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Original Research	

FACTORS AFFECTING THE PARTICIPATION OF TANZANIAN COLLEGE YOUTHS IN PURCHASING ONLINE PRODUCTS

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Abstract

Recently, Tanzania has experienced an exponential growth of internet users, with youths forming the largest number of users who access internet service. Despite statistics showing that youths form the largest number of internet users in the country, the number of youths who purchase online products is still limited. This study aimed to analyse factors affecting youth online purchasing in Tanzania and suggest strategies to improve its adoption. The subjects of the study were 43 students from the Arusha Technical College in Tanzania who were studying an E-commerce and Internet Technology course. The data were collected using questionnaires and participatory workshop. The collected data were analysed using both quantitative and qualitative techniques. The findings reveal ten factors that influence youth engagement in online purchases: quality risks, delayed deliveries, e-commerce skill gaps, fraud fears, extra charges, internet costs, payment issues, network reliability, local availability, and absence of bargaining habits. To enhance the participation of youths in online shopping, the study recommends several strategies which, if implemented, will help improve e-commerce adoption in Tanzania. The major contribution of this study is to reveal the status of online purchase adoption among Tanzanian youths and document strategies for accelerating its adoption in the country.

Keywords: E-commerce adoption in Tanzania, online buying, online shopping experience, strategies for e-commerce adoption, youth online buying experience.

1.0 INTRODUCTION

Since the evolution of the Internet and the World Wide Web in the early 1990s, the world has undergone a revolution in the way people conduct business globally. The introduction of the Internet has transformed how people engage in business, communicate, and provide customer

services. The process of selling and buying of products and services over the internet, commonly known as e-commerce, is now common worldwide.

Like other developing countries, Tanzania has recently experienced rapid digital transformation that has transformed the way people conduct businesses. The exponential growth of e-commerce in Tanzania presents an opportunity to all people, including youths, to participate in e-commerce and get access to several products within and beyond their countries across continents (Mlelwa et al., 2015; Nantembelele & Gopal, 2018). According to Tanzania Communications Regulatory Authority (TCRA)'s report of June 2023, the Tanzanian population with access to the 3G mobile broadband network was 77% as of June 2023, while access to 4G network or higher was 50% of the population. The annual average growth rate for internet subscriptions is 17% per year. The number of internet subscribers increased from 23 million in 2018 to 34 million in June 2023. If the country is indeed expected to shift into a fully-fledged digital economy, such substantial increases should be accompanied by a rise in the number of youths engaging in online transactions.

According to the Tanzania Bureau of Statistics (United Republic of Tanzania, 2022), the current population of Tanzania is 61.74 million, and more than half of the population being youths aged below 35. The estimated number of youths who are doing business in what is known as the informal sector is 5 million, among which 800,000 are the university graduates who are produced every year and currently, because of the lack of formal employment, heavily engage in small-scale business in big cities.

Currently, youths form the largest number of internet users in Tanzania. While the number of internet users is alarming, studies, so far, reveal that people who purchase online products per year do not exceed 6% (Global System for Mobile Communications Association, 2023). According to literature, one among the major factors that limit the Tanzania citizens including youths to participate in online purchasing is the lack of digital skills among users (Global System for Mobile Communications Association, 2023; Nyarusanda & Mollel, 2020). According to Global System for Mobile Communications Association Report (2023), consumers' level of education including digital literacy is an important factor influencing the likelihood of adopting e-commerce. To date, there is limited research that has investigated the factors that affect the participation of Tanzanian youths, specifically those with digital computing skills, in buying online products.



2.0 OBJECTIVE OF THE STUDY

The central objective of this study was to examine the factors affecting youth participation in purchasing online products. More specifically, the study aimed to address the following key questions: How do youths with digital literacy engage in purchasing products through e-commerce platforms? What are the youths' perspectives on the challenges associated with buying products via e-commerce platforms? What strategies should be implemented to enhance youth participation in buying online products?

3.0 LITERATURE REVIEW

This section reviews the literature related to online purchase and e-commerce. It covers both theoretical and empirical literature.

3.1 Theoretical Review on E-commerce

E-commerce is the term encompassing buying and selling products and services on the web (Chaffey, 2009). It is the contemporary method of conducting business beyond national borders. However, internal business procedures that organisations employ to support their hiring, selling, planning, and other activities are also included in electronic commerce, or e-commerce, along with a host of other activities.

The term e-commerce should not be confused with e-business. Though such terms are sometimes used interchangeably, the term e-business refers to "the transformation of key business processes through the use of internet technologies." (Schneider, 2015). Some of the advantages of e-commerce includes boosting income and profitability, enhancing customer relationships, saving time, maintaining current inventory, and increasing accuracy (Deans et al., 2005; Kang & Park, 2014). Other benefits that e-commerce technologies bring in business include cost reductions, increased productivity, increased efficiency, better customer service, and the ability for sales staff to obtain vital information about customers and items while away from their workstations (Alwahaishi et al., 2009; Murphy, 1998; Ngussa & Frumence Valentine Mruma, 2020).

There, exists various types of e-commerce platforms. Business-to-business (B2B), consumer toconsumer (C2C), business-to-consumers (B2C), and government-to-citizen (G2C) are the most common types. Studies show that these e-commerce types contribute to a stronger economy worldwide. Currently, the leading countries in e-commerce include the USA, China, and Korea. African countries have also started to utilise the potentials of e-commerce. Countries like Nigeria,

the South African Republic, and Egypt are major pioneers of e-commerce in Africa. Since it was introduced in the late 1990s, e-commerce has moved from very little buying or selling online (where it was just used to subsume traditional business), to where now e-commerce is done by using sophisticated software tools that provide intelligent search tools for finding information online (Hendricks & Mwapwele, 2023; Schneider, 2015).

The status of E-commerce Adoption in Tanzania

According to the United Nations Conference on Trade and Development (UNCTAD), Geographically, Tanzania has an excellent position to get integrated into the global digital economy. Being situated along the coast, bordering eight nations, six of which are landlocked, Tanzania is ideally positioned to grow as a hub for regional trade via e-e-commerce (United Nations Conference on Trade and Development, 2020). E-commerce may strengthen Tanzania's economy by generating new value chains, employment possibilities, and income diversification.

Recent study by Nyarusanda and Mollel (2020) has revealed that currently the status of online buying and selling in Tanzania is enlightening. This follows the fact that some users are now aware of the benefits of using the Internet. However, the number is still low due to lack of awareness of e-commerce, illiteracy about the use of e-commerce platforms, inconveniences with patents, and low customers' trust in sellers. Regardless of these challenges, it has been noted that for the past three years, the number of online shoppers has increased each year, which means that more awareness of online shopping has increased due to the introduction of smart phones and electronics (Nyarusanda & Mollel, 2020).

Globally, Tanzania is one of the countries that have adopted the use of e-commerce. The UN Conference on Trade and Development (UNCTAD) publishes the B2C e-Commerce World Index each year, which is a helpful indicator of e-commerce activity around the world and has ranked Tanzania at 110 out of the 152 countries (UNCTAD, 2020). From an African perspective, online shopping has expanded in recent years. More consumers in Africa are resolving to buy products and services online. However, Tanzania is still lagging behind other countries such as South Africa, Nigeria, and Kenya. Currently, the country has improved postal services and implemented postcodes which are the potential strategies expected to boost e-commerce in the country.

Despite its relatively small size, Tanzania's e-commerce market is expected to grow and generate US\$ 257.9 million in revenue by 2023. From 2023 to 2027, the industry is projected to develop at



a compound annual growth rate (CAGR) of 6.1%, reaching a market volume of US\$326.9 million. Tanzania's e-commerce market, which has contributed to the worldwide e-commerce boom, was expected to grow by 2.8% in 2023 (Ecommercedb, 2023). So far, most of the youths in the country own smartphones since they are sold at reasonable prices. There is also internet connectivity that is easily accessible via mobile phones. Rural electrification is taking place in the country and has currently reached 90 percent, enough to foster e-commerce adoption (Muya et al., 2023).

The internet subscribers in the country reached 34 million as of June 2023, with youths forming the largest proportion of users (Tanzania Communications Regulatory Authority, 2023). Given that many internet users in Tanzania are currently youths, there is a need to investigate the factors influencing the online shopping experience among young individuals in Tanzania. This inquiry will specifically focus on students with formal digital skills from higher learning institutions who participate in online shopping as well as the strategies that must be employed to enhance ecommerce adoption in Tanzania.

In the context of this study, the term online shopping or buying via e-commerce platform refers to the process of ordering and buying goods and products via e-commerce websites. It should be distinguished from social e-commerce, which refers to the process of buying and selling products or services via social media platforms. The term "online product" on the other hand refers to any goods or services that are available for purchase or consumption via the internet through a digital platform or online store. These products can range from physical items like clothing or electronics to digital products such as software, e-books, or online courses. This study focused on online physical products/goods as distinguished from online services.

3.2 Empirical Review on the Factors Influencing Online Purchasing

Several factors influence youth involvement in online purchasing. According to Rana (2019), customers' opinions about online buying are influenced by various aspects including price, quality, convenience, and exposure to a greater selection. Other additional characteristics, according to Rana (2019) include clarity, experience, reliability, accessibility, appeal, and high exposure to multiple channels of products both online and offline.

Oreku, Otieno, and Dahoud (2013) examined online consumers' purchasing power among Tanzanians regarding online buying and selling as well as the chances for Internet access. Their study's results revealed that Tanzanians can engage in e-commerce, yet, the country must create a

more regulated and trustworthy image both within and internationally.

Sahu (2020) studied factors that influence youth's purchasing decisions and buying behaviour towards online shopping in the Raipur region in India. The results of this study showed that youth education level and low-cost to access the online services were determining elements in their purchase selections and online shopping behaviour. According to the report, most young people shop online because of the vast selection of goods and the convenience of doing so (such as time savings, the option to pay online or with cash on delivery, home delivery, and available discounts). Sahu's (2020) study also demonstrated that youths with higher levels of education are becoming more conscious of the factors that influence online shopping.

In another study by Rumanyika and Mashenene (2014) who investigated the factors that impede ecommerce adoption among small and medium enterprises in Tanzania, the findings indicate that among the causes of (...?), were inadequate government policy, insufficient e-commerce security measures, limited telecommunication infrastructure, shortage of IT education and training, and exorbitant taxes levied on e-commerce services. Moreover, it was revealed that online purchasing is hindered by several other reasons including inadequate e-readiness and socio-cultural views, higher internet cost, shortage of IT expertise, rapid technology advancements, and unclear communication standards.

Vaicondam and Subramaniam (2020) studied the factors influencing young consumers' adoption of e-commerce in Malaysian hypermarkets. The results showed that youth e-commerce adoption is significantly positively impacted by service quality, time saving, convenience, and ease of use. Nyarusanda and Mollel (2020) examined the effects of online shopping platforms on consumer purchasing behavior at KIKUU Online Shopping Mall, and their study's results showed that cost, convenience, time, and privacy all have an impact on what customers choose to buy on the KIKUU online platform.

A recent study by Global System for Mobile Communications Association (2023) reveals that regardless of the progress in the information and communication technology sector, e-commerce in Tanzania is still moving at low speed. The study reveals that in 2021, only 5.9% of the adult population managed to conduct e-commerce transactions. Some of the factors addressed in the study that affect e-commerce adoption includes lack of an enabling legislation framework, limited network coverage in rural and semi-urban locations due to inadequate internet infrastructure, poor



logistics capacity, and high taxes on electronic transactions.

In this study, literature pertaining to the factors influencing youth online purchasing behaviour has been presented and discussed. While the reviewed literature acknowledges several factors that hinder youth online buying adoption, there is a notable gap in research specific to the Tanzanian context, particularly focusing on students in higher learning institutions with digital computing skills. Limited studies have investigated the nuanced challenges faced by youths with digital computing skills in their quest for buying products online, leaving a gap in understanding the factors that affect their adoption in online shopping. The current research sought to address this gap by exploring the factors affecting youth's involvement in online shopping in Tanzania; and identifying strategies that should be used to address this challenge, thereby contributing valuable insights to both academic discourse and policy formulation.

4.0 METHODOLOGY

This section describes how the study was designed and conducted. It covers the research approach, study location, sampling procedure, sample size, data collection methods, data analysis, validity and reliability of the study, and ethical considerations.

4.1 Study Location

The study took place in January 2022 at Arusha Technical College, which is located in Arusha City. The criteria for selecting ATC included the availability of students enrolled in e-commerce courses, their willingness to participate in the study, and the College's consent to conduct the research.

4.2 Research Approach

A research approach describes how assumptions, ideas, and techniques are adopted in a study (Punch, 2013). Based on the nature of the study, problem scope, and the research questions, this study employed a mixed-method research approach whereby both qualitative and quantitative research methods were used when collecting, processing, and analysing data. In this study, participatory workshop was used to collect the qualitative data while survey questionnaires were used to collect the quantitative data. To triangulate and validate the research findings, documentary review methods were used to collect more information related to the study whereby papers, reports, and books were used.

4.3 Sampling Procedure and Sample Size

The sampling frame for this study consisted of undergraduate students at ATC with digital computing skills, and who were majoring in the information and commutation technology field. The study participants comprised of 43 third-year undergraduate students from Arusha Technical College enrolled in the E-commerce and Internet Technology course during the academic year 2022/2023.

A purposeful sampling technique was used to obtain the participants of this study. The criteria for selecting respondents included being enrolled in the Internet and E-commerce course, willingness to participate voluntarily in the study, interest in the research topic, and an experience of using the internet for over three years. The students attended the lesson for a period of three weeks. They were then required to order and buy products abroad online using popular e-commerce platforms that serve in Tanzania. After ordering and receiving the goods via e-commerce platforms, participants were asked to fill out questionnaires and attend a participatory workshop. During these sessions, they provided their views on the challenges, opportunities, and strategies to improve eshopping adoption in Tanzania.

4.4 Data Collection Methods

In this study, participatory workshop and questionnaires were used as data collection methods. The participatory workshop was used for gathering qualitative data while questionnaires were employed for collecting quantitative data. The subsequent subsections elaborate on how these data collection methods were used in this study.

Questionnaires

A questionnaire was used as the primary data collection method. The questionnaire consisted of both closed and open-ended questions with a total of 14 questions. The first five questions collected demographic data like age, country, and name of the respondents. The remaining questions explored free views of the respondents regarding the experience of buying online and strategies that must be taken to improve youth online buying experience. The data collected from both closed and open-ended questions were analysed by using quantitative and qualitative methods, respectively.



Participatory Workshop

The aim of the workshop was to collect participants' opinions on the factors affecting youth involvement in online shopping. A total of 15 students from Arusha Technical College (ATC) who were studying the E-commerce and Internet Technology course volunteered to participate in the workshop. The data collection instruments used during the workshops were checklists and diaries. The discussion was chaired by the researcher, and one student volunteered to write down all the necessary information that was presented during the dialogue. The workshop had three main phases: the introductory phase, the presentation and discussion phase, and the conclusion and recommendation phase. During the introductory phase, the researcher introduced the purpose and aim of the workshop. The workshop was guided by structured discussions with leading questions.

During the presentation and discussion phase, the researcher introduced the history of information and communication technology and e-commerce in Tanzania, the status of e-commerce in Tanzania, and trends in online shopping in Tanzania. The researcher asked the participants to give their opinions about the factors affecting youth participation in buying online products regardless of having digital computing skills. The results obtained were discussed by all participants. All factors identified by the participants were discussed and analysed. During the conclusion and recommendation phase, members gave their views on the strategies that should be taken to improve youth participation in online shopping and e-commerce in Tanzania. All the factors that affect online shopping among youths and strategies to improve the youth online shopping experience were summarized and documented.

4.5 Data Analysis

The objective data from the questionnaires were analysed using descriptive statistics. The subjective responses from the questionnaire were analysed using content analysis. Descriptive results were represented by using tables and charts. The data collected from the participatory dialogue were analysed using the content analysis method. The collected data recorded, coded and organised into different themes. Each theme was later reviewed and presented based on the subject examined. The identified themes were then quantified and ranked based on their frequency of occurrence. The content analysis was chosen as methodology to analyse the data collected during the workshop because the content analysis employs approaches that enable specific interpretation of both textual and auditory material through an organised process of carefully classifying and discovering patterns (Guthrie et al., 2004; Keown, 2014; Woodrum, 1984).

4.6 Validity and Reliability

According to Hoadley (2004), the validity of a study is the likelihood that the interpretation of the results accurately reflects the truth of the theory and the hypotheses under examination. Reliability on the other hand is concerned with whether the experiment or questionnaire would generate the same results if repeatedly administered to the same students Oates (2022).

To ensure the validity of this study, the researchers employed multiple data collection methods and engaged diverse sources of information all of which facilitated the use of reliable data and yielded favourable results. Similarly, to ensure that the results obtained from participatory workshop were reliable, the participation was entirely voluntary and proportionate representation was also considered. To ensure the reliability of the research instruments, all of them were cross-checked and piloted before being used in the actual study. To measure the internal consistency of the questionnaire items which were used in the study, a Cronbach's Alpha Reliability Test was used. Cronbach's Coefficient Alpha is the most common estimate of internal consistency which is the degree to which each item on a scale correlates with the other. According to Blanche et al. (2006), the reliability coefficient or an alpha value of 0.75 or higher is considered to indicate reliable internal consistency. In this study, the reliability coefficient of 0.813 and above was obtained, thus implying that the set of questionnaire items were closely related as a group.

4.7 Ethical Considerations

When conducting research, it is advisable to uphold ethical practices throughout the process. Therefore, prior to commencing the study, the researcher obtained permission from the College. To maintain privacy and adhere to ethical standards, the researcher initially informed the respondents about the purpose and significance of the research, assured them of privacy protection, and emphasized that the collected information would be strictly used for research purposes, with participants' names disguised. Additionally, student participation in the workshop was voluntary. Using respondents who volunteer for interviews ensures greater willingness to participate, leading to more genuine responses and increased cooperation in the research process. Furthermore, the study incorporated citations and references to uphold ethical writing practices.

4.8 Quality Control

To ensure quality of the study, the study maintained the reliability and validity of the data collection instruments. The pilot test was conducted to validate the reliability and validity of the questionnaire



and workshop checklist. To guarantee the questionnaire's quality, a preliminary sample of 15 questionnaires was distributed to respondents before the full distribution. A pilot test was employed to identify and address potential issues that respondents could encounter in answering the questions, and the shortcomings identified during the pilot study were subsequently addressed and adjusted.

After doing pilot and addressing all weaknesses observed, a total of 43 questionnaires were distributed physically to the participants and all questionnaires were fully filled. All questionnaires were correctly filled and collected from the respondents. To ensure reliability and validity of both findings and measures, triangulation from multiple data sources and pilot tests were performed (Oh & Reeves, 2010). The triangulation of data collection methods was achieved using questionnaires, participatory workshop, and documentary review of secondary data sources such as books, journal papers, reflections/journals, and online materials from online internet resources pertinent to the topic under study. The documentary method was used throughout in this study since it is an invaluable part of most schemes of triangulation, and thus, helps to provide a confluence of evidence that breeds credibility (Bowen, 2009).

5.0 RESULTS AND DISCUSSIONS

This section presents the study findings and discussion based on the research questions outlined in this study. Section 5.1 presents the general information about the respondents. Section 5.2 presents the key research findings, and section 5.3 present the discussion of the study results.

5.1 General Information about the Respondents

Demographics of the Respondents

Both male and female students participated in the study. As shown in Figure 1, 86.0% of the participants were male, while 14.0% were female.

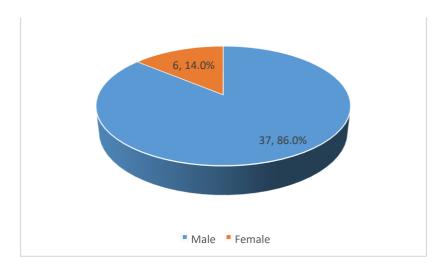


Figure 1: Demographics of the respondents

Source: Research Data (2023)

Age of the Respondents

As shown in Figure 2, 46.5% of the participants were aged 18–25, 40.0% were aged between 26 and 35, and 41.9% were aged between 26 and 35 years. 11.6% of the participants were aged between 36 and 45 years. None were over 45 years old. Since in Tanzania, persons aged between 15 and 35 years are regarded as youths, all participants in this study were therefore youths.

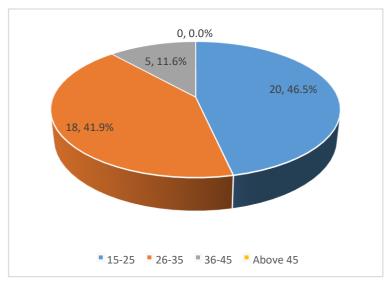


Figure 2: Age of the respondents

Source: Research Data (2023)

Ownership of computer equipment

Participants were asked to describe their ownership of computer equipment. As shown in Table 1, all 43 participants owned smartphones and laptop computers; 86% owned both smartphones and featured phones, and 11.63% also owned tablet computers. This implies that all participants had the necessary computing devices for buying products online.



Table 1: Ownership of computer equipment

Key words and theme (suggestions)	Number	Percentage
Participants who owned smartphones and laptop computers	43	100%
Participants who owned both smartphones and featured	37	43.5%
phones		
Participants who owned tablet computers	5	5.9%

Source: Research data (2023)

Sites that were Visited by the Respondents

There are several online platforms that provide online buying services in Tanzania. During the survey, participants were requested to provide a list of the websites from which they purchased the products. As shown in Figure 3, results were as follows: 20 (46.5%) used Aliexpress.com, 15 (34.9%) used kikuu.co.tz, 3 (7.0%) used Amazon.com, and 5 (11.1%) used jumia.co.tz. This implies that most of the participants used the AliExpress and Kikuu platforms. These results suggest that although different e-commerce sites exist in Tanzania, these two were the most preferred by the youths. Figure 3 indicates sites that were visited by the respondents.

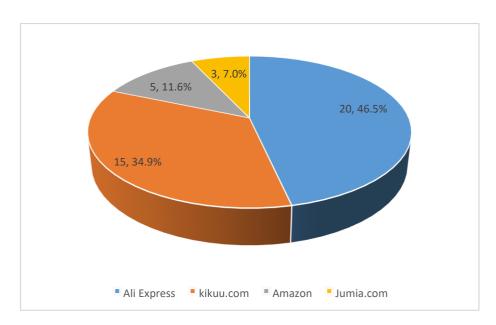


Figure 3: Site that were visited by the respondents

Source: Author's Field data (2023)

5.2 Key Research Findings

Youth Experience in Buying Online Products

During the study, youths with basic digital literacy were asked to share their experiences of purchasing products online. As illustrated in Figure 4, 83.7% of the participants had never bought any products online before, while 16.3% had prior experience with online shopping.

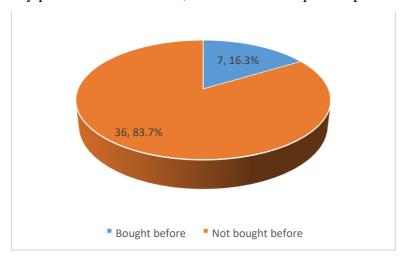


Figure 4: Participants' previous online buying experience

Source: Research data (2023)

Factors that Affect Buying Online Products

During the survey, participants who had never purchased online products despite having digital computing skill were asked to share their views on the challenges associated with buying products via e-commerce platforms. The participants' responses are depicted in Figure 5.



Figure 5: Respondents Views on the Factors affecting buying online products. Source: Research data (2023)

Figure 5 illustrates that the participants considered fear of quality risks, delays in receiving ordered goods, lack of e-commerce skills, and concern about online fraud as the leading barriers towards



purchasing online products. 94.6% of participants stated that they had not purchased online products due to fears of receiving low-quality items, as well as concerns about the unclear and tedious process of returning products to the seller for replacement. Another significant barrier was the extended delay in receiving the ordered products, with workshop participants reporting delivery times ranging from 3 days to two months. The lack of e-commerce skills also emerged as a notable hindrance to online buying, as three-quarters of participants who had never bought products online expressed difficulties in understanding the entire online purchase process.

Additionally, concerns were raised about the fear of online fraud and the perceived higher cost of purchasing products online compared to traditional commerce. Fear of not receiving the online products in time is another barrier. As shown in Figure 5, 83.8% of the participants believed that buying products online may expose them to the risk of losing their money in their bank accounts. They also doubted if the items bought online could really be received. Also, they had a fear of losing their financial privacy. For this reason, they had a negative reception towards doing online shopping.

Additional charges involved in buying online products and higher internet costs were also other barriers that were found to impede online buying behaviour among youths. During the study, about two-thirds of the participants reported additional charges as a barrier to buying online. Such costs involve the cost of searching for the product, the cost of previewing the product, communication costs, and additional charges incurred while making payments. Participants reported that unlike traditional purchasing, the price displayed on the website for a product does not include taxes, shipping, or handling charges. Upon making payments, these additional charges are added, resulting in an increased final price compared to what was initially seen on the website. They further stated that buying online requires the buyer to buy a debit or credit card, which also demands a card processing fee. All these add up to more charges. Other challenges that were reported by the participants were the cost for opening or activating mobile money accounts such as cost to activate the Airtel Master Card. Due to such extra charges, some participants were not interested in online buying as compared to traditional buying experience.

Furthermore, some participants held the views that online purchase is a complex and tedious process as it involves a lot of steps. Though not in large proportions, nearly one-third of the participants stated that they rarely bought products online because of poor internet connectivity. It was reported that lack of reliable broadband internet connectivity with high speed is another barrier

to the adoption of online shopping among youths. During the study discussion, some of the participants reported to have been experiencing jitter in previewing products when searching for them online. This implies that the quality of the network coverage is still unreliable in some areas as it keeps varying from time to time and location to location. Yet, in other places particularly in rural areas, internet services are not available at all.

The results from Figure 5 further show that 35.1% of the participants who did not buy online products stated that they had not purchased products online before because the products they wanted were available in traditional local markets. The results also show that nearly one quarter of participants who did not buy products online reported lack of bargaining culture and other factors such as lack of physical touch when buying products online as the barriers towards buying online. Such participants still rely on traditional purchases because they believe that buying physically is more secure and reliable than online purchases. This is because a customer can physically see the products and judge their quality based on the given price.

5.3 Strategies to Enhance Youth Online Buying Experience in Tanzania

The participants were asked to provide their perspectives on the strategies that should be implemented to enhance youth online buying experience in Tanzania. The responses from the participants are summarized in Table 2.

Table 2: Strategies to enhance youth online buying experience in Tanzania

Key words and theme (suggestions)	Frequency	Percentage
	(N=43)	
Establishing verified local agents	39	90.7%
Establishing an e-commerce telecentre	38	88.4%
Formulating customer protection and return policies	37	86.0%
Providing e-commerce skill training programmes	35	81.4%
Establishing a cashless payment method	34	79.1%
Reducing Internet subscription costs	31	72.1%
Promoting local e-commerce sites	29	67.4%
Integrating postcode address system and e-commerce	29	67.4%
sites		
Promoting the use of Swahili language in e-commerce	20	46.5%



sites

Table 2 highlights that online fraud, product quality risks, and delays in receiving the products are factors hampering e-commerce adoption among youths in Tanzania.

To address such barriers, one strategy that was recommended by the participants is the establishment of local e-commerce agents on each street like mobile money and bank agents. Such agents will receive the ordered products and deliver them to the customers. If the products ordered is of poor quality, the agent will return the product to the supplier so that another quality product can be delivered again to the customer. The existence of local agents will help ensure trust among the customers, provide customer support, and serve as the picking points for goods and products ordered online via both internal and external e-commerce platforms. Next to this strategy is the establishment of e-commerce telecentres in both urban and rural areas. The participants were of the opinions that such centres would provide people access to necessary computing devices and support for shopping online. They will also provide support for people with disabilities. They may also serve as the picking point for products that have been ordered, thus improve operational efficiency.

The findings in this study have revealed that currently there is a limited number of local ecommerce sites that serve customers in Tanzania. To improve the online shopping experience for youths and adults, the participants recommended that more promotion campaigns be provided to advertise the existing local e-commerce sites. This can be achieved using radio, TV, social networks, websites, etc.

To enhance e-commerce adoption among the users, it was recommended to increase the provision of e-commerce training programmes to the community via radio, television, the internet, and social networks. It was recommended that such trainings should be conducted in such a way that they address a wide segment of users based on sex, age, education levels, and ethnic groups. They should also be provided both in English and Swahili so that all citizens who speak only one of the two languages may benefit from such trainings. It was also noted that to improve the shopping experience, there is a need for the government to formulate an e-commerce customer protection policy. Based on this policy, each online seller must be registered. Such a seller must also be linked to a financial institution that will retain the money before delivery of the good to the customer so that in case the product does not meet the quality requirement, the paid money will not be issued to the seller until the seller resends the product with the required quality.

Other strategies recommended includes promoting the use of Swahili at local sites, adopting cashless payment, linking the postcode address system and the e-commerce platforms, reducing Internet subscription cost, and improving network quality. Specifically, the participants argued that there is a need to promote the use of Swahili at local sites as most of the youths are more comfortable with their native language, Swahili, when purchasing or selling items than their second language, English. By offering a familiar linguistic interface, e-commerce platforms become more accessible, reducing the language barrier, and increasing the confidence of potential users who may lack proficiency in a global language like English.

Likewise, to hasten the adoption of e-shopping, the government needs to enforce the use of cashless payments following the implementation of an interoperable system that allows the transfer of payments between different participating digital financial service providers, both banks and non-banks, in real time. The use of cashless payments was insisted by the participants. The participants were of the views that the widespread adoption of cashless payments in areas where cash is the primary method can significantly augment the participation of youths in online buying and selling. By having accessible and secure cashless options, it overcomes the limitations of cash, enabling the easier setup of online businesses and fostering trust in online transactions.

To reduce delay and online fraud, e-commerce sites operating in Tanzania (both local and international) were advised to link their sites with the postcode address systems. To enhance ecommerce adoption, the government was also advised to reduce taxes on online transactions to allow more participants to buy online. To cut down on running costs, internet service providers were also advised to use solar energy sources instead of diesel generators to power their mobile network towers in areas where electricity from the national grid is not available.

Although network coverage has reached over 90% in town centres and about 65% in rural areas following government efforts to subsidise the building of more network infrastructure in remote areas, network quality still varies and is poor at different times and locations (Global System for Mobile Communications Association, 2023). The participants, therefore, recommended that internet service providers should make additional efforts to improve network quality including constructing redundant network links at both regional and district levels. Such efforts should go along with prompting the use of local languages in e-commerce sites. Such practice facilitates a deeper understanding of the product details, terms, and instructions, making it easier for youths to showcase their products and services effectively and enabling buyers to make informed decisions.



Moreover, local language support fosters a sense of trust and cultural connection, enhances user engagement and loyalty within the community.

5.4 Discussion

Online shopping is currently burgeoning, experiencing a rapid increase in recent years. This growth was particularly pronounced during 2019-2022 amidst the global COVID-19 pandemic. One factor driving youth's participation in online shopping is their familiarity with computer and internet usage (Nyarusanda & Mollel, 2020; Oreku et al., 2013). This study investigated the factors affecting youth online purchasing experience among Tanzanian youths with digital computing skills. The study findings reveal that the adoption of online purchasing among Tanzania youths is still low regardless of having computer kills. Results show that only 16.3% of the respondents who participated in this study had prior experience with online shopping despite owning computing devices and possessing adequate digital computing skills.

Several factors that have been impeding online shopping among youth were identified. The four leading factors identified in this study are fear of quality risks, delay in getting the products in time, mistrust among suppliers, and lack of e-commerce skills. Next to these factors were the concern of high internet charges and additional processing charges, such as payment processing charges, tax, shipping, or handling charges. Some of these charges are not directly shown when searching for the products, but they tend to raise the final product price. This situation makes people hesitate to buy products online.

Other barriers to online shopping that were reported by the respondents during the study are network quality challenges, the higher cost of internet and online transactions, and some cultural issues, such as relying heavily on bargaining for price discounts. These factors have been also been reported in other studies (Global System for Mobile Communications Association, 2023; Kabanda, 2011; Oreku et al., 2013). For example, the study by Global System for Mobile Communications Association (2023) revealed that only about 6% of Tanzania's adult population was found to have made an online purchase during 2021. Such low uptake is caused, among other things, by low digital exclusion and high levels of distrust stemming from inadequate consumer protection laws and enforcement.

According to earlier research, consumers prefer online shopping over traditional retail because of its many advantages such as its affordability, ease of use, and vast selection of options because it

allows users to visit several online retailers and compare prices (Rana, 2019; Sahu, 2020). However, in this study nearly 85% of the participants reported that they had never ordered online products through e-commerce sites because they encountered difficulties during the process, indicating that a significant number of them did not benefit from these advantages. The study found that a primary cause of this avoidance is lack of suitable e-buying skills, since online shopping calls for a higher level of skill than traditional means of making purchases. For example, in this study, some of the participants who complained to receive products with poor quality were those who failed to adequately define their preferences or provided inaccurate specifications when ordering the items on the e-commerce sites.

Given the abundance of new brands and styles available in apparel and footwear, this issue is especially noticeable for participants who ordered products such as shoes and clothes (Rana, 2019). These results are in line with past research, such as that of Mng'ong'ose and Victor (2018) who found that many Tanzanians still prefer traditional marketplaces and in-person buying due to the lack of e-commerce expertise and mistrust. The findings of this study have revealed that possessing formal digital computing skills from college or school does not necessarily imply readiness to purchase products online. There is a clear need to emphasize and raise awareness to effectively transform individuals who have acquired formal digital and ecommerce skills into utilizing and benefiting from online product purchases.

To enhance youth adoption of online shopping and e-commerce in general, several strategies have been proposed. Such strategies include establishing a verified local agent for ordering items online, formulating an e-commerce customer protection and return policy, and establishing e-commerce telecentres. These three issues are crucial for the protection of customers' rights and improving access to internet services. According to Hendricks and Mwapwele (2023), these challenges continue to dominate because issues pertaining to ecommerce adoption, business environment, and customer trust are still dealt in isolation. To address such challenge, Hendricks and Mwapwele (2023) proposed the application of managerial based strategies to be used to propel e-commerce adoption in the country. In line with the above observation, and in order to bridge the skill gap between customers and services providers, this study proposes the establishment of e-commerce telecentres in both rural and urban areas to help bringing products and services nearby the customers, thus create a broader market while boosting the digital economy in the region.

The findings from the study further show that the use of cashless payments is important for the



successful adoption of e-commerce. This strategy should also go along with improving network quality, reducing internet subscription costs, and enhancing e-commerce skill training programmes. Enhancing e-commerce skills is critical since, unlike paying a utility bill which is specific and direct, buying products via ecommerce platforms requires several skills such as opening email and user accounts and the ability to search, order, and pay. All these activities require basic digital literacy as well as specific online buying skills which most of the youths do not have (Global System for Mobile Communications Association, 2023).

To further enhance the online shopping experience, there is also a need to use Swahili on e-commerce sites, integrate postcode address systems and e-commerce sites so as to improve the delivery of ordered goods. The findings from the study concur with those of the previous studies that consumer protection is still challenging despite having laws such as the Cyber Security Act and the Postal Communication Act (Mwasomola, 2020: Global System for Mobile Communications Association, 2023). Based on such previous studies, acts of fraud, misrepresentation, lack of redress, and others have dominated online business, addressing the need of enforcing the existing laws mechanisms for handling complaints and disputes, and strong consumer rights advocacy bodies. Similar recommendations have been put forth by other researchers. For example, in advocating for the adoption of e-commerce in Tanzania, Mng'ong'ose & Victor (2018) proposed such measures as government support and the formulation of ICT policies, enhancement of ICT infrastructure, and the assurance of system security (Hendricks & Mwapwele, 2023).

6.0 CONCLUSION AND AREAS FOR FURTHER STUDIES

This study assessed the factors affecting youth participation in buying online products in Tanzania, taking Arusha Technical College as the study case. The results reveal that the adoption of online purchase among youth is still low, hindered by several factor such as quality risks, delay, mistrust, inadequate customer protection policies, and insufficient online purchase skill among the youth. This study represents the first attempt to engage students with higher digital skills in providing their views on the challenges of the online purchase experience in Tanzania. Additionally, it offers a reference and roadmap for policymakers and other e-commerce stakeholders regarding strategies for establishing a vibrant e-commerce ecosystem in the country. The feedback from this research is expected to provide more insights for the researchers to determine the most appropriate strategies for improving e-commerce adoption in the country.

An important lesson that can be learned in this study is that having formal digital computing skills from college/school doesn't guarantee readiness for online purchases. Greater emphasis and awareness are needed to ensure individuals with digital skills benefit from online purchasing.

This study was done over a short period of time with a limited sample size. Futures studies should consider doing similar longitudinal studies using large sample sizes.

REFERENCES

- Alwahaishi, S., Nehari-Talet, A., & Snasel, V. (2009). Electronic commerce growth in developing countries: Barriers and challenges. 2009 First International Conference on Networked Digital Technologies, 225–232.
- Blanche, M. T., Blanche, M. J. T., Durrheim, K., & Painter, D. (2006). *Research in practice:*Applied methods for the social sciences. Juta and Company Ltd.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Chaffey, D. (2009). *E-Business and Management E-Commerce* (Fourth Edi). Pearson Education Limited.
- Deans, P. C., Press, I. R. M., & Rossi, M. (2005). E-Commerce and Technologies. IRM Press.
- Ecommercedb. (2023). *eCommerce market in Tanzania*. ECommerce Market in Tanzania. https://ecommercedb.com/markets/tz/all
- Global System for Mobile Communications Association Report. (2023). *Tanzania 's Digitalisation Journey: Opportunities for value creation*.
- Guthrie, J., Petty, R., Yongvanich, K., & Ricceri, F. (2004). Using content analysis as a research method to inquire into intellectual capital reporting. *Journal of Intellectual Capital*, 5(2), 282–293.
- Hendricks, S., & Mwapwele, S. D. (2023). A systematic literature review on the factors influencing e-commerce adoption in developing countries. *Data and Information Management*, 100045.
- Hoadley, C. M. (2004). Methodological alignment in design-based research. Educational



Psychologist, 39(4), 203-212.

- Kabanda, S. (2011). "E-Commerce Institutionalization is not for us": SMEs perception of ECommerce in Tanzania. *African Journal of Information Systems*, *3*(1), 1–16.
- Kang, J., & Park, S. (2014). Factors influencing electronic commerce adoption in developing countries: The case of Tanzania. *South African Journal of Business Management*, 45(2), 83–96.
- Keown, V. (2014). Using NVivo TM for Content Analysis in LIS Research.
- Mlelwa, K. L., Chachage, B., & Zaipuna, Y. O. (2015). *E-Commerce trend in developing countries:*A case study of Tanzania.
- Mng'ong'ose, W., & Victor, M. (2018). Factors Affecting E-Commerce Adoption in Tanzania. World Wide Journal of Multidisciplinary Research and Development, 4(1), 29–40.
- Murphy, J. (1998). Electronic Commerce—A Government Perspective. *Economic Papers: A Journal of Applied Economics and Policy*, 17(4), 113–122.
- Muya, F., Mlay, G. B., Edward, L., & Ntyangiri, C. D. (2023). *Mobile Phone Internet Usage and Students' Achievements in T anzania Higher Learning Institutions*. 4(3), 63–74.
- Nantembelele, F. A., & Gopal, S. (2018). Assessing the challenges to e-commerce adoption in Tanzania. *Global Business and Organizational Excellence*, *37*(3), 43–50.
- Ngussa, M. G., & Frumence Valentine Mruma, A. N. (2020). Analysis of affects of e-commerce on Supply chain management to facilitate the entrepreneurship in Tanzania. *IOSR J. Bus. Manage.(IOSR-JBM)*, 22(4), 1–13.
- Nyarusanda, C., & Mollel, T. (2020). The Effects of Online Shopping Platforms on Consumer Buying Behavior in Tanzania: A Case of Kikuu Online Shopping Mall. 2, 19–34.
- Oates, B. J., Griffiths, M., & McLean, R. (2022). Researching information systems and computing. Sage.
- Oh, E., & Reeves, T. C. (2010). The implications of the differences between design research and instructional systems design for educational technology researchers and practitioners. *Educational Media International*, 47(4), 263–275.

- Oreku, G. S., Otieno, F., & Dahoud, A. Al. (2013). AKU in East Africa A Viewpoint of Tanzania
- E-Commerce and Implementation Barriers A Viewpoint of Tanzania E-Commerce and. 10, 263–281. https://doi.org/10.2298/CSIS110725002O
- Page, M. (2004). An Introduction to Content Analysis.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches.* sage.
- Rana, J. (2019). A Review On Changing Online Buying Behavior Trends Due To Youth Oriented Demographics Of India. 6(5), 512–514.
- Roth, J. J. (2012). Using NVivo to Organize Literature Reviews Goals of Literature Reviews Choosing an Organizational Method Literature Reviews as Content Analysis. 1–13.
- Rumanyika, J. D., & Mashenene, R. G. (2014). *Impediments Of E-Commerce Adoption Among Small And Medium Enterprises In Tanzania : A Review : 32*(1), 45–55.
- Sahu, M. (2020). Factors Affecting Online Buying Behaviour in Youth with Special Reference to
- Chhattisgarh. Journal of Xi'an University of Architecture & Technology Issn No, 1006, 7930.
- Schneider, G. P. (2015). *Electronic Commerce* (Eleventh E). Cengage Learning.
- Tanzania Communications Regulatory Authority. (2023). *Tanzania Communications Regulatory AuthorY*. Quarterly Report *June*, 2023.
 - Ulimboka L. Mwasomola, D. (2020). Examining the Consumer Protection And
- Comprehensiveness In E- Commerce In Tanzania. Business Education Journal, IV(I), 1-

12.

- United Nations Conference on Trade and Development. (2020). The Unctad B2c E-Commerce Index 2020 Spotlight on Latin America and the Caribbean UNCTAD Technical Notes on ICT for Development.
- United Republic of Tanzania. (2022). Administrative Units Population Distribution Report.



Vaicondam, Y., & Subramaniam, M. (2020). *Hypermarkets "E-commerce Adoption among Youth in Puchong , Malaysia. 24*(01), 766–773. https://doi.org/10.37200/IJPR/V24I1/PR200180

Woodrum, E. (1984). "Mainstreaming" content analysis in social science: Methodological advantages, obstacles, and solutions. *Social Science Research*, *13*(1), 1–19.