Factors affecting e-commerce adoption in Zanzibar: From buyers' perspectives

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Abstract

This paper examines factors affecting e-commerce adoption among users in Zanzibar. Due to differences in culture, technological infrastructure, education, and awareness, the factors affecting e-commerce adoption in developing nations differ from those in industrialized ones. Zanzibar as an archipelago off the coast of East Africa in the Indian Ocean has adopted e-commerce. As the number of internet users grows dramatically in Zanzibar, the significance of e-commerce has risen which increases the need to conceptualize and understand e-commerce consumer adoption behaviors. Through literature review, the first model was developed with six variables. The Trust, Risk, and Technology Acceptance Model (Tri TAM) theory was used as a basis. A total of thirteen hypotheses were formulated in this paper. Additionally, data collected from 264 respondents was analyzed by IBM SPSS Statistic and Analysis of Moment Structures (AMOS). Furthermore, SEM revealed two significant factors out of three that directly affect the dependent variable. These are Trust (TR) and Technology Perception (TP). Although Policy Perception (PP) was insignificant with a negative value, but has an indirect effect by positively affecting Trust (TR). It discovered that, Trust (TR) mediates relationship of both Technology Perception (TP) and Policy Perception (PP) on Intention to use e-commerce (ITU). Education and Experience were then tested to verify their moderating effect between independent and dependent variables by the Hayer process macro. Both (Education and Experience) moderate effects of Technology Perception (TP) and Trust (TR) on Intention to use e-commerce (ITU). Hence, ten (10) hypotheses were accepted while three (3) hypotheses were rejected. The valid model was then produced. Lastly, the paper provides recommendations to the revolutionary government of Zanzibar together with the Government of Tanzania on the ways to improve e-commerce usage for the development of the country.

Keywords: E-commerce, e-commerce adoption, Zanzibar e-commerce, Tri-TAM

1. INTRODUCTION

1.1 Background

Among the topics that heat nowadays that directly interacts with people's daily life activities is the way they purchase (Basarir-Ozel, 2017). A barter system was the ancient way of commerce. We are now in a new era where e-commerce replaces previous options. E-commerce consists of all commercial activities carried out electronically (Kenneth Longo Mlelwa, 2015), (Ranjan, 2023). This technology allows individuals to purchase and sell things online (Ali Salamai, 2022).

E-commerce adoption from buyers' perspectives refers to the consumers' acceptance and usage of electronic commerce as an essential aspect of their commercial activities. It involves the willingness to use e-commerce and trust in the security and reliability of e-commerce platforms (Koe, 2022). E-commerce adoption varies from one place to another. Developed countries tend to have higher rates of e-commerce adoption than developing countries (W.H. Makame, 2014). This study focused on e-commerce adoption at a micro level on the consumer side.

Zanzibar is an insular semi-autonomous province that united with Tanganyika (Tanzania mainland) in 1964 to form the United Republic of Tanzania. The size of Zanzibar is about 2,461 km². It consists of two large islands called Unguja and Pemba and several small islands. It has a population of 1,889,773 as of the 21 August 2022 Census (Omar, 2015).

1.2 Statement of the current problem

A large number of people living in Zanzibar depend on business by exporting and importing goods from other countries in the World, especially from P. R. China. Additionally, Tourism is the top income generator for these islands (Omar, 2015). During these activities people normally use e-commerce, therefore the need of

investigating factors for its adoption is highly needed.

As Zanzibar searches for development, there is also a need to study his e-commerce in-depth due to few studies on it. The absence of real and current data on e-commerce consumers that can be used to evaluate e-commerce adoption in Zanzibar is a great challenge. Government, customers, business owners, and even those who need to invest in the field of e-commerce in Zanzibar are looking at this research.

The current situation and lifestyle in Zanzibar highlight the requirement for extensive empirical research to understand how local consumers are currently adopting e-commerce. The factors influencing the adoption of e-commerce must therefore be urgently identified and investigated so that suitable solutions can be put forward to facilitate easy adoption of e-commerce in Zanzibar.

1.3 Rationale for topic selection

It has been noticeable from the Literature review that, no empirical study conducted earlier focused on examining factors for e-commerce adoption on individual consumers in Zanzibar. The majority of studies presented have a direct bearing on the micro or macro levels of certain nations. As a result, they cannot be applied to the Zanzibar setting in general, especially because different societies have different elements that influence customers' intentions to make online purchases. Additionally, the current situation and lifestyle in Zanzibar highlight the requirement for extensive empirical research to understand how local consumers are currently adopting e-commerce.

1.4 Research Objectives and Questions
1.4.1 General objective:
To examine major factors affecting e-commerce adoption in Zanzibar. From buyers' perspectives
1.4.2 Specific objectives:
➢ To test the distribution of e-commerce usage along the gender and age groups of buyers in Zanzibar.
➢ To analyze major factors that affect the intention to adopt e-commerce among users in Zanzibar.
➢ To develop an e-commerce adoption model by investigating the factors affecting the adoption of e-commerce among users in Zanzibar.
1.4.3 Research questions:
o Is there any difference in e-commerce usage between the gender and age groups of buyers in Zanzibar?
o What are the major factors that affect the intention to adopt e-commerce among users in Zanzibar?
o Which is the best conceptual model that can be used to investigate factors for e-commerce adoption in Zanzibar?

2 LITERATURE REVIEW
2.1 Conceptual review

E-commerce is the outcome of advancements in economics, science and technology. E-commerce development has transformed consumer behavior and company practices. The adoption of online commerce is a source of competitive advantage (Yang, 2022). In a continuously changing internet environment, it is important to keep an eye on trends in online purchasing as well as changes in consumers' shopping habits and preferences. As a result, online businesses can adjust their selection of goods and services to suit the preferences and needs of customers (Tongora, 2022).

According to the users, e-commerce has been divided into four main categories. These are Business-to-Consumer (B2C), Business-to-Business (B2B), Consumer-to-Business (C2B), and Consumer-to-Consumer (C2C) (Anas, 2021). This study focused on B2C e-commerce which is pre-dominant in Zanzibar due to the availability of customers. B2C e-commerce occurs when businesses sell their goods or services to customers, and customers buy directly from the business.

E-commerce is very important for the development of any country. It is a significant part of the research nowadays (Nguyen M. Thu, 2024). E-commerce has been crucial to the socio-economic and cultural advancement of societies all over the world (Fedorko, 2022). The benefits of e-commerce differ according to the type of e-commerce and whether the beneficiary is a customer, a business, a society, or a government. Its significance can be seen in several important contexts including time saving, price and product comparison, convenience, flexibility and scalability.

During the COVID-19 lockdown and quarantine, many people wondered how they could purchase. They remembered e-commerce which is the best answer to their question. The COVID-19 crisis has forced businesses to move to an online format, even though this crisis has caused losses of resources for many companies. The Coronavirus has transformed the nature of business to the entire e-commerce (Fedushko, 2022). COVID-19 had a significant impact on e-commerce in the world (Cynthia Saisaria Mandasari, 2022). It compelled customers to use the internet and make it a habit in their daily routine (Riadi, 2022).

E-commerce usage has increased globally, especially in China (Gai, 2023). Despite its development,

there are a number of barriers hindering e-commerce. They may differ from one country to another but mostly occur in developing nations (Tongora, 2022). Political barriers such as civil war result lack of strategic vision, an unfriendly business environment for e-commerce, and cutting down of important infrastructure like the internet. Access to e-commerce platforms and online payment systems may be limited in rural regions due to economic barriers. Social, cultural and technological barriers drawback the development of e-commerce in some countries like Tanzania. Potential customers may be discouraged from participating in e-commerce activities by a lack of familiarity with online shopping platforms and payment methods. Some cultures have a strong preference for traditional shopping experiences. Customers prefer to interact physically with products before making a purchase. In many developing countries, the internet penetration rate is low, and the quality of internet services is still poor. The presence of poor transportation systems and inadequate delivery services hinder the growth of e-commerce (Emmanuel H. Yindi, 2020).

2.2 Theoretical review

Scholars have developed different theories to study technology adoption and observe factors in dealing with new technologies. The Theory of Diffusion of Innovations (DOI), the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Task-Technology Fit (TTF), the Technology Acceptance Model (TAM), Combined TPB and TAM theories (C-TAM-TPB), Unified Theory of Acceptance and Use of Technology (UTAUT), and Perceived Trust, Risk and TAM (Tri TAM) are among theories used (Lai, 2017)

The Technology Acceptance Model (TAM) theory was developed by Fred Davis in 1989. He believes that perceived usefulness (Kenneth Longo Mlelwa) and perceived ease of use (PEOU) are the primary factors that influence an individual's intention to use a technology (Davis, 1989).

Trust, risk and Technology Acceptance Model (Tri TAM) theory was initialized in 2003 by Paul A. Pavlou. His study focused on predicting consumer acceptance of e-commerce by integrating trust and risk with the Technology Acceptance Model (TAM). The analysis exposed that trust, risk and perceived usefulness positively influence consumers' intentions to transact online (Pavlou, 2003). Therefore, this paper integrates the revised Trust, risk and Technology Acceptance Model (Tri-TAM) theory and adds policy perception as a new variable.

3   RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

3.1 Research model

The research model provides a pictorial illustration of the predictable relationship between the effects of different variables. The conceptual research model shows that the Technology Perception (TP), and Policy Perception (PP) are independent variables. Trust (TR) is mediating variable. Experience and Education are Moderating variables while intention to use e-commerce (ITU) stands as a dependent variable. Technology Perception (TP) refers to how individuals evaluate and understand the technology involved in e-commerce and how these perceptions influence their decision to adopt or reject e-commerce usage (Basarir-Ozel, 2017). Trust (TR) is a confidence, belief and reliance that the promise of another can be relied upon (Haryanti, 2020). The way individuals perceive and interpret the policies and regulations surrounding e-commerce activities is known as Policy Perception (PP) (Saikrishnan, 2023). Intention to use e-commerce (ITU) is a consumer's willingness to engage in e-commerce activities such as buying goods. It is a behavioral practice that leads to the actual buying of goods or services (Dudi Amarullah, 2022). *Figure 1* below shows the actual relationship of the study variables.
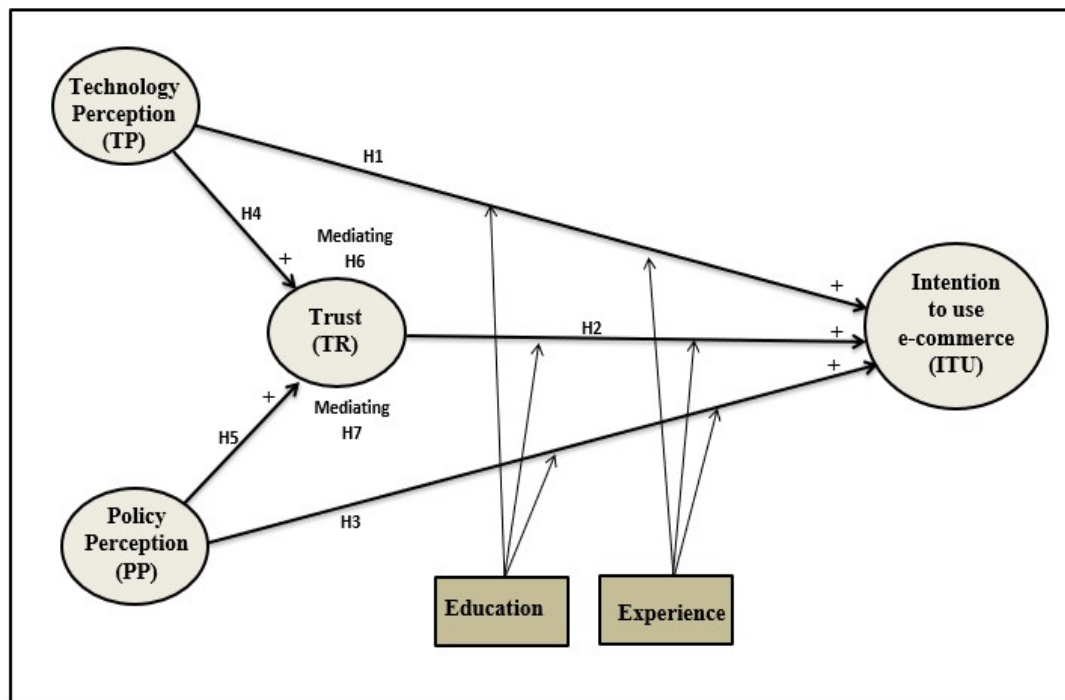
Figure 1:The Proposed Conceptual Model and Research Hypotheses

3.2 Research hypothesis

- H1: Technology Perception (TP) positively influences the Intention to use e-commerce (ITU).
- H2: Trust (TR) positively influences the Intention to use e-commerce (ITU).
- H3: Policy Perception (PP) positively influences Intention to use e-commerce (ITU).
- H4: Technology Perception (TP) positively influences Trust (TR) in e-commerce usage Intention.
- H5: Policy Perception (PP) positively influences Trust (TR) in e-commerce usage Intention.
- H6: Trust (TR) positively mediates relationship between Technology Perception (TP) and Intention to use e-commerce (ITU)
- H7: Trust (TR) positively mediates relationship between Policy Perception (PP) and Intention to use e-commerce (ITU)
- H8A: The effect of Technology Perception (TP) on Intention to use e-commerce (ITU) is moderated by education level.
- H8B: The effect of Technology Perception (TP) on Intention to use e-commerce (ITU) is moderated by experience.
- H9A: The effect of Trust (TR) on Intention to use e-commerce (ITU) is moderated by education.
- H9B: The effect of Trust (TR) on Intention to use e-commerce (ITU) is moderated by experience.
- H10A: The effect of Policy Perception (PP) on Intention to use e-commerce (ITU) is moderated by education.
- H10B: The effect of Policy Perception (PP) on Intention to use e-commerce (ITU) is moderated by experience.

4 RESEARCH METHODOLOGY

4.1 Research philosophy and approach

Based on the nature of the research question formulated and the context of this study, the positivism philosophy was adopted. This philosophy emphasizes empirical observation, objectivity, and the use of quantitative methods to establish causal relationships (Mark N.K. Saunders, 2019). The study is associated with a quantitative approach.

4.2 Research Strategy and Data Collection Method

The Primary data was collected through online surveys. This survey involved asking a set of structured questions (questionnaires) to e-commerce users in Zanzibar by using a Google form (Mark N.K. Saunders, 2019). The link to the form is shared using emails and social media such as WeChat and WhatsApp.

4.3 Study area, Sample size and Sampling technique

The study was conducted at Zanzibar (Unguja and Pemba). A total of 264 samples were collected. All samples were valid which means no missing data. All questions in the questionnaire were mandatory. Respondent cannot submit responses without filling all questions. This sample size is suitable for model containing four factors with 18 items. Both males and females were included in the sample (No gender bias). The referral/Snowball non-probability sampling technique was applied in this study (Kothari, 2004). Table 1 below presents the demographic data collected.

Table 1: Demographic data of respondents

Variable	Interval	Frequency	Percentage
Gender	Male	131	49.6%
	Female	133	50.4%
	Total	**264**	**100%**
Age	Under 20 years	26	9.8%
	21-30 years	113	42.8%
	31-40 years	103	39.0%
	Above 40 years	22	8.3%
	Total	**264**	**100%**
Education	Primary - Advanced	78	29.5%
	Certificate - Diploma	84	31.8%
	Bachelor	85	32.2%
	Master – PhD	17	6.4%
	Total	**264**	**100%**
Experience	Once	66	25.0%
	2-3 times	64	24.2%
	4-6 times	49	18.6%
	More than 6 times	85	32.2%
	Total	**264**	**100%**

4.4 The Structure of the questionnaire and scale used

The questionnaire had 20 questions in two sections (parts). Section A comprised the demographic data of the respondents. Section B holds 18 questions about the constructs within the theoretical framework of this study. Each question was mandatory to ensure no missing data in the data file. The study employed a five-point Likert Scale. Respondents had freedom to provide their opinions about statements based on five options starting from Strongly Disagree (1 point) to Strongly Agree (5 points) (Mark N.K. Saunders, 2019).

4.5 Statistical Significance

Is a concept used in hypothesis testing to determine whether an observed effect or relationship in data is likely to be real or if it could have occurred by chance (Kothari, 2004). The study applied a significance level (Alpha (α)) of 0.05 (5%)

5   DATA ANALYSIS AND DISCUSSION OF RESULTS

5.1 Descriptive analysis

The majority of the respondents agreed that Technology Perception (TP) affects their buying decisions with a mean of 3.6. Furthermore, the majority of the respondents accepted buying online more if they trust (TR) online buying with a mean of 3.6. Moreover, most of the respondents gave a high rate to Policy Perception (PP) during their online buying with a mean of 3.57. Concerning the intention to use e-commerce (ITU), we have information and general agreement towards its adoption from 264 respondents with a mean of 3.7. The mode and range were 4 in all variables. The minimum number was 1 and the maximum was 5 as shown in Table 2 below.

Table 2: Descriptive statistics of Variables

|	*TP*	*TR*	*PP*	*ITU*
N Valid	264	264	264	264
Missing	0	0	0	0
Mean	3.6	3.6	3.57	3.7
Mode	4.00	4.00	4.00	4.00
Range	4.00	4.00	4.00	4.00
Minimum	1.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00
Sum	958.00	959.50	943.00	979.75

5.2 Exploratory Factor Analysis

The Principal Component Analysis (PCA) was used to predict the factors needed to account for the maximum portion of the variance of the original set of variables. Varimax rotation was used to maximize the

variance of the squared loadings within each factor (Kothari, 2004). The analysis exposes four components. The KMO value was 0.965. The Bartlett's Test of Sphericity was highly significant (0.000) which means the sample qualified for factor analysis (refer **Error! Reference source not found.**). Firstly, the analysis was performed with 18 items that make up three independent variables and one dependent variable. The initial test indicated that some construct (items) needs revisions. In this manner, two constructs from Policy Perception (PP1 and PP3) whose loadings were 0.53 and 0.49 respectively were deleted from the model to represent the constructs well and increase the goodness of fit indices of the measurement model. The extracted components named TP, TR, PP and ITU respectively.

5.3 Test for normality distribution

Different assumptions considered indicate the non-normality distribution of data (Khatun, 2021). The Skewness Z-Value was (-7.36) which does not fall between -1.96 to 1.96, although the z-value of Kurtosis was (0.826). Both Kolmogorov-Smirnov and Shapiro-Wilk values were significant at 0.000. Many data points fall far to the diagonal line in the Q-Q Plot. Figure 2, visually shows that the data are not normally distributed. The numbers 4 and 4.5 highly appeared to be above the line.

Figure 2: Non-normality distribution
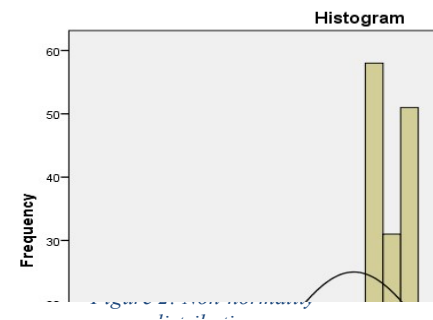
5.4 Internal consistency reliability and Validity

Cronbach's coefficient alpha was used to test inter-item consistency. It quantifies how closely items adhere to their scale. After performing reliability analysis, the Cronbach's alpha value was 0.94. It is close to 1 indicating that the items in the questionnaire are highly correlated and measure the same underlying construct consistently. Spearman's correlation was used to assess the strength and direction of association between two ranked variables. Table 3 below shows that the data is valid. None of correlation between two different variables has value greater than 0.75. The lowest value is 0.647 while the highest is 0.748.

Table 3: Correlations between variables

	Spearman's rho	TP	TR	PP	ITU
TP	Correlation Coefficient	1.000	.676**	.647**	.703**
	Sig. (2-tailed)	.	.000	.000	.000
	N	264	264	264	264
TR	Correlation Coefficient		1.000	.697**	.748**
	Sig. (2-tailed)		.	.000	.000
	N		264	264	264
PP	Correlation Coefficient			1.000	.663**
	Sig. (2-tailed)			.	.000
	N			264	264
ITU	Correlation Coefficient				1.000
	Sig. (2-tailed)				.
	N				264

5.5 Group differences by gender and age.

The Mann-Whitney U Test was conducted for "Gender" to identify any difference between males and females in their intention to use e-commerce in Zanzibar. The results from Table 4 suggest that, there was no significant gender difference in their intention to adopt e-commerce (P= 0.233) (males and females were similar). The age of e-commerce users in Zanzibar was divided into "under 20, 21-30, 31-40, and above 40 years old" respectively. The Kruskal-Wallis Test results in Table 5 indicates no significant age differences in the respondents' intention to use e-commerce. The P-value was 0.19 insignificant.

Table 4: Group Differences by Gender   *Table 5: Group Differences by Age*

Mann-Whitney U	7980.000
Wilcoxon W	16626.000
Z	-1.192
Asymp. Sig. (2-tailed)	.233

Null hypothesis	Sig.	Decision
The distribution of ITU is the same across categories of Age	0.19	Retain the null hypothesis

5.6 Measurement model/model fit

The measurement model assesses how well the proposed model fits the observed data (Basarir-Ozel, 2017). Researchers considered several fit indices and criteria to evaluate the fit of the proposed model. Table 6 below, displays values of fit indices for the model of this study. In general, based on these Fit Indices, the model appears to have a good fit.

Table 6: Model values of this study

Fit Indices	χ^2	chi2/df	P value	CFI	TLI	NFI	RFI	IFI	RMSEA
Recommended Value	<2df	<2	<0.05	>0.95	>0.90	>0.90	>0.90	>0.90	<0.08
Model Value	172.833	1.839	0.000	0.98	0.975	0.958	0.946	0.980	0.05

5.7 Estimates of the model

Figure 3 shows unstandardized values of all observed and unobserved variables, modification indices performed as well as Covariances and Error Terms.
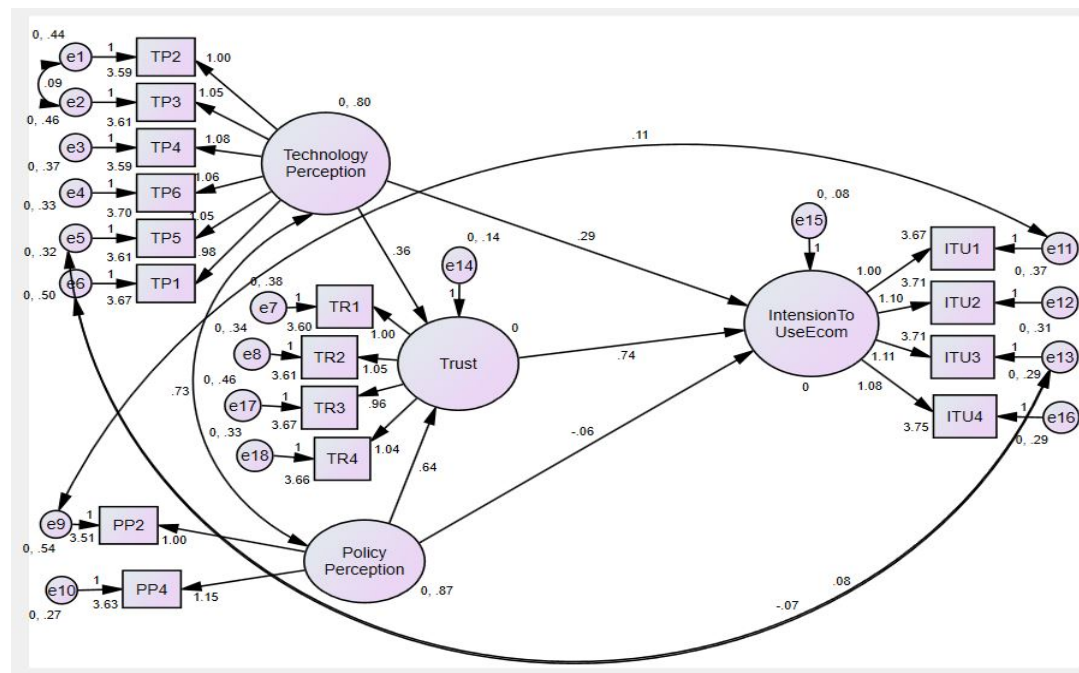

Figure 3: Unstandardized estimates of the model

5.8 Testing hypothesis of direct effects

Table 7 presents factors affecting e-commerce adoption in Zanzibar. The first factor (Technology Perception), was found to be significant (0.001). It has a positive β value of 0.29 which means when Technology Perception (TP) increased by one unit, the Intention to use e-commerce increased by 0.29 units. Trust (TR) is the second factor which was highly significant (0.000). It is the most important factor that affects the Intention to use e-commerce in Zanzibar. It has a high positive beta value (0.74). This value means the Intention to use e-commerce increased by 0.74 units as the Trust (TR) increased by 1 unit. The third factor, which represents the Policy Perception (PP), was unfortunately found to be insignificant (P<0.05 = 0.634) with a negative Beta value (-0.06). This suggests that as Policy Perception (PP) increased by 1 unit, the Intention to use e-commerce decreased by -0.06. Therefore, only two factors directly influence the Intention to use e-commerce in Zanzibar. Nevertheless, Trust is directly influenced by both Technology perception and policy perception.

Table 7: Testing hypothesis of direct effects

			Estimate	S.E.	C.R.	P
Intention To Use (ITU)	<---	Technology Perception	.288	.090	3.188	.001
Intention To Use (ITU)	<---	Trust	.739	.121	6.104	***
Intention To Use (ITU)	<---	Policy Perception	-.060	.126	-.476	.634
Trust	<---	Technology Perception	.357	.117	3.047	.002
Trust	<---	Policy Perception	.643	.120	5.356	***

5.9 Testing hypothesis indirect effect (Mediation)

With reference from Table 8, Trust (TR) positively mediates the relationship between Technology Perception (TP) and Intention to use e-commerce (ITU). The presence of a significant indirect effect (0.264) alongside a significant direct effect (0.288) suggests partial mediation. Nevertheless, Trust (TR) positively mediates the relationship between Policy Perception (PP) and Intention to use e-commerce (ITU). The direct effect is not significant, but the significant indirect effect (0.4753) supports full mediation. Both two R^2 values are close to 1 indicating that the model explains a high percentage of the variance in the dependent variable (ITU).

Table 8: Effects and R^2

MV= Trust (TR)	Estimates	Std. Error	P-Value	R^2
Technology Perception (TP)	0.264	0.096	0.006	0.849
Policy Perception (PP)	0.475	0.118	0.000	0.907

DV= Intention to use e-commerce (ITU)

5.10 Testing Moderating effects of Education and experience between TP and ITU

Both Education and Experience are divided into two groups (low educated/ experienced) and (high educated/ experienced). The analysis reveals that Education and Experience moderate the relationship between TP and ITU as the overall model was significant (p < .0001). While TP has a direct positive effect on ITU, this relationship is not constant across all levels of Education and Experience. Instead, the strength and even the direction of the relationship vary depending on the levels of these moderators. Table 9 shows that 70.5% of the model explains a significant amount of variance in ITU. The interaction terms (Interaction1 and Interaction2) are significant, suggesting that the relationships between TP and ITU are moderated by Education and Experience. The conditional effects show that the relationship between TP and ITU varies depending on the levels of Education and Experience.

Table 9: Moderating effects between TP and ITU

	Coeff	se	t	p	LLCI	ULCI	R^2	P
TP	1.5997	.1571	10.1826	.000	1.2903	1.9091		
Education	.7866	.3854	2.0411	.0423	.0277	1.5455		
Interaction1	-.2067	.0975	-2.1194	.0350	-.3988	-.0147	.705	0.0001
Experience	1.7772	.4470	3.9755	.0001	.8969	2.6576		
Interaction2	-.4133	.1121	-3.6862	.0003	-.6341	-.1925		

5.11 Testing Moderating effects of Education and experience between TR and ITU

According to Table 10, approximately 77.8% of the variance in the dependent variable is explained by the predictors and interaction terms. The entire model was statistically significant (p <.0001), indicating that the factors work together to predict ITU. Education and Experience act as significant moderating variables, indicating that their presence alters the relationship between Trust and ITU. The two interaction variables represent the complex relationships between Trust and ITU at various Experience and Education levels.

Table 10: Moderating effects between TR and ITU

	Coeff	se	t	p	LLCI	ULCI	R^2	P
Trust	1.5859	.1370	11.5767	.0000	1.3161	1.8556		
Education	1.1901	.3044	3.9102	.0001	.5908	1.7895		
Interaction1	-.2777	.0773	-3.5929	.0004	-.4299	-.1255	.778	0.0001
Experience	1.3633	.4073	3.3473	.0009	.5613	2.1653		
Interaction2	-.3354	.0997	-3.3646	.0009	-.5317	-.1391		

5.12 Summary of Hypotheses

No.	Hypothesis	Result	Decision
H1	Technology Perception (TP) positively influences the Intention to use e-commerce	Significant	Accepted

H2	Trust (TR) positively influences Intention to use e-commerce	Significant	Accepted
H3	Policy Perception (PP) positively influences the Intention to use e-commerce	Insignificant	Rejected
H4	Technology Perception (TP) positively influences Trust (TR) in e-commerce usage Intention	Significant	Accepted
H5	Policy Perception (PP) positively influences Trust (TR) in e-commerce usage Intention.	Significant	Accepted
H6	Trust (TR) positively mediates relationship between Technology Perception (TP) and Intention to use e-commerce	Significant	Accepted
H7	Trust (TR) positively mediates relationship between Policy Perception (PP) and Intention to use e-commerce	Significant	Accepted
H8A	The effect of Technology Perception (TP) on Intention to use e-commerce (ITU) is moderated by education.	Significant	Accepted
H8B	The effect of Technology Perception (TP) on Intention to use e-commerce (ITU) is moderated by experience.	Significant	Accepted
H9A	The effect of Trust (TR) on Intention to use e-commerce (ITU) is moderated by education.	Significant	Accepted
H9B	The effect of Trust (TR) on Intention to use e-commerce (ITU) is moderated by experience.	Significant	Accepted
H10A	The effect of Policy Perception (PP) on Intention to use e-commerce (ITU) is moderated by education	Insignificant	Rejected
H10B	The effect of Policy Perception (PP) on Intention to use e-commerce (ITU) is moderated by experience	Insignificant	Rejected

6   CONCLUSION AND RECOMMENDATION

6.1 Conclusion

In general, this paper examines major factors affecting intention to adopt e-commerce among users in Zanzibar. The factor analysis produced four factors namely Technology Perception (TP), Trust (TR), Policy Perception (PP) and Intention to use e-commerce (ITU). The Structural Equation Modeling (SEM) identified two positive and significant factors for Intention to use e-commerce (Technology perception and Trust). Policy perception was insignificant with a negative value. Education and Experience were tested to verify their moderating effect between Technology perception and Trust on the dependent variable. It found that, both education and experience moderate effect of Technology perception and Trust on Intention to use e-commerce (ITU).

6.2 Knowledge, theoretical and Practical Contribution

This research has contributed to the body of knowledge, theoretical and practical through the introduction of the first conceptual framework model, which specifies the validated factors that influence the adoption of e-commerce in Zanzibar on the consumer side. Hence, the present study contributes to the literature by being the first empirical study of e-commerce adoption factors in Zanzibar. Accordingly, Figure 4 presents the final version of the research conceptual model. It can be used as an e-commerce adoption model for Zanzibar consumers.
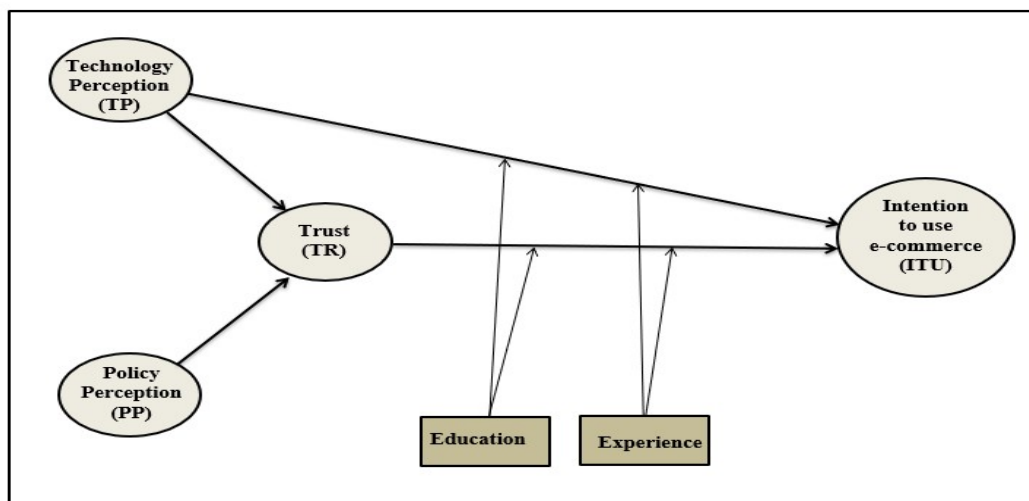

Figure 4: Zanzibar E-commerce Adoption Model

6.3 Policy Recommendations

The revolutionary government of Zanzibar together with the Government of Tanzania, have been worked hard to facilitate e-commerce adoption among the users. Unfortunately, a gap still exists. Some people prefer offline commerce with cash then e-commerce due to some problems that faced them when using e-commerce. Lack of trust and bad technology perception were discovered to be very important barriers to e-commerce in Zanzibar. Therefore, the Government should start promoting and protecting the rights of online consumers through the introduction of a legal system, infrastructure development and awareness campaigns. The local media should launch a comprehensive campaign to spread the e-commerce benefits among the Zanzibaris. The government should invest in robust and reliable digital infrastructure, including high-speed internet connectivity and mobile networks. There needs to prepares a special department in the government that deals

with e-commerce and emphasizes more research on e-commerce.

6.4 Research Limitations and Future Directions

This study focused on e-commerce adoption in Zanzibar at the micro level. Therefore, further researches on the macro level need to be conducted. For example, small and medium enterprises (SMEs) instead of the consumer's side. Furthermore, adding new variables in future research to extend the research model can be crucial. For instance, any similar future research that will examine other variables such as culture which may include language, religion and traditions. From this study, trust seemed to be a very important factor for e-commerce adoption. Accordingly, any future research that can investigate factors that can promote (build) online trust in e-commerce is appreciated.

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