

PERCEIVED USEFULNESS (OF TECHNOLOGY) ON SME PERFORMANCE IN BULOBA, UGANDA DURING THE COVID-19 PANDEMIC.

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Abstract: This study employed a descriptive quantitative design to investigate the connection between the perceived usefulness of technology adoption and the performance of small and medium-sized enterprises (SMEs) in Buloba Town, Uganda. The descriptive design aimed to analyze the relationship between identified variables and provide a thorough exploration of the problem, while considering the characteristics of the target population. A total of 79 SMEs were included in the study using nonprobability sampling (purposive). The analysis revealed a weak/small positive, but statistically insignificant relationship between the perceived usefulness of technology and SME performance in Buloba. However, the statistical significance was not established. The low R-squared value and non-significant t-value indicate that other factors may have a more significant impact on explaining SME performance in the setting. To gain a better understanding of the relationship between Perceived usefulness (of technology) and SME performance, further research and analysis with a larger sample size or the inclusion of additional variables may be necessary. The study recommends that the government facilitates access to affordable and reliable internet services for SMEs in Buloba, which would enhance their online presence and ability to connect with customers.

Keywords: Perceived usefulness, technology, SME Performance

1.0 INTRODUCTION

Small and medium-sized enterprises (SMEs) have long been recognized as significant contributors to job creation and output growth (Criscuolo et al., 2014). However, concerns about persistently weak productivity growth have shifted focus to the prevalence of low-productivity SMEs (Aradanaz-Badia et al., 2017). In Buloba, Uganda, SMEs face substantial challenges in embracing innovation, particularly technology adoption, which affects their overall performance. Despite the potential of technology to enhance productivity, streamline operations, and provide a competitive advantage, SMEs in Buloba are hesitant to utilize it (Rollin et al., 2022). The lack of business and ICT skills among owners hinders the survival and sustainability of SMEs, making it difficult to meet growth requirements (Wendt et al., 2021). The limited recognition of technology's usefulness among SMEs in Buloba highlights a lack of skills and knowledge in ICT, with reluctance to seek expert guidance. The failure of SMME startups to embrace the "new normal" due to ICT challenges, insufficient funds, inadequate management skills, and poorly implemented business plans further exacerbate the situation (Bamata et al., 2019). Consequently, 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. Digital technology is crucial in attracting customers, delivering products without physical store visits, and facilitating rapid business model changes. Azam (2015) suggests that SMEs can unlock their potential by embracing digital tools and solutions to enhance overall performance, increase operational efficiency, expand market reach, and make data-driven decisions. Cultivating a positive perception of using technology adoption and encouraging a culture of technological innovation is vital.

Thus, comprehensive research is needed to fully understand the factors influencing the perceived usefulness of technology among SMEs in Buloba

2.0 LITERATURE REVIEW

2.1 Perceived Usefulness to ICT Adoption

Digital technology is essential 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. Larger collaborations, compared to small businesses, have received sufficient funding from the government to address the impact of the COVID-19 pandemic on profitability and sustainability (Meramveliotakis & Manioudis, 2021). Financing large businesses as compared to small businesses has harmed 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, Managers, 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 SMME survival and sustainability, making it more difficult to meet growth requirements (Wendt et al., 2021).

Despite these advances on one hand, on the other hand, in many African countries and Uganda inclusive, the level of adoption seems to declines. Several factors contribute to the low adoption of ICT in SMEs. Issues such as lack of ICT knowledge (Robinson, Imran & Barlow, 2018) and limited budget for an ICT investment (Amusan, et al 2018) have been identified as the main barrier for SME owners to adopt ICT. Moreover, individual capabilities have a huge effect on the adoption as well. The unpleasant past experiences in handling ICT (Ukata, Adejola & Okoye, 2018) can also change SME owners' perception to fully adopt ICT. Thus, the existing issues need to be highlighted first by the SME owners and the government in order to increase ICT. Regarding the adoption of ICT during the COVID-19 pandemic, the ICT infrastructure of informal enterprises was poor. Poor infrastructure hinders the adoption of ICT (Mogwe & Balotlegi, 2020). A recent study established that The start-up of SMMEs was assumed to have failed due to the inability to embrace the "new normal" due to ICT challenges deepened by lack of funds and inherent factors (such as business size), lack of management skills and abilities, human qualities, financial conditions, and poorly implemented business plans (Bamata et al., 2019).

2.2 SME Performance

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). 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). Pascal, Byamukama & Osunsan (2022) pointed out the importance of considering financial and nonfinancial SME Performance measures. This study has adopted these indicators.

2.3 Perceived usefulness of technology on SME Performance

According to Chairuel, Widyarto & Pujani, (2015), SMEs have limited financial and human resources to adopt ICT contrary to large organizations which have enough resources to adopt ICT. A third of larger SME businesses reported that operations were disrupted by logistics, and 21% reported they had supply and or merchandise shortages (Gqoboka, Anakpo, & Mishi, 2022). As a result of all these external variables, nearly seven out of ten small business owners were experiencing Cash flow issues. Due to a delay in customer payments (or clients simply failing to pay their accounts), as well as an unanticipated increase in personal protective equipment (PPE) costs, all these factors contributed to a third of SME firm owners being unable to pay their employees' salaries, forcing a quarter of them to lay off workers (Jafta, K., Anakpo, G., & Syden, M.2022). With severe livelihood implications. For instance, the airline and tourism industries have seen a significant decline in online reservations due to travel restrictions (Foo, Chin, Tan, & Phuah.2021). Consumer demand for online grocery shopping on sites such as Pick and Pay has skyrocketed (Morganosky, & Cude, 2000). As a result of the current economic climate, some

businesses have closed their physical stores and offices, while airlines have reduced their flying schedules. To protect their employees, many businesses, manufacturers, and production lines have had to shut down (Liu, Lee, & Lee, C. (2020). The inability to work from home due to inadequate technological infrastructure has had an influence on the supply chain, resulting in the closure of e-commerce stores.

With the advent of covid-19, the demand and 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. In the words of Dudhe (2013), stated that the evolution and use of ICT have explicated business processes and transactions which has also improved information and knowledge management for informed business decision-making. Unlike in the past when 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). 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. Large companies were able to meet their growth needs because they had the business and management skills needed to make informed and rapid decisions that would support their success.

3.0 METHODOLOGY

The study adopted a descriptive quantitative design. A descriptive research design is flexible and provides an opportunity to examine all aspects of a problem and it captured all the characteristics of the target population (Nyaga, 2019). According to Creswell (2003), quantitative methods are more objective and help to investigate the relationships between the identified variables. This study applied qualitative approaches which involved in-depth probing and application of subjectively interpreted data. 7SMEs were considered for the study using nonprobability sampling (purposive). The content validity index was 1.0 for the Perceived usefulness of technology and .86 for SME Performance. While the reliabilities testing using the Cronbach alpha coefficient, Perceived usefulness of technology ($\alpha = .70$), and SME performance ($\alpha = .80$). To collect quantitative data using questionnaires, which were then analyzed using the Statistical Package for Social Scientists (SPSS) method. Frequency, means and standard deviations were computed and interpreted using:

Sno	Description	Mean Range	Scale	Interpretation
1	Strongly Agree	4.20 – 5.00	5	Very High
2	Agree	3.40 – 4.19	4	High
3	Not Sure	2.60 – 3.39	3	Moderate
4	Disagree	1.80 – 2.59	2	Low
5	Strongly Disagree	1.00 – 1.79	1	Very Low

A regression analysis was conducted to explore the relationship between the perceived usefulness of technology and SME Performance

4.0 RESULTS

4.1 Demographic Characteristics of Respondents

The data indicated that the majority of respondents were aged between 28 to 37 and the age group 18 – 27 represented 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%. Followed by those from Vocational Institutions representing 25.3%. And those with secondary levels 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 / widowers with a frequency of 10 out of the total sample population with only 12.7% means that the highest number of married people are engaged in SMEs to support their family. 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 who were twenty-three at 29.1%.

4.2 Level of SME Performance

Table 1: 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	2.10	1.04	Very low

Tables 1 show that SMEs are normally performing unwell, (Mean=2.10.) The capital increase was the worst-performing area, (Mean=1.84). Employee increase performed to some extent better, (Mean= 2.43), but it was again low.

4.3 Levels of Perceived Usefulness of Technology

Table 2: Levels of Perceived Usefulness of Technology

Items	Mean	Std. Deviation	Interpretation
Technology is useful in business	1.63	.719	Very low
Technology is an added value to the business	1.80	.723	Very low
Technology makes running a business easier	1.96	.911	Low
Technology is useful for all types of business	2.16	1.245	Low
I find the technology useful for my business	1.91	1.146	Low
Average	1.89	.95	Very low

Tables 2 show low levels of Perceived usefulness of technology (Mean =1.89). Technology is useful in business was the worst-performing level, (Mean=1.63). Technology is useful for all types of business performed somehow better, (Mean= 2.16), but it was still low.

4.4 Regression Analysis

Table 3: Perceived Usefulness of Technology and SME Performance

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.955	.246		7.951	.000
	Perceived usefulness	.077	.123	.071	.622	.536

R = .071

R Squared = .005

Adjusted R Square = -.008

Sig = 0.536

F = .387

Durbin-Watson = 1.855

In Table 3, the regression model examines the relationship between the perceived usefulness 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 usefulness of technology is associated with a .071 standard deviation increase in SME performance. The t-value for the perceived usefulness of technology is .622, which is not statistically significant at the conventional level of significance ($p > 0.05$). The coefficient of determination (R-squared) is .005, indicating that the perceived usefulness of technology explains 0.5% of the variance in SME performance. The adjusted R-squared is -.008, which takes into account the number of predictors in the model that show a poor fit.

The Durbin-Watson statistic is 1.855, 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 0.536 is greater than the conventional threshold of 0.05, we would consider the F-value not statistically significant. Therefore, we fail to reject the null hypothesis, indicating that there is not enough evidence to conclude that there is a significant relationship between the perceived usefulness of technology and SME performance.

5.0 DISCUSSION AND CONCLUSION

The findings revealed that SMEs in Buloba were not aware of the benefits of technology and faced many challenges in adopting it effectively. It was revealed that there was a lack of understanding about the competencies of technology, limited access to technological resources, or other factors that caught up the adoption of technology in their operations. Bamata et al., (2019) noted that businesses fail mostly due to the inability to embrace new change or to lack management skills, financial conditions, and lack of management abilities. The findings revealed also that businesses in Buloba had negative experiences with technology or little knowledge of to use technology effectively in their business operations due to its location. The findings revealed also that some businesses in Buloba perceive that technology is only beneficial and necessary for certain types of business, they refer to the medium and big businesses. According to Ahmed et al. (2020), the perception and attitude of an individual toward technology lead to acceptance and adoption of new technology. Findings revealed that very few SMEs in Buloba consider technology useful. This shows that there is a lack of skills and knowledge about ICT and they don't want to seek knowledge from the experts. Many SMEs owners lack the business and ICT skills needed for SMME survival and sustainability, making it more difficult to meet growth requirements (Wendt et al., 2021).

Therefore, the findings suggest that the lack of awareness and understanding of the benefits of technology delayed SME growth in Buloba. This could be particularly problematic for SMEs that lack the necessary capital to invest in expensive technological resources or the knowledge and skills to effectively implement them. Also, limited access to technological resources in the area could further delay SME performance. Furthermore, the findings suggest that SME owners in Buloba lack the business and ICT skills needed for survival and sustainability, which could have negative impacts on their ability to achieve growth and profitability. This might contribute to difficulty in paying off debts and achieving a positive return on investment (Wendt et al., 2021). Based on the findings, the perceived usefulness of technology did not have a significant impact on the performance of SMEs in Buloba. This suggests that the researcher should look at other factors in driving growth and success in SMEs in Buloba.

Policymakers and business leaders in Buloba should consider investing in technologies that are easy for SMEs to use by providing training or education on how to use technology effectively or developing user-friendly technology solutions. The study concludes that the use of ICT is useful in SMEs because, in the current corporate world, technology is one of the major elements that are hard to ignore in any business.

REFERENCES

1. Amusan, L. M., Oloniju, L. I., Akomolafe, M., Makinde, A., Peter, N. J., Farayola, H., & Osawaru, F. A. I. T. H. (2018). Adopting information and communication technology in the construction industry. *International Journal of Mechanical Engineering and Technology (IJMET)*, 9(1), 739-746.
2. Aradanaz-Badia, A., Awano, G., & Wales, P. (2017). Understanding firms in the bottom 10% of the labor productivity distribution in Great Britain: "the laggards", 2003 to 2015. Office for National Statistics.
3. Azam, M. S. (2015). Diffusion of ICT and SME performance. In *E-services adoption: Processes by firms in developing nations*. Emerald Group Publishing Limited.
4. Bamata, H., Govender, K. K., & Fields, Z. (2019). An empirical study of optimal access to external finance by small and medium enterprise start-ups. *Problems and Perspectives in Management*, 17(3), 242.
5. Brem, A., Kreusel, N., & Neusser, C. (2008). Performance measurement in SMEs: literature review and results from a German case study. *International Journal of Globalisation and Small Business*, 2(4), 411-427.
6. Chairael, L., Widyarto, S., & Pujani, V. (2015). ICT adoption in affecting organizational performance among Indonesian SMEs. *The International Technology Management Review*, 5(2), 82-93.
7. Creswell, J. W. (2003). A framework for design. *Research design: Qualitative, quantitative, and mixed methods approach*, 2003, 9-11.
8. Criscuolo, C., Gal, P. N., & Menon, C. (2014). The dynamics of employment growth: new evidence from 18 countries.
9. Foo, L. P., Chin, M. Y., Tan, K. L., & Phuah, K. T. (2021). The impact of COVID-19 on the tourism industry in Malaysia. *Current Issues in Tourism*, 24(19), 2735-2739.
10. Frempong, G. (2009). Mobile telephone opportunities: the case of micro and small enterprises in Ghana. *info*, 11(2), 79-94.
11. Gqoboka, H., Anakpo, G., & Mishi, S. (2022). Challenges Facing ICT Use during COVID-19 Pandemic: The Case of Small, Medium and Micro Enterprises in South Africa. *American Journal of Industrial and Business Management*, 12(9), 1395-1401.
12. Hlungwane, F., Anakpo, G., & Mishi, S. (2022). The Impact of COVID-19 and Related Policy Measures on the Livelihood Strategies in Rural South Africa. *South African Journal of Economic and Management Sciences*.
13. Jafta, K., Anakpo, G., & Syden, M. (2022). Income and poverty implications of Covid-19 pandemic and coping strategies: the case of South Africa. *Africagrowth Agenda*, 19(3), 4-7.
14. Jafta, K., Anakpo, G., & Syden, M. (2022). Income and poverty implications of Covid-19 pandemic and coping strategies: the case of South Africa. *Africagrowth Agenda*, 19(3), 4-7.
15. Liu, Y., Lee, J. M., & Lee, C. (2020). The challenges and opportunities of a global health crisis: the management and business implications of COVID-19 from an Asian perspective. *Asian Business & Management*, 19, 277-297.
16. Meramveliotakis, G., & Manioudis, M. (2021). Sustainable development, COVID-19 and small business in Greece: small is not beautiful. *Administrative Sciences*, 11(3), 90.
17. Mogwe, A. W., & Balotlegi, P. (2020). Barriers to information communication technology (ICT) adoption in Botswana's primary education. *Journal of Education and Learning (EduLearn)*, 14(2), 217-226.
18. Morganosky, M. A., & Cude, B. J. (2000). Consumer response to online grocery shopping. *International Journal of Retail & Distribution Management*, 28(1), 17-26.
19. Njagi, I. K., Maina, K. E., & Kariuki, S. N. (2017). Equity financing and financial performance of small and medium enterprises in Embu Town, Kenya.
20. Nyaga, C. (2019). A water infrastructure audit of Kitui County. *Sustainable WASH Systems Learning Partnership Research Report*, Kitui County Government with the support of USAID, UNICEF, and the University of Oxford.
21. Pascal, N. A., Byamukama, G., & Osunsan, O. K. (2022). Book Keeping on SME Performance in Munuki Payam-Juba Central Equatoria State, South Sudan. *Cross Current Int J Econ Manag Media Stud*, 4(5), 95-104.
22. Robinson, M., Imran, A., & Barlow, M. (2018, April). Impact of Macro-level Regulations on Micro-level (Individual) Use of ICT: A case of mobile services in India. In *Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance* (pp. 175-182).

23. Rollin, J. M., Ladur, A., Byamukama, G., & Osunsan, O. K. (2022). Owner-Manager Perceived Relationship Between ICT Adoption and SME Performance in Busiro West Wakiso District, Uganda.
24. Ukata, P. F., Adejola, B. C., & Okoye, A. I. (2018). Business Education Students ICT Learning Experiences and Programme Satisfaction in Rivers State Universities. *World Journal of Innovation and Modern Technology*, 2, 9-34.
25. Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long-range planning*, 52(3), 326-349.
26. Wen, K. Y. K., & Kim Hua, T. (2020). ESL Teachers' Intention in Adopting Online Educational Technologies during COVID-19 Pandemic. *Journal of Education and E-learning Research*, 7(4), 387-394.
27. Wendt, C., Adam, M., Benlian, A., & Kraus, S. (2021). Let's connect to keep the distance: How SMEs leverage information and communication technologies to address the COVID-19 crisis. *Information Systems Frontiers*, 1-19.