influence of digital literacy on the firm performance of SMEs in Nairobi County. A Likert scale was used where the responses were coded as follows: 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5 = Strongly Disagree. The results were presented in tables and analyzed and discussed. The descriptive statistics for the study variables are as follows:

i). Digital Culture

The study's second objective is to determine how Digital Culture influences firm performance of SMEs in Nairobi County. The descriptive statistics aimed at answering 'to

what extent does Digital Culture influence the Firm performance of SMEs in Nairobi County?'. The average (Mean = 3.68, Stdev = 1.208) indicated the existence of Digital Culture in SMEs in Nairobi County. Table I below shows the results.

Table I: Digital Culture

Digital Culture Indicators	Mean	Stdev
The organization uses digital tech to collaborate	3.64	1.169
All the business processes are automated	3.70	1.346
The organization has a policy in place for the adoption of technology in its activities.	3.99	1.049
The organization prioritizes employees who technology competent	3.86	1.121
There is learning and teaching on digital competencies in the organization	3.20	1.424
Digital education is highly emphasized	3.96	0.999
The organization encourages employees to work virtually.	3.38	1.348
<i>Average Digital Culture</i>	<i>3.68</i>	<i>1.208</i>

The study found that the organizations use digital tech to collaborate (Mean = 3.64, Stdev = 1.169). The business processes were also automated (Mean = 3.70, Stdev = 1.346). Majority of the SMEs also have policies for adoption of technology (Mean = 3.99, Stdev = 1.049). The SMES also prioritize employees who are technology competent (Mean = 3.86, Stdev =1.121). Further, Digital education is highly emphasized (Mean = 3.96, Stdev = 0.999). However, the study didn't find any evidence to suggest whether the SMEs are involved in learning and teaching on digital competencies (Mean = 3.20, Stdev = 1.424). In addition to that, it wasn't clear whether the SMEs encourage their employees to work virtually (Mean = 3.38, Stdev = 1.348).

ii). Technical Capacity

The third objective of the study is to analyze how Technical Capacity influences the firm performance of SMEs in Nairobi County. The descriptive aimed at answering 'in what ways does Technical Capacity influence the Firm Performance of SMEs in Nairobi County?'. The average Technical Capacity (Mean = 3.42, Stdev =1.245) doesn't clearly indicate the existence of Technical Capacity on Digital Literacy in SMEs in Nairobi County. Table II below shows the results.

Table II: Technical Capacity

Technical Capacity Indicators	Mean	Stdev
The organization recruits' individuals specialized in IT	3.34	1.586
Employees have relevant knowledge of digital application	4.57	.909
The organization has the relevant infrastructure to adopt digital literacy	3.99	1.070
The organization invests in digital literacy	3.21	1.140
The organization organizes training to increase the skills of employees in digital technology	2.15	1.421
The organization strives to be part of the early birds whenever a new technology is in the market.	3.20	1.424
The organization has scheduled refresher courses on the use of digital technologies.	3.48	1.168
<i>Average Technical Capacity</i>	<i>3.42</i>	<i>1.245</i>

The study didn't clearly indicate whether the SMEs in Nairobi prioritized recruiting individual in IT (Mean = 3.34, Stdev = 1.586). Further, no evidence was found to indicate whether the SMEs invest in Digital Literacy (Mean = 3.21, Stdev = 1.140). In addition, there was no evidence to suggest whether the SMEs strive to be part of the early birds on new technology trends the market (Mean = 3.20, Stdev = 1.424). The study found SMEs do not organize training to enhance the employees' skills on digital technology (Mean = 2.15, Stdev = 1.421) and there is also no evidence of whether the SMEs organize refresher courses on the use of digital technologies (Mean = 3.48, Stdev = 1.168). However, employees in the SMEs in Nairobi County have the relevant knowledge on Digital application (Mean = 4.57, Stdev = .909). The SMEs in Nairobi County have relevant infrastructure for adopting digital literacy (Mean = 3.99, Stdev = 1.070).

ii). Firm Performance of SMEs

The study's main objective was to examine the influence of digital literacy on the firm performance of SMEs in Nairobi County. The descriptive statistics attempted to establish the status of Firm performance of SMEs as influenced by Digital Literacy. The average Firm Performance of SMEs (Mean = 3.38, Stdev = 1.282) doesn't clearly indicate the status of Firm Performance of SMEs in Nairobi County. Table III below shows the results.

Table III: Firm Performance of SMEs

Firm Performance Indicators	Mean	Stdev
There is a growth in the number of customers in the business	3.52	1.177
Due to digital literacy, the trade name has become popular	3.31	1.547
Digital literacy has enabled an increase in sales volumes	3.60	1.053
The organization has improved in service delivery to its customers	3.29	1.285
The organization has been profitable since the adoption of digital platforms.	2.76	1.432
The annual turnover has increased since the adoption of digital technologies.	3.68	1.124
The customers are more satisfied as they can easily transact with the company at their convenience.	3.47	1.353
<i>Average Firm Performance</i>	<i>3.38</i>	<i>1.282</i>

The study found there was growth in the number of customers in the SMEs business in Nairobi County (Mean = 3.52, Stdev = 1.177). Digital Literacy has also enabled increase in sales volumes of the SMEs in Nairobi County (Mean = 3.60, Stdev = 1.053). Further, the SMEs annual turnover increased since the adoption of digital technologies (Mean = 3.68, Stdev = 1.124). However, the study didn't find clear evidence that the popularity the SMEs trade names has increased due to digital literacy (Mean = 3.31, Stdev = 1.547). Further, there was no indication of improved service delivery to customers of the SMEs in Nairobi County (Mean = 3.29, Stdev = 1.285). In addition, there was clear indication of SMEs profitability as a result of adoption of digital platforms (Mean = 2.76, Stdev = 1.432). Finally, the study could not clearly establish whether the customers are more satisfied as a result of convenience and ease of transacting with the SMEs (Mean = 3.47, Stdev = 1.353).

B. Inferential Analysis

Inferential statistics was used to determine the relationship between the independent variables and the dependent variables (Firm performance of SMEs). They include correlation analysis and multiple regression analysis.

i). Correlation Analysis

Pearson correlation coefficient (r) at 0.05 significance level was used to determine the relationship, the direction of the relationship as well as the magnitude between the dependent variable (Firm Performance of SMEs) and the predictor variables.

Table IV: Correlation Matrix

	Firm Performance	DC	TC
Firm Performance	1	.313**	-.188**
Digital Culture		1	.037
Technical Capacity			1
	N	91	91

Digital Culture (r = .313, p-value = .003) indicates a positive significant weak correlation with Firm Performance of SMEs in Nairobi County. The positive direction of the

correlation implies a direct relationship where an increase in the Digital Culture may lead to an increase in the Firm Performance of SMEs. However, the magnitude of the correlation is weak as $r (.313)$ nears 0. This implies that the variables do not strongly associate with each other. The p-value ($.003 < 0.05$) shows that Digital Culture as a component of Digital Literacy is crucial in influencing the Firm Performance of SMEs. Thus, to some extent Digital Culture in Digital Literacy may influence Firm Performance of SMEs in Nairobi County. [18] found a significant relationship between the Digital Culture and Performance in Norway as the country has reviewed its Digital literacy policies and thus, has more internet users as compared to Romania.

Technical Capacity ($r = -.188$, p-value = $.037$) indicates a negative significant weak correlation with Firm Performance of SMEs in Nairobi County. The negative direction of the correlation implies an inverse relationship where an increase in the Technical Capacity may lead to a decrease in the Firm Performance of SMEs and vice versa. However, the magnitude of the correlation is weak as $r (.188)$ nears 0. This implies that the variables do not strongly associate with each other. The p-value ($.037 < 0.05$) shows that Technical Capacity as a component of Digital Literacy is crucial in influencing the Firm Performance of SMEs. Thus, to some extent Technical Capacity in Digital Literacy may negatively influence Firm Performance of SMEs in Nairobi County. The also concurs with the findings of [33] that though technological human resource skills had an impact on economic performance of small businesses in Sri Lanka, the did not have a significant effect. However, the findings are contrary to [35] who found that technology acquisition positively influence performance SMEs in Kenya.

i). Regression Analysis

The study assumed multiple linear relationships between the study constructs, and is expected to follow a general regression model as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \quad (i)$$

Table V: Regression Coefficients

	Unstandardized Coefficients		Standardize d Coefficient s	t	Sig.
	B	Std. Error			
(Constant)	12.885	5.754		2.239	0.028
Digital Culture	.312	.147	.207	2.123	0.037
Technical Capacity	-.626	.290	-.456	-2.158	0.034

Digital Culture positively influenced the Firm Performance of SMEs in Nairobi County (standardized beta = $.207$, p-value = $.037 < 0.05$). The findings also align with [38] that SMEs have grown due to embracing digital culture, especially using digital financial services with mobile phones spearheading financial transactions. That has also led to an increase in

Digital payment technology, and consumers are familiar with the different payment systems. Technical Capacity negatively influenced the Firm Performance of SMEs in Nairobi County (standardized beta = $-.456$, p-value = $0.034 < 0.05$). The results also indicated a negative relationship and influence between Technical Capacity and Firm Performance. This implies an increase in one unit will lead to a decrease in the other. Technical Capacity highly influenced Firm performance negatively ($-.456$) or -45.6% . Thus, the model could be fitted as below:

$$FPerformance = 12.885 + .312DC - .626TC \dots (ii)$$

V. SUMMARY OF FINDINGS

i). Digital Culture and Firm Performance of SMEs

The study's second objective was to determine how Digital Culture influences the Firm Performance of SMEs in Nairobi County. The study found a significant weak positive correlation between Digital Culture and the Firm Performance of SMEs. Further, a significant positive influence exists between Digital Culture and the Firm Performance of SMEs. The study found that Digital Culture influences Firm Performance by 20.7%. The descriptive statistics indicated the existence of the influence of Digital Culture on the Firm Performance of SMEs. The study found that SMEs use digital tech to collaborate, and business processes are automated. The SMEs also have policies for adopting technology and prioritize technically competent employees. Digital education is highly emphasized though it is unclear whether the SMEs are involved in learning and teaching digital competencies. The study could not establish whether SMEs encourage their employees to work virtually.

ii). Technical Capacity and Firm Performance

The third objective of the study was to analyze how Technical Capacity influences the firm performance of SMEs in Nairobi County. The study found a significant weak negative correlation between Technical Capacity and Firm Performance of SMEs in Nairobi County. Technical Capacity also significantly negatively influenced the firm performance of SMEs, influencing firm Performance of SMEs by -45.6% . However, Technical Capacity had the highest influence on the Firm Performance of SMEs. The descriptive statistics didn't provide significant statistical evidence to suggest the influence of Technical Capacity on the Firm Performance of SMEs in Nairobi County. The study could neither establish whether SMEs in Nairobi prioritized recruiting individuals in IT nor whether the SMEs invested in Digital Literacy. In addition, it wasn't clear whether SMEs strive to be part of the early birds on new technology trends in the market. The SMEs do not organize training to enhance the employees' skills on digital technology and it's not clear whether SMEs organize refresher courses on digital technologies. Employees in the SMEs in Nairobi County have the relevant knowledge of Digital applications, while the SMEs have the relevant infrastructure for adopting digital literacy.

VI. CONCLUSIONS

The study found that Digital literacy significantly influences the Firm performance of SMEs in Nairobi County. Digital Literacy has a strong correlation with the Firm performance of SMEs. However, the components of Digital literacy in this study (Data Management, Digital Culture, Technical Capacity, & Digital Literacy Applications) could only explain 31.2% of the variation in Firm Performance of SMEs in Nairobi County. Digital Culture has a significant positive influence on the Firm Performance of SMEs in Nairobi County. Digital culture is the knowledge, beliefs, and practices of people interacting on digital networks that may recreate tangible-world cultures or create new strains of cultural thought and practice native to digital networks [15]. According to [16], in companies with advanced digital cultures, most employees use digital tech to collaborate, innovate and offer customers access to products, services and support. Companies with sophisticated digital cultures also use digital communication tools, build genuine connections with employees that work remotely, have automated repetitive processes, have inclusive online environments, and enabled meaningful customer experiences. Digital cultures allow you to grow, innovate quickly and adapt to customer needs. As the global marketplace heads toward digitalization, mature digital cultures help you stay agile and future-proof your business.

Technical Capacity significantly negatively influences the Firm Performance of SMEs in Nairobi County. The findings contradict [33] who found that technological human resources skills positively influence SMEs' firm performance in Sri Lanka. [21] describe Technical Capacity as the Capacity of technical capabilities, including knowledge and the technical skills that an individual requires to accomplish their tasks. [22] opine that digital literacy is not just the ability to use new technologies, learn to use a new device or even apply gadgets and technologies to the learning process. On the contrary, digital literacy is the ability of high adaptability that allows people to harness technical skills and navigate the diverse information in the internet network. Thus, [23] postulate that technical proficiency in accessing technology can be changed later in the day. Digital services can become a performance driver if SMEs have the necessary infrastructure and technological expertise. As a result, technologically competent SMEs are more prepared to utilize digital platforms.

ACKNOWLEDGMENT

First and most importantly, I thank God the Almighty for guiding me and giving me the energy and health to overcome all the challenges and obstacles I have encountered while undertaking this assignment. I want to thank the following people, without whom I would not have been able to complete this research and without whom I would not have made it through my master's degree! My supervisor Dr Yusuf W Muchelule, whose insight and knowledge into the subject matter, time, efforts, encouragement and priceless comments steered me throughout this research. And my most enormous thanks to my mum Elizabeth J, Brother Allan K, Sister Ethel Maria K, Nephew Adeel B and Arnold J for all the love and support you have shown me through this research, the culmination of two years of distance learning. A special

thanks to my late father, B.S. Khwatenge, for setting me off on a successful academic path through your sacrifices and hard work, which laid the foundation for my education, and I will always be indebted to you.

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