Tech Simplicity and SME Triumph: Exploring the Perceived Ease of use of Technology on SME Performance in Buloba, Uganda During the Covid-19 Pandemic

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Abstract-*The study investigated the challenges faced by Small and Medium-sized Enterprises (SMEs) in Buloba, Uganda, with a focus on technology adoption and its impact on performance, exacerbated by the COVID-19 pandemic. The study adopted a descriptive quantitative design to investigate the connection. A total of 79 SMEs were included in the study using nonprobability sampling (purposive). The findings suggest a prevalent low level of SME performance, particularly in employee increase, return on investment, and debt payments. Despite a generally low perceived ease of technology use, there's a moderate perception that technology is easy to access and learn. The regression analysis indicates that perceived ease of technology use does not significantly impact SME performance. Recommendations include diversifying revenue streams, investing in targeted technology training, strategic integration of technology into operations, holistic performance assessments, and embracing a culture of continuous adaptation. Collaboration and knowledge sharing within the SME community are also emphasized for overcoming challenges.*

Keywords: Perceived ease of use, technology adoption, SME performance, Uganda

1.0 INTRODUCTION

Small and medium-sized enterprises (SMEs) have long been known as important contributors to job creation and output growth (Criscuolo et al., 2014). However, fears about persistently weak productivity growth have shifted focus to the pervasiveness of low productivity (Aradanaz-Badia et al., 2017). In Buloba, Uganda, SMEs face substantial challenges in embracing innovation, particularly technology adoption, which affects their overall performance. SMEs in Buloba notice that technology is hard to learn though hard to ignore in their business (Niyongere & Osunsan, 2022). The lack of ideas or knowledge about the accessibility of communication technology in an organization makes it difficult to improve productivity (Pakkanen, 2012). To overcome this, practical training can improve employees' knowledge of technology and increase productivity (Niri, 2017). Therefore, the reluctance of SMEs in Buloba to explore and adopt technology solutions may result in missed opportunities for development and growth (Rollin et al., 2022). Geographical factors, negative experiences, and limited knowledge of technology usage in business operations contribute to this reluctance. Warner and Wäger (2019) emphasize the transformative potential of digital technology, enabling companies to quickly transition from traditional physical methods to online models. The COVID-19 pandemic has accelerated this shift, compelling companies to focus on short-term planning. In the current corporate world, technology is one of the major elements that are hard to ignore in any business because it increases an organization's work quality, especially in Small and Medium Enterprises (SMEs). Gyambrah and Offei (2016) argued, that for SME owners/managers to respond promptly and adequately to a turbulent business environment, the capacity of the information and communication technology (ICT) employed by such SMEs to handle the situation is pertinent. Ahmed et al. (2020) observed that the perception and attitude of an individual toward

technology lead to acceptance and adoption of new technology. Cultivating a positive perception of using technology adoption and encouraging a culture of technological innovation is vital. Thus, comprehensive research was needed to fully understand the factors influencing the perceived ease of use of technology among SMEs in Buloba.

2.0 LITERATURE REVIEW

2.1 *Perceived Ease of Use* to ICT Adoption

Technology is the primary key to driving living standards in the current modern world. The primary purpose of technology is to handle or manage data. Therefore, technology is a practical application in the corporate world. Moreover, technology is an essential tool for quality products and the expansion of businesses in the global market. Digital technology is necessary given the current economic crisis of the COVID-19 pandemic, as it can attract more consumers and deliver their products over time without the need for consumers to go to physical stores. Financing large businesses as compared to small businesses has affected small businesses, as they need the most money. The ability of large companies to adapt to ICT as they move from physical technology to online technology, for example, allows customers to make purchases online, saving the retail outlet from losing earnings as a result of not being able to sell items to consumers, which could lead to oversupply. Many owners lack the business and ICT skills needed for SME survival and sustainability, making it more difficult to meet growth requirements (Wendt et al., 2021). Despite these progressions on one side, in several African nations such as Uganda, the rate of adoption and use of technology diminishes as this issue is explored beyond the central region.

Numerous factors contribute to the limited adoption of ICT among SMEs. Major obstacles include a deficiency in ICT knowledge (Robinson, Imran, & Barlow, 2018), along with constraints related to budget allocation for ICT investments (Amusan et al., 2018). Besides, individual capabilities in the use of technology have a significant influence on the adoption process. SMEs' opinions toward cloud computing benefit the operation of a business that motivates their adoption (Widyastuti & Irwansyah, 2018). The perceived ease of use of cloud computing is cost-saving, speeding up decision-making, expanding the market, and improving communication with the client. Largely, the adoption of technology positively benefits a firm in developing its business. As the COVID-19 pandemic effect ravaged globally, disrupting business activities and resulting in severe effects, forcing many businesses both large and small to close temporarily and some permanently, most SME owners are thinking out of the box on how to enhance their performance to overcome the COVID-19 pandemic effect and adjust to the recent normal way of doing business during the pre and post-pandemic era. In a study recently conducted by OECD (2020), SMEs should adopt digitalization and telemarketing to increase their sales, lower the cost of production, and improve their relationships with their business stakeholders like customers, suppliers, and government.

2.2 SME Performance

Small and Medium-sized Enterprises (SMEs): Up until now, there is no generally accepted definition for Small and Medium-sized Enterprises. A consensus on a universally accepted definition of Small and Medium-sized Enterprises is yet to be agreed upon by major stakeholders (Apulu & Latham, 2016). Several countries, organizations, and individual stakeholders hold different definitions of SMEs. For now, several scholars have defined SMEs in terms of their revenue base, the number of employees, assets base, or a combination of any of the factors (Oluwatayo, 2014). This accounts for the diverse definitions which are often dependent upon the individual's viewpoint (Adair & Taylor, 1994). The definition of SME differs from country to country, depending on their level of development. However, the most common factors used to define SMEs are the number of employees, the total investment, and sales turnover (Njagi, Maina & Kariuki, 2017). One well-known institution that has offered definitions and recommendations for Small and Medium-sized Enterprises is the International Finance Corporation (IFC), a World Bank Group member. Based on the number of workers and annual revenue or turnover, the IFC classifies SMEs. Depending on the industry, these definitions may change. Though the IFC's rules are frequently followed, other organizations and nations may have their own definitions that are more appropriate for their particular circumstances. The International Finance Corporation (2021) noted that while the term

SME is defined differently across industries and regions, it generally refers to a company that employs between 10 and 249 people full-time or one that takes out loans of $10,000 to $1,000,000." The fact that there isn't a single, widely recognized definition of SMEs in academia emphasizes how crucial it is to take into account individual standards and backgrounds while studying or debating SMEs in a certain area or sector. Even then, the degree of innovation in products, processes, and management systems, and the ability of SMEs to survive and compete are considered to be critical indicators of their success by most studies. Numerous studies have examined SME performance from various perspectives, including financial performance, innovation, productivity, and competitiveness (Brem, Kreusel, & Neusser, 2008). This study has adopted these indicators here aforementioned.

2.3 Perceived Ease of Use of Technology on SME Performance

The rapid spread of the COVID-19 pandemic posed record challenges to Small and Medium-sized Enterprises (SMEs) worldwide. To navigate this catastrophe effectively, SMEs in Buloba were forced to adopt technology solutions to sustain and enhance their operations. For a company to succeed in something new or unique and develop the company's performance, the firm should emphasize technology adoption (Mustafa &Yaakub, 2018). This implies that the significance of integrating technology solutions within an organization to drive productivity and efficiency is crucial. The easier these technologies are to use, the more readily they are adopted by employees, leading to enhanced company performance.

Moreover, Chairoel et al. (2015) clarified that an organization's performance is beyond implementation and technology usage, though technology can enhance the perfromance. This means that an organization's performance would meet more standards with the use of technology. Dudhe (2013) stated that the evolution and use of ICT have enhanced business processes and transactions, which have also improved information and knowledge management for informed business decision-making. In the past, most managers and development planners saw ICT as a luxury service, and as such it was not given the desired prominence in the national strategies for economic development (Frempong, 2009). The perceived ease of use of technology can streamline customer service operations, resulting in improved customer satisfaction (Abid et al., 2010). On the other hand, Attar and Sweis (2010) noted that when employees find technology solutions easy to use and perceive them as tools that enhance their work, it generally contributes to their job satisfaction. Regarding the adoption of ICT during the COVID-19 pandemic, the ICT infrastructure of informal enterprises was poor (Wen & Kim Hua, 2020). Poor infrastructure hinders the adoption of ICT. Most companies in Buloba found technology difficult to use for mainly business purposes. With the advent of COVID-19, the demand and ease of use of ICT have become imperative for most businesses across the globe. This is so because ICT is now the main driver of change in organizations and allows business transactions even during restrictions and lockdowns of economies. However, Pakkanen (2012) argued and explained that employees do not have an idea or knowledge about the accessibility of communication technology in an organization to improve productivity. To overcome this, Niri (2017) recommended that practical training can improve employees' knowledge of technology and increase productivity. This suggests that SMEs in Buloba do not perceive technology to be a significant part of life.

H_{01}: Perceived ease of use of technology has no significant effect on SME performance

3.0 METHODOLOGY

The study adopted a descriptive quantitative design. A descriptive research design is flexible and provides an opportunity to scrutinize all aspects of a problem and captures all the characteristics of the target population (Nyaga, 2019). Creswell and Creswell (2023), quantitative methods are more objective and help to investigate the relationships between the identified variables. 79 SMEs were considered for the study using nonprobability sampling (purposive). The content validity index was 1.0 for the perceived ease of use of technology and .86 for SME Performance. While the reliabilities testing using the Cronbach alpha coefficient, resulted in a perceived ease of use of technology ($\alpha = .83$) and SME performance ($\alpha = .81$). Quantitative data was collected using questionnaires, which were then analysed using the Statistical Package

for Social Scientists (SPSS) method. Descriptive analysis was done using frequency, means, and standard deviations, which were computed and interpreted using a Likert scale as shown in Table 1.

Table 1: *Likert Scale Interpretation*

Scale	Mean	Response	Interpretation
1	1.00-1.80	Strongly Disagree	Very low
2	1.81-2.60	Disagree	Low
3	2.61-3.40	Not sure	Moderate
4	3.41-4.20	Agree	High
5	4.21-5.00	Strongly Agree	Very high

At an inferential level, a regression analysis was conducted, and the regression analysis was used to determine the effect of Perceived ease of use on SME Performance; $SP = \alpha_0 + b_1 (PEU_i) + \varepsilon_i$. Where, PEU = Perceived ease of use; ε_i = Error Term, SP = SME Performance; α_0 = intercept line; b_1 = Regression line. The hypothesis was tested at a 0.05 level of significance. The decision rule was that $p > 0.05$, then the null hypothesis was rejected, otherwise it was accepted.

4.0 RESULTS

4.1 Demographic Characteristics of Respondents

The data indicated that the majority of respondents were aged between 28-37 and the age group 18 – 27, represented by 31.6% and 26.6% respectively. Male respondents were forty-one representing 51.9% of the total percentage, and female respondents were thirty-eight which constituted 48.1% of the total percentage. The majority with a frequency of twenty-four constituted 30.4%. This was followed by those from vocational institutions representing 25.3%. Those with a secondary education level were nineteen representing 24.1%. Married respondents were forty-six constituting 58.2% of the total percentages, followed by the single respondents who were twenty-three carrying 29.1%; while the least were those widowed with a frequency of 10 out of the total sample population representing only 12.7%. This means that the highest numbers are the married, who are most engaged in SMEs to support their families. Businesses that have been in operation for four to six years were the majority. They were thirty representing 38% followed by those between one and three years that were twenty-three at 29.1%.

4.2 Level of SME Performance

Table 2: *Levels of SME Performance*

Items	Mean	Std. Deviation	Interpretation
Employees increase	2.43	1.195	Low
Return on investment	2.33	1.163	Low
Business Debts Payment	2.30	1.223	Low
Profit Increase	2.05	.918	Low
Sales Increase	2.03	.974	Low
Capital Increase	1.84	.912	Very low
Operational Growth	1.72	.905	Very low
Average	1.80	1.04	Very low

Table 2 shows an analysis of SME performance in Buloba, Uganda, during the COVID-19 pandemic. The mean values reveal mainly low levels across various indicators. Outstanding among these, employee increase, return on investment, and business debt payment exhibit means of 2.43, 2.33, and 2.30, respectively, categorised as low. Profits and sales increase follow closely with means of 2.05 and 2.03, both falling into the low category. Capital increase and operational growth display the lowest means at 1.84 and 1.72, classified as very low. The overall average of 1.80 underscores a generally very low SME performance during the specified period.

4.3 Levels of Perceived Ease of Use of Technology

Table 3: *Levels of Perceived Ease of Use of Technology*

Items	Mean	Std Deviation	Interpretation
Easy-to-use technology	2.48	1.31	Low
Easy to access it	2.92	1.457	Moderate
Easy to learn it.	2.84	1.497	Moderate
Technology comes naturally to me	2.92	1.269	Moderate
Technology is part of life	1.77	.905	Very Low
Average	2.58	1.28	Low

Table 3 assesses the levels of perceived ease of use of technology. The mean values highlight varied perceptions. "Easy to access" and "Easy to learn" fall into the moderate range with means of 2.92 and 2.84, respectively, indicating a generally moderate ease of use. However, "Easy to use technology" presents a lower mean at 2.48, categorised as low. Strikingly, "Technology is part of life" records a notably low mean of 1.77, signifying a very low level of integration. The overall average of 2.58 reinforces the interpretation of a generally low perceived ease of use of technology among SMEs in Buloba, Uganda.

4.4 Regression Analysis

Table 3: *Perceived Ease of Use of Technology and SME Performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	*Std. Error*	*Beta*		
1	(Constant)	1.958	.224		8.735	.000
	Perceived ease of use	.055	.081	.077	.675	.501

R = .077
R Squared = .006
Adjusted R Square = -.007
Sig =.501
F = .456
Durbin-Watson = 1.822

In Table 3, the regression model examines the relationship between the perceived ease of use of Technology and SME performance. The coefficients represent the strength and direction of the relationship. The standardized coefficient (beta) indicates that a one-unit increase in the perceived ease of use of technology is associated with a .077 standard deviation increase in SME performance. The t-value for the perceived ease of use of technology is .675, which is not statistically significant at the conventional level of significance ($p > 0.05$). With a low R-squared of 0.006, the model explains only a small proportion of the variance in SME performance. The insignificant p-value (0.501) further implies that the relationship is not reliably distinguishable from random chance.

The Durbin-Watson statistic is 1.822, which is close to the ideal value of 2 and suggests no significant autocorrelation in the model's residuals. In this case, since the significance level (Sig) of 0.501 is greater than the conventional threshold of 0.05, the F-value is considered not statistically significant. The overall model fit, as indicated by the F-statistic (0.456), is not statistically significant, reinforcing the lack of support for the model's predictive capability. Therefore, the null hypothesis is not rejected, indicating that perceived ease of use of technology has no significant effect on SME performance.

5.0 DISCUSSION AND CONCLUSION

The findings revealed that most of the businesses in Buloba found adopting and using technology for mainly business purposes during COVID-19 difficult. Niri (2017) recommended that practical training can improve employees' knowledge of technology and increase productivity. The findings revealed that many

SMEs in Buloba perceive that technology is hard to learn nevertheless hard to ignore in any business. The findings revealed also that some SMEs in Buloba found it difficult to access the technology during the COVID-19 pandemic. For instance, there is evidence that more than half of the world's population does not have access to the Internet which is a clear example of a lack of digital infrastructure and services (Arinaitwe, 2006). The findings revealed that the internet is a bit expensive in Uganda which made technology hard to access and learn. For instance, in poor countries, network connections are not afforded by most people even if they use ICT (Mishi & Anakpo, 2022; Tshabalala, Anakpo, & Mishi, 2021). The findings revealed that most of the businesses in Buloba do not perceive technology to be a significant part of life contrary to the study by Widyastuti and Irwansyah (2018) explored SMEs' opinions toward cloud computing. Widyastuti and Irwansyah (2018) perceived the benefits of cloud computing as being cost-saving, speeding up decision-making, expanding the market, and improving communication with the client. Therefore, the findings suggest that challenges or barriers to accessing technology delayed SME growth for many SMEs in Buloba, even though these challenges were not insurmountable. Thus, efforts to improve access to technology for SMEs and tools of technology such as social media and e-commerce will improve the performance of SMEs in Buloba. Based on the findings, the perceived ease of use of technology did not have a significant impact on the performance of SMEs in Buloba. This suggests that researchers should look at other factors in driving the growth and success of SMEs in Buloba

The conclusion can be drawn that the low SME performance levels indicate a challenging business environment in Buloba, potentially exacerbated by the COVID-19 pandemic. The perceived ease of technology use, while varied, does not emerge as a significant factor influencing SME performance based on the regression analysis. This suggests that other factors, not captured in the model, may be more influential.

Given the challenges reflected in the low SME performance levels and the superficial perceptions of technology use, the following recommendations are proposed:

1. Given the consistently low-performance indicators, SMEs in Buloba should consider diversifying revenue streams to reduce dependence on a single aspect. Exploring new markets or products may enhance financial stability.
2. While the perceived ease of technology use is generally low, there's a moderate perception that technology is easy to access and learn. SMEs should invest in targeted training programs to improve technological proficiency among employees, potentially leading to more effective use of technology in business operations.
3. Recognizing the very low integration of technology into daily operations, SMEs should strategize on incorporating technology seamlessly. This could involve partnerships with technology providers, adopting user-friendly platforms, and fostering a culture where technology is perceived as an integral part of business processes.
4. Beyond the perceived ease of technology use, SMEs should conduct a comprehensive performance assessment considering external factors such as market trends, regulatory changes, and economic conditions. This holistic approach can reveal additional areas for improvement.
5. The COVID-19 pandemic has brought unprecedented challenges. SMEs should embrace a culture of continuous adaptation, staying agile to respond effectively to changing circumstances.
6. SMEs can benefit from collaborative initiatives and knowledge sharing within the business community. Networking and shared learning experiences can provide valuable insights and strategies for overcoming challenges.

Suggestions for future research include the need to explore specific technologies as opposed to the generic view adopted in this study. This will enable the understanding of the perceived ease of use of the specific technology, subsequent adoption by SMEs, and its implications on performance.

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