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THE DRIVERS OF CONTINUANCE INTENTION OF ONLINE SHOPPING OF CLOTHES IN ANGOLA

Ana Carina da Cunha Chitas

Dissertation presented as partial requirement for obtaining the Master's degree in Information Management with a specialization in Knowledge Management and Business Intelligence

NOVA Information Management School Instituto Superior de Estatística e Gestão de Informação

Universidade Nova de Lisboa

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OF CLOTHES IN ANGOLA
by
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Abstract

The increasing number of shoppers who buy clothes online raises the interest in understanding what promotes their continuance of buying in this channel. This study seeks to understand what the drivers of usage continuance intention of online clothes shopping are. The proposed research model is based on the expectation confirmation model (ECM), by adding the enjoyment construct and the trust as moderator effect. An online survey with 233 respondents in Angola was conducted and the data were analyzed with the partial least squares (PLS). The results indicate that satisfaction and enjoyment are the fundamental predictors of continuance intention and that it is also indirectly influenced by confirmation and perceived usefulness. The model explains 54.9% of the variation in continuance intention. With the findings of this study, online stores of clothing have a better understanding of their customers.

Keywords: Continuance intention, expectation confirmation model, clothes, Angola

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1. INTRODUCTION

In 1991 there were fewer than three million internet users worldwide and e- commerce applications did not yet exist. In 1999 the number of users of the internet grew dramatically to 250 million users, of which about 63 million were already making online transactions corresponding to a total value of approximately USD 110 billion (Coppel, 2000), and this number grew to USD 128.1 billion by 2007. Throughout the past decade the number of online buyers exploded, especially in 2020 due to the Covid-19 pandemic, which caused many people to buy all sorts of products and services online to avoid exposure to the virus. Consequently, most businesses had to adapt to this format and make their products and services available at a distance (Shetty & Pai, 2021). According to Statista (2021), in 2020 the number of online buyers was 2.02 billion, which was almost a quarter of the worldwide population in that year (7.8 billion people), generating USD 4.29 trillion worth of online transactions. With these values we can understand the relevance that online shopping carries nowadays.

Africa (especially Sub-Saharan Africa) is very often thought as a continent that is far behind in technology, but despite all the problems the continent faces, the spread of the internet and associated technologies is progressively becoming a reality even if it is not as advanced as in other continents (Okoli & Mbarika, 2003). As reported by Statista (2021), in 2019 the number of online buyers in the African continent was 233 million, and according to forecasts it is expected that this number will increase significantly, and that in 2024 it will reach double the number of users in 2019.

Angola is a country located in the south of the African continent, with a population of 33.40 million people (in January 2021), characterized by an overall young population (the average age of the population is 16.7 years old). According to the Datareportal (2021), the percentage of the population using the internet in Angola in January 2021 was about 31%. Since most of the population does not have internet access, online shopping is less developed. Nevertheless, it is increasingly common among the population with internet access, making this a segment of the country with great growth potential. There are no official data regarding the number of people that are shopping online in Angola.

Several investigations have been conducted into the continuance intention of online shopping based on different contexts such as Saudi Arabia, Malaysia, and Nigeria (Al-Maghrabi & Dennis, 2011a; Mohamed et al., 2014; Olubunmi & Adeyemi, 2018). However, as far as we are aware, there are no published studies that focus on the continuance intention of online clothing shopping specifically and no studies that focus on the continuance intention of online shopping in Africa or other African countries aside from Nigeria. Having this gap in the literature in mind, the following research question (RQ) arises:

RQ: What are the drivers of continuance intention of online shopping for clothing in Angola?

The main goal of this paper is to build a research model that investigates the factors that influence the continuance intention of online shopping of clothes in Angola and how they do so. This study is of extreme importance, because it focuses on understanding the reasons that make a customer purchase additional clothes online after the first experience, which is very valuable to the longevity of online stores, considering that gathering new customers can be five times more expensive than preserving the existing ones (Bhattacherjee, 2001). The study also adds to the continuance intention literature, presenting a new context that has not yet been studied (Angola). The proposed model is an adaptation of Bhattacherjee's (2001) ECM, with the addition of the enjoyment construct and the moderator effect of the trust construct.

This paper's contributions are threefold. First, to the best of the author's knowledge there are no studies that focus specifically on the continuance intention of shopping for clothes online, and there are very few studies about continuance intention of online shopping in Africa. This is the first paper that studies the continuance intention of online shopping of clothes, in Angola. Second, the model proposed by this research addresses the moderator effect of trust in continuance intention, adding to the literature in the sense that it contributes to a greater understanding of the continuance intention of online shopping phenomena. Last, the paper helps online stores of clothes to understand the factors that make their customers repurchase after the first experience, which is very helpful to improve their services and retain more customers.

The rest of the paper is organized as follows. Section 2 explains about the background of the ECM, cites examples of studies that have adapted it, and provides some context on the E-Commerce clothing sector. Section 3 describes the proposed model and hypotheses. Section 4 describes the data collection. Section 5 describes the methodology used to test the research model and the results. Section 6 presents the discussion, implications of these results, and limitations of this paper. Section 7 presents the conclusions.

2. LITERATURE REVIEW

2.1 E-COMMERCE - CLOTHING

E-Commerce, also known as electronic commerce or internet commerce, consists of buying and selling goods or services through the internet and the money and data transfer to conclude these operations. Online shopping is an E-Commerce activity that involves the action of a consumer buying goods or services from a seller over the internet, through a mobile app or a web browser. In recent years this type of commerce has been developing very quickly, making it easier to sell or buy a vast variety of products and services on the internet. Another advantage of the growth of online shopping is that distance is increasingly ceasing to be a barrier, allowing people to buy from or sell to any part of the world, regardless of the location. The low cost of E-Commerce enables businesses and consumers with a new and forceful information channel (Al-Maghrabi & Dennis, 2011).

Today it is possible to purchase almost anything on the internet. The Clothing sector is very popular. In 2017 it was observed that around 57% of internet users had bought products online that were related to fashion, with Clothing and Apparel being the most popular online shopping category worldwide in that year. Several studies can attest to the weight this sector has in the economy of some countries. Kim (2019) explains that the textiles and clothing industry is one of the oldest and most influential industries in the Indian economy because of the jobs it creates, the contribution to exports, and massive industrial production. Çay (2018) states that the clothing industry is one of the biggest sectors in the Turkish economy, as the ready-to-wear clothing industry represented 11.9% of Turkey's total exports in 2016. Some studies also mention the importance this sector has globally, with the Textiles and Clothing sector among the largest industries and growing exponentially (Alves et al., 2022; Koszewska, 2018).

2.2 THE EXPECTATION CONFIRMATION MODEL

The expectation confirmation model (ECM) has been adopted by many researchers (e.g., Albashrawi & Motiwalla, 2019; Bhattacherjee, 2001; Hong et al., 2006; M. C. Lee, 2010; Lin et al., 2005) to explain an individual's post-acceptance behavior. The ECM is an adaption from expectation confirmation theory (ECT). The ECT was developed by Oliver (1977, 1980) to explain post-purchase or post-adoption satisfaction, based on the expectations of the consumer before the purchase, the perceived performance following the product or service use, and confirmation or disconfirmation of the opinion the consumer had. According to ECT the consumer has an initial expectation or opinion about the product or service, then he uses the product or service, and after consuming it he finally has an opinion based on his experience. With this experience consumers can finally determine if their initial expectations are confirmed or not. Having in consideration the confirmation or disconfirmation of the initial expectations, consumers form a satisfaction opinion about the product or service, meaning that if the consumer is satisfied it is more likely that he will

reuse that product or service. Consumers' expectations can influence their attitude regarding the product or service and after the purchase they may compare their initial expectations with the post-perceived performance (Shiau et al., 2011). The ECM developed by Bhattacherjee (2001), concentrates only on post-acceptance variables, since the effects of pre-acceptance variables are already captured by the satisfaction and confirmation constructs. According to Bhattacherjee (2001) the ECT is limited to examining only the effect of pre-consumption expectations, but it is also very important to study post-consumption expectation because an individual's expectation is very likely to change over time, and this is very common when the subject is IS use. Therefore, the ECM amends the ECT including the post-consumption expectation. Figure 1 is the ECM, which is supported by perceived usefulness (that represents the post-consumption expectation), confirmation, and satisfaction.

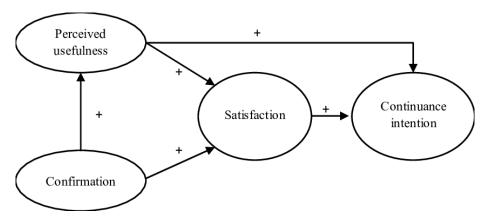


Figure 1 - Expectation confirmation model

Many studies have been developed based on the ECM developed by Bhattacherjee (2001), in which he examines the continuance intention of an information system used by the clients of an online banking division. The results of this study concluded that continuance intention is determined by the client's satisfaction with the information system and the perceived usefulness of the continued use of the information system. Koufaris (2002) studied customer's intention of repurchasing on online libraries, concluding that enjoying the shopping experience and perceived usefulness are two constructs that positively influence the customer's intention the revisit an online library. Lee et al. (2000) sought to explain what are the factors that make internet users revisit cyberstores, and showed that trust and low transactional costs are factors that expand customer loyalty towards the stores and that these details change depending on how involved the customer is with the product that was purchased through that store. Chung and Lee (2003) studied the determinants of customer's intention of repurchasing in internet malls, and concluded that factors such as the demography, perceptions about the product, customer service, perceived ease of use, site image, the store promotion, the perceived customer risk, the customer's characteristics, and internet communication channels all have a positive relationship with repurchase intention. Nonetheless, perceived consumer risk is negatively related with repurchase intention. According to Atchariyachanvanich et al. (2007), both extrinsic (time and finances) and intrinsic (delight, innovation, and fashion engagement) benefits positively influence the customer's intention to continue to purchase online. Additionally, they came to the conclusion that confirmation, satisfaction, perceived usefulness, perceived incentives, and customer loyalty are the main determinants when it comes to customers' intentions to continue to purchase items through the internet. Al-Maghrabi and Dennis (2011) attempted to understand the drivers of customer continuance of online shopping in the context of Saudi Arabia. The findings of their study indicated that the perceived usefulness, enjoyment, and subjective norms are some factors that determine continuance intention of e-shopping.

It is possible to find in the continuance intention literature several studies that are based on the ECM to explain continuance intention in different contexts. An example is the study developed by Darmawan et al. (2020), in which he seeks to understand the continuance intention to use mobile-based smart cities of Indonesian citizens. The model proposed in this study is an ECM modified by TAM (Technology Acceptance Model) to also measure the acceptance of information technology and the results concluded that continuance intention is explained by perceived usefulness, attitude, and curiosity. Prasetya et al. (2021) studied the impact of quality factors on e-learning usage continuance intention, proposing a model based on the ECM with additional constructs that represent quality factors. They concluded that continuance intention is explained by satisfaction and confirmation. Persada et al. (2021) used the ECM to analyze the determinants of students' continuance intention to use online private tutoring and their findings revealed that satisfaction explains continuance intention. Anil Kumar & Natarajan (2020) proposed a model that integrates the ECM and TAM and added further constructs to study the continuance behavior in using e-health services, from which they concluded that confirmation and perceived ease of use influence continuance intention.

3. RESEARCH MODEL AND HYPOTHESES

The confirmation construct contemplates the initial expectations of the performance, and the perceived usefulness construct contemplates the post-expectations. In this way the model considers the changes of the user's expectation that may happen as he gains experience (Pereira & Tam, 2021). This study attempts to show that several factors influence a customer's intention to continue to shop for clothes online, some of them directly, such as their satisfaction, enjoyment, and perceived usefulness, and others indirectly like confirmation, enjoyment, and trust. To validate these affirmations, we created and tested several research hypotheses. In Figure 2 we see the research model and the respective research hypotheses.

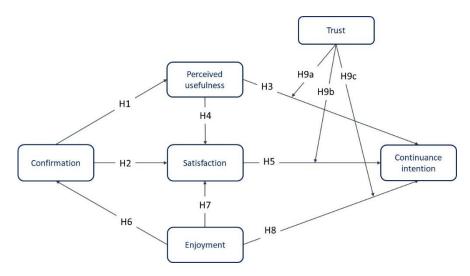


Figure 2- Research model

In accordance with Bhattacherjee (2001), confirmation can be defined as an inner belief (the extent to which the user's expectation of IS use is fulfilled during its use) originated from previous IS use. This means that confirmation is the extent to which the user's expectation is met during the use of the IS, or in the context of this study during the process of shopping for clothes online. The higher the confirmation, the more the experience of shopping clothes online was able to meet the individual's initial expectations. According to Davis (1993), perceived usefulness is the extent to which an individual thinks that the use of a particular system would enhance his job performance. It measures the instrumentality of using the system and impacts the individual's attitude over time (Pereira & Tam, 2021). More specifically, in this case it is the extent to which an individual believes that online shopping of clothes will enhance their purchase activities. This means that the higher the perceived usefulness, the higher the probability of the individual purchasing clothes online. It is likely that users continue using an E-Commerce service if they consider that it is useful, even if they are not satisfied with their previous experience (Bhattacherjee, 2001).

In agreement with Olubunmi & Adeyemi (2018), a website is considered useful when it

delivers services to customers and meets their expectations, and we assume that individuals will continue shopping clothes online if the store is able to meet their expectations, meaning that confirmation is an important construct to explain perceived usefulness. Several studies such as Al-Maghrabi & Dennis (2011) and Atchariyachanvanich et al. (2007) have considered perceived usefulness as a relevant factor that influences the customer's intention to repeat purchases online (Olubunmi & Adeyemi, 2018).

As mentioned above, in the words of Bhattacherjee (2001), PU captures future expectations and it is the criterion used to measure the confirmation of the expectations. Therefore, the level of confirmation will influence how the individual perceives the online shopping of clothes. If the initial expectations of the individual are satisfied or exceeded, the level of confirmation will be positive, influencing the individual's future expectations. The higher the expectations, the greater the satisfaction. But if the expectations about shopping clothes online are low, it means that the individual does not have a sufficient reason to continue to shop for clothes online (Hong et al., 2006). Therefore, it is hypothesized:

H1: The individual level of confirmation with online shopping of clothes positively influences perceived usefulness.

H2: The individual level of confirmation with online shopping of clothes positively influences satisfaction.

Post-experience satisfaction or simply satisfaction is how much an individual is satisfied with a product, service, or technology after experiencing it. Several studies attest that satisfaction and the individual's continuance intention are related (Pereira & Tam, 2021), and Bhattacherjee (2001) verifies that satisfaction is the strongest predictor of an individual's continuance intention. Regarding online shopping of clothes, it is important that the buyer is satisfied with the experience, so he repurchases, therefore, it is hypothesized:

H3: The user perceived usefulness about the online shopping of clothes positively influences the usage continuance intention.

H4: The user perceived usefulness about the online shopping of clothes positively influences the satisfaction.

H5: The individual satisfaction with online shopping of clothes positively influences continuance intention.

According to Joo et al. (2017), perceived enjoyment or simply enjoyment is the learner's perceptions of the degree to which using digital textbooks draw his curiosity, enjoyment, and engagement. Adapting this definition to the current study, enjoyment is the extent to which a customer was involved and amused with the experience of shopping for clothes online. Therefore, it is hypothesized:

H6: The customer's enjoyment with online shopping of clothes influences the individual

level of confirmation.

H7: Perceived Enjoyment with online shopping of clothes positively influences satisfaction.

H8: Perceived Enjoyment with online shopping of clothes positively influences the usage continuance intention.

Pavlou (2003) defined customer trust in e-tailing websites as the intuitive belief that online retailers will accomplish the expected service when customers engage in e-tail transactions. In agreement with Gefen & Straub (2004), trust is the belief that others will not act opportunistically. Adapting these two definitions to our study, trust is the belief that online stores of clothes will fulfill the service and will not act opportunistically once the consumers engage in the online transaction. It is essential for e-retailers to build trust with their customers so they become loyal customers and because purchasing decisions are trust-related behaviors (Al-Maghrabi & Dennis, 2011a). If the client cannot build trust with the e-retailer, there is no motive for him to expect gaining a benefit when buying clothes from that online store. The lack of trust keeps buyers from shopping online (Al-Maghrabi & Dennis, 2011a). When an individual trusts an online retailer and has a positive experience, it is likely that he thinks it is useful (Gefen et al., 2003). Perceived usefulness must only take place when a customer can trust an e-vendor (Festinger, 1975). Therefore, it is hypothesized:

H9a: Trust moderates the impact of perceived usefulness on usage continuance intention.

H9b: Trust moderates the impact of satisfaction on usage continuance intention.

H9c: Trust moderates the impact of enjoyment on usage continuance intention.

4. METHODS

4.1 MEASUREMENT INSTRUMENTS

The measurement items used in this study were adapted from (Bhattacherjee, 2001), (Odusanya et al., 2020), and Lowry et al. (2013) with a few alterations. From the literature, continuance intention (CI), perceived usefulness (PU), confirmation (CONF), and satisfaction (SAT) came from Bhattacherjee (2001), trust (TR) came from Odusanya et al. (2020), and enjoyment came from Lowry et al. (2013). The data were collected through an online survey that was conducted through the Qualtrics survey website. To measure the items, we used a seven-point Likert scale, on an interval from (1) totally disagree to (7) totally agree.

4.2 DATA COLLECTION

The survey was disseminated to Angolan users of online shopping clothes via a link on social networks (Instagram, Twitter, Facebook, and LinkedIn). The survey was designed in English and translated to Portuguese. The data were collected 7-10 March 2022. To better ensure the quality of this survey, before the official version was launched, a pilot survey was carried out, collecting 30 valid responses, which were discarded from the main survey. The pilot did not identify any problems in the survey, and therefore no changes were made.

Of 237 responses collected, 4 were incomplete and removed (1.68%) and as seen in Table 1, 233 responses were valid (98.31%), 64% are women, 76% are under the age of 26 years old and 85% have a bachelor's degree. More than half of the sample are students (57%) and employees (28%).

 Table 1 - Sample characteristics

Distribution (n=233)								
Gender			Education					
Male	89	36%	High School or below	10	4%			
Female	157	64%						
			Bachelor's degree	197	85%			
Age			Master's degree or higher	26	11%			
<26	178	76%						
26-30	30	13%	Occupation					
>30	25	11%	Employee	66	28%			
			Self-employed	23	10%			
			Student	132	2 57%			
			Other	4	2%			
			Unemployed	7	3%			
			Retired	1	0%			

5. RESULTS

To test the model the method chosen was the partial least squares (PLS) based on the variance. The relationships that were proposed in the theoretical model were analyzed using the Smart PLS v 3.0 software.

5.1 MEASUREMENT MODEL

To ensure the internal consistency of the survey, the composite reliability coefficient was used. The Cronbach's alpha is used to measure how closely a set of items is related as a group and it varies between 0 and 1. The higher the value, the better the internal consistency, a value below 0.7 is considered questionable, and is therefore not accepted. As seen in Table 3 the Cronbach's alfa values for all of the constructs are higher than 0.7, assuring their reliability. Regarding the indicators, the criterion followed was the indicator reliability criterion, according to which the value of each indicator's loading must be greater than 0.7 (which demonstrates a good indicator reliability) and if it is lower than 0.4 then that indicator should be excluded.

We followed the Fornell & Larcker (2016) criterion and Henseler et al. (2016), and considered the average variance extracted (AVE) to test the convergent validity. According to this criterion, the value of the AVE must be higher than 0.5 so that the latent variable is able to explain more than 50% of the variance observed in its indicators. As seen in Table 3, all the constructs obey the criterion, because all of them have an AVE above 0.5.

Two criteria were considered to measure the discriminant validity, Fornell & Larcker (2016) and cross-loadings (Chin et al., 1998; Tenenhaus et al., 2005). The first criterion was that the square root of the AVE of each construct must be greater than the correlations between constructs and the second was that each indicator's loading must be greater than all the cross loadings. In Table 3 we see that the square roots of AVEs (the elements in the diagonal) are higher than the correlation between the pairs of constructs (the elements off-diagonal). Item JOY4 was excluded because its loading was low and did not meet the criteria. After it was eliminated, we see in Table 2 that all the construct indicators have loadings higher than cross-loading, meaning that the two criteria are met.

After several assessments such as the internal consistency, reliability of indicators, convergent validity, and discriminant validity, through the analysis of the results we conclude that the constructs can be used to test the conceptual model.

Table 2 – PLS loadings and cross- loading

Constructs		CONF	PU	SAT	Trust	JOY	CI
Confirmation	CONF1	.805	.477	.635	.432	.580	.583
	CONF2	.900	.487	.769	.573	.681	.629
	CONF3	.840	.358	.692	.580	.599	.532
Perceived	PU1	.399	.847	.491	.329	.560	.366
usefulness	PU2	.423	.866	.494	.326	.596	.453
	PU3	.403	.836	.452	.293	.523	.437
	PU4	.466	.711	.506	.340	.461	.406
Satisfaction	SAT1	.801	.516	.940	.664	.632	.636
	SAT2	.762	.587	.963	.635	.710	.639
	SAT3	.794	.603	.953	.639	.741	.644
Trust	TR1	.589	.332	.602	.856	.484	.518
	TR2	.555	.333	.605	.914	.459	.498
	TR3	.522	.335	.606	.907	.464	.495
	TR4	.510	.384	.558	.818	.430	.496
Enjoyment	JOY1	.539	.543	.536	.425	.820	.518
	JOY2	.546	.627	.525	.372	.833	.527
	JOY3	.569	.494	.560	.371	.811	.476
	JOY5	.683	.538	.675	.464	.863	.558
	JOY6	.717	.574	.743	.556	.888	.620
Continuance	CI1	.600	.384	.625	.553	.563	.864
intention	CI2	.595	.483	.522	.444	.532	.842
	CI3	.541	.434	.548	.451	.534	.825

Table 3 - Means, standard deviations, correlations, and reliability and validity measures (CR, CA, and AVE) of latent variables

Constructs	Mean	SD	CA	CR	CONF	PU	SAT	Trust	JOY	CI
Confirmation	5.188	1.420	.806	.886	.849					
Perc. usefulness	4.493	1.716	.832	.889	.521	.817				
Satisfaction	5.001	1.576	.948	.967	.826	.598	.952			
Trust	4.270	1.574	.896	.928	.623	.396	.679	.874		
Enjoyment	5.321	1.523	.899	.925	.732	.657	.730	.526	.844	
Contin. intention	5.547	1.547	.798	.881	.686	.511	.672	.575	.644	.844

5.2 STRUCTURAL MODEL

To assess multicollinearity problems, variance inflation factor (VIF) calculations were executed. The VIF values were all below 5, which indicates that there were no multicollinearity problems. For the estimation of the structural model, we considered the levels of significance of the path coefficients and the explained variance (R²). Figure 3 shows the model with the path coefficients and significances. On the dependent variables, perceived usefulness, satisfaction, confirmation, and continuance intention respectively, the values of R² are 27.1%, 73.1%, 53.6%, and 54.9% respectively. These are the percentages of the variation in each construct that are explained by the model. To evaluate the significance of the path coefficients we used bootstrapping based on 5,000 resamples. Figure 3 shows the path coefficients.

The model explains 27.1% of variation of perceived usefulness. Confirmation (β = 0.521; p<0.001) is statistically significant in explaining perceived usefulness, and therefore H1 is supported.

The model explains 73.1% of variation of satisfaction. Perceived usefulness (β = 0.165; p<0.001), confirmation (β = 0.613; p<0.001), and enjoyment (β = 0.173; p<0.01) are statistically significant in explaining satisfaction. Therefore, H4, H2, and H7 are supported.

The model explains 53.6% of variation of confirmation. Enjoyment (β = 0.732; p<0.001 is statistically significant in explaining confirmation and H6 is therefore supported.

The model explains 54.9% of variation of continuance intention. Satisfaction (β = 0.238; p<0.01) and enjoyment (β = 0.269; p<0.001) are statistically significant in explaining continuance intention, and therefore H5 and H8 are supported. Perceived usefulness is not statistically significant in explaining continuance intention, and thus H3 is not supported.

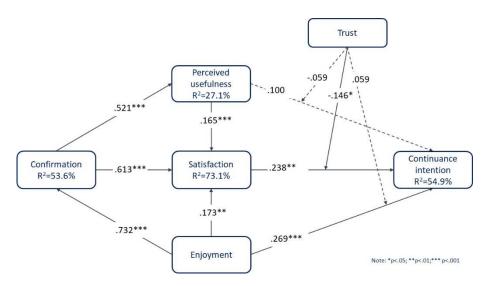


Figure 3 - Structural model results

6. DISCUSSION

This model combines the original ECM proposed by Bhattacherjee (2001), adding the enjoyment construct and the trust moderator effect on continuance intention. The model explains 54.9% of the variation in continuance intention. The most important constructs to explain continuance intention are enjoyment and satisfaction. Most of the hypotheses are in line with observed studies (Anil Kumar & Natarajan, 2020; Bhattacherjee, 2001; Darmawan et al., 2020; Persada et al., 2021; Prasetya et al., 2021), with the exception of H3, which is not supported and is at odds with some studies reported in the literature (Anil Kumar & Natarajan, 2020; Bhattacherjee, 2001; Darmawan et al., 2020), H9a and H9c are also not supported.

6.1 THEORETICAL IMPLICATIONS

To the best of our knowledge this is one of the few papers in the literature that studies continuance intention of online shopping of clothes specifically and in the African context. Eleven hypotheses were tested, from which 8 were statistically supported and 3 were not. Based on the hypotheses that were supported and the ones that were not, it is possible to draw interesting conclusions for the continuance intention of online shopping of clothes. Table 4 is a summary of the results of the hypotheses testing. According to the results, satisfaction and enjoyment should be considered when trying to explain the continuance intention of online shopping of clothes. This means that the extent to which an individual is satisfied with the product or service after experiencing it and how much he was amused by it influence his plans regarding continuing to shop for clothes online, and that enjoyment is more important in explaining continuance intention than is satisfaction. The model explains 54.9% of variation of the continuance intention.

Table 4 - Results of hypotheses testing

Hypotheses		β	t-value	Result
H1	Conf -> PU	0.521	10.312	Supported
H2	Conf -> Satis	0.613	11.161	Supported
Н3	PU -> CI	0.100	1.556	Not Supported
H4	PU -> Satis	0.165	3.474	Supported
H5	Satis -> CI	0.238	3.006	Supported
Н6	Joy -> Conf	0.732	19.234	Supported
H7	Joy -> Satis	0.173	2.593	Supported
Н8	Joy -> CI	0.269	3.486	Supported
Н9а	PU*Trust -> CI	-0.059	0.971	Not Supported
H9b	Satis*Trust -> CI	-0.146	2.034	Supported
Н9с	Joy*Trust -> Cl	0.059	0.787	Not Supported

According to the ECM proposed by Bhattacherjee (2001), satisfaction is the most important construct to explain the continuance intention, explaining 32% of its variation. Other studies such as Anil Kumar & Natarajan (2020), Persada et al. (2021), and Prasetya et al. (2021) also came to the same conclusion.

Our results are that satisfaction is explained by confirmation (β =0.613), perceived usefulness (β =0.165), and enjoyment (β =0.173), meaning that for an individual to be satisfied, his expectations with shopping for clothes online must be met or surpassed, and he must find it useful and enjoy it. This is also in line with the results observed in other studies (Anil Kumar & Natarajan, 2020; Bhattacherjee, 2001; Persada et al., 2021; Prasetya et al., 2021).

Perceived usefulness is explained by confirmation (β =0.521) and confirmation is explained by enjoyment (β =0.732), which suggests that an individual perceives shopping for clothes online as useful when his expectations are confirmed, which accords with the results of other studies observed (Anil Kumar & Natarajan, 2020; Bhattacherjee, 2001; Darmawan et al., 2020; Persada et al., 2021), and his expectations are confirmed when he enjoys the experience.

We also see that trust has a moderator effect on the way satisfaction influences usage continuance intention. As seen in Figure 4, to the individuals with low trust in shopping for clothes online, if they are satisfied with the experience there is a greater variability in the usage continuance intention, while to the individuals with high trust in shopping for clothes online, there is not a great difference in the continuance intention, regardless of being satisfied or not. This means that when a person has low trust and is satisfied with the experience, continuance intention is influenced, but when the person already has high trust, being satisfied or not with the experience has no impact on the usage continuance intention decision.

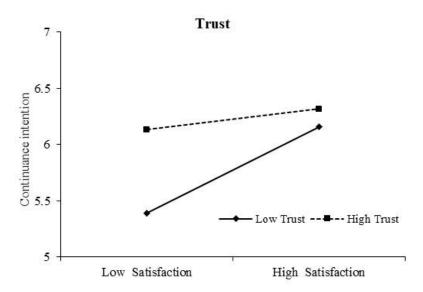


Figure 4 - Moderator effects

Considering the hypotheses that were rejected we conclude that perceived usefulness is not relevant to explain usage continuance intention. One of the reasons for this may be that even though

perceived usefulness is considered in several studies as relevant in explaining usage continuance intention, in this model it is not, because it may already be presumed by clients. It is therefore not a factor that influences respondents' decisions to continue to use a product or service.

In addition, we note that trust does not have a moderator effect on the way perceived usefulness explains continuance intention, nor on the way enjoyment influences continuance intention, signifying that the level of trust does not influence the variability of usage continuance intention if the perceived usefulness is low or high, nor if the enjoyment level is low or high.

6.2 Managerial Implications

The findings of this study have implications for the online stores that sell clothes that are useful and can help them better understand how to retain customers and how to increase their satisfaction and confirmation toward their services. The results indicate that both enjoyment and satisfaction are very important in determining the client's continuance intention, and that the usage continuance intention is indirectly affected by confirmation and perceived usefulness, because they influence satisfaction. Consequently, to retain clients online stores of clothing should ensure that the client enjoys the experience of shopping for clothes on their webstores, because the more they enjoy it, the more they will pay attention to the motivation caused by it (Lowry et al., 2013). They should ensure that the client perceives the experience as useful, and ultimately focus on assuring the client's satisfaction (Bhattacherjee, 2001).

The focus should be mainly on improving the client's enjoyment and satisfaction to impact usage continuance intention, but also guaranteeing the confirmation of their expectations to increase satisfaction. If the expectations an individual initially has about shopping for clothes online are met or exceeded, the level of confirmation is positive, influencing his satisfaction (Hong et al., 2006) and the individual's future expectations of that service, making it more likely that the individual consumes that service again. Enjoyment is also important because of its influence on confirmation, meaning that the extent to which the individual was involved and amused with the experience also plays a part in confirming or disconfirming their initial expectations. If the individual's level of enjoyment with the experience is positive, this has a positive influence on confirmation, and indirectly increases the usage continuance intention.

6.3 LIMITATIONS AND FUTURE RESEARCH

This study has some limitations. As mentioned above, only a small minority of the Angolan population has internet access, and therefore only an even smaller minority shops for clothing online. Because of this, the sample is not representative of the whole country. Hopefully, by the time future studies are conducted, the percentage of population with access to the internet will be greater and the studies will be more representative than at present. The survey conducted during this study did not consider the provinces where the respondents reside. Angola has 18 provinces, and as the survey did not consider that, we cannot determine if the respondents of the survey were concentrated in any specific province(s). If concentration were, in fact, the case, the sample would not be representative of the whole country. To overcome this issue, future studies should assure that the sample is representative of all or most of the provinces.

7. CONCLUSION

This study is about the continuance intention of shopping for clothing online. Shopping online is a form of E-Commerce that has become very popular in the past years and shows a growing trend. The continuance intention literature regarding this theme has not yet been deeply explored, and there are few studies that focus on online shopping of clothes specifically and fewer still of studies in the context of an African country. Also, this is the first continuance intention study in the context of Angola. To fill this gap in the literature, we proposed an adaptation of the ECM by Bhattacherjee (2001), combined with the enjoyment construct and the trust moderator effect. The results of this study show that enjoyment and satisfaction have a direct impact on continuance intention. Stores that sell clothes online, especially those that sell to Angola, can benefit from this research to better understand what drives their clients to continue to shop for clothing with them.

8. APPENDIX

Appendix A - Items

Constructs		Item	Adapted from					
Confirmation	CONF	LI find buying clothes online useful.	Bhattacherjee					
	CONF	F2 My experience in buying clothes online was better than I expected.						
	CONF	3 Overall, most of my expectations about buying clothes online were confirmed.						
Perceived	PU1	Buying clothes online decreased my stress.	Bhattacherjee					
usefulness	PU2	Buying clothes online helped me better pass the time.	(2001)					
	PU3	Buying clothes online provided a useful escape.						
	PU4	Buying clothes online helped me think more clearly about what to buy.)					
Satisfaction	SAT1	I am very pleased to buy clothes online.	Bhattacherjee (2001)					
	SAT2	SAT2 I am very happy buying clothes online.						
	SAT3	I am delighted buying clothes online.						
Trust	TR1	I trust that online shopping websites of clothes are reliable.	(Odusanya et					
	TR2	TR2 I trust that online shopping websites of clothes are secure.						
	TR3	I trust that online shopping websites of clothes are trustworthy.						
	TR4	I trust the quality of clothes displayed on online shopping websites.						
Enjoyment	JOY1	I found buying clothes online to be enjoyable.	Lowry et al.					
	JOY2	I had fun buying clothes online.	(2013)					
	JOY3	Buying clothes online was boring.						
	JOY4	Buying clothes online really annoyed me.						
	JOY5	The experience of buying clothes online was pleasurable.						
	JOY6	Buying clothes online left me unsatisfied.						
Continuance	CI1	I intend to continue buying clothes online.	Bhattacherjee					
Intention	CI2	My intentions are to continue buying clothes rather than shopping in physical stores or other alternative means.	ping in ⁽²⁰⁰¹⁾					
	CI3	I will frequently buy clothes online in the future.						

9. BIBLIOGRAPHICAL REFERENCES

- Al-Maghrabi, T., & Dennis, C. (2011a). What drives consumers' continuance intention to e-shopping?: Conceptual framework and managerial implications in the case of Saudi Arabia. 39(12), 899–926. https://doi.org/10.1108/09590551111183308
- Al-Maghrabi, T., & Dennis, C. (2011b). What drives consumers' continuance intention to e-shopping?: Conceptual framework and managerial implications in the case of Saudi Arabia. *International Journal of Retail and Distribution Management*, *39*(12), 899–926. https://doi.org/10.1108/09590551111183308
- Albashrawi, M., & Motiwalla, L. (2019). Privacy and Personalization in Continued Usage Intention of Mobile Banking: An Integrative Perspective. *Information Systems Frontiers*, 21(5), 1031–1043. https://doi.org/10.1007/s10796-017-9814-7
- Alves, L., Ferreira Cruz, E., Lopes, S. I., Faria, P. M., & Rosado da Cruz, A. M. (2022). Towards circular economy in the textiles and clothing value chain through blockchain technology and IoT: A review. *Waste Management and Research*, *40*(1), 3–23. https://doi.org/10.1177/0734242X211052858
- Anil Kumar, K., & Natarajan, S. (2020). An extension of the Expectation Confirmation Model (ECM) to study continuance behavior in using e-Health services. *Innovative Marketing*, 16(2), 15–28. https://doi.org/10.21511/im.16(2).2020.02
- Atchariyachanvanich, K., Okada, H., & Sonehara, N. (2007). What keeps online customers repurchasing through the internet? *ACM SIGecom Exchanges*, *6*(2), 47–57. https://doi.org/10.1145/1228621.1228626
- Bhattacherjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, *25*(3), 351–370.
- Çay, A. (2018). Energy consumption and energy saving potential in clothing industry. *Energy*, 159, 74–85. https://doi.org/10.1016/j.energy.2018.06.128
- Chin, W. W., Quarterly, S. M. I. S., & Mar, N. (1998). *Commentary : Issues and Opinion on Structural Equation Modeling Minnesota Stable URL : http://www.jstor.com/s /249674 Issues and Opinion on Structural Equation Modeling. 22*(1).
- Chung, I.-K., & Lee, M.-M. (2003). A study of influencing factors for repurchase intention in internet shopping malls. *Proceedings International Parallel and Distributed Processing Symposium*, 7-pp.
- Coppel, J. (2000). E-Commerce: Impacts and Policy Challenges. *OECD Economics Department Working Papers*, *252*, 1–26. http://ideas.repec.org/p/oec/ecoaaa/252-en.html
- Darmawan, A. K., Siahaan, D. O., Susanto, T. D., Hoiriyah, Umam, B. A., & Bakir, B. (2020).

 Understanding Indonesian Citizen's Continuance Intention to Use Mobile-based Smart

 City: A Perspective of Modified Expectation Confirmation Model (M-ECM). 7th

- International Conference on Information Technology, Computer, and Electrical Engineering, ICITACEE 2020 Proceedings, 115–120. https://doi.org/10.1109/ICITACEE50144.2020.9239157
- Datareportal. (2021). Data Reportal. https://datareportal.com/
- Davis, F. D. (1993). An exploration of primary school students' perceived learning practices and associated self-efficacies regarding mobile-assisted seamless science learning. In *International Journal of Science Education* (Vol. 41, Issue 18, pp. 2675–2695). https://doi.org/10.1080/09500693.2019.1693081
- Fornell, C., & Larcker, D. F. (2016). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research This*, 18(1), 39–50.
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services. *Omega*, *32*(6), 407–424. https://doi.org/10.1016/j.omega.2004.01.006
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382
- Hong, S., Thong, J. Y. L., & Tam, K. Y. (2006). Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet. *Decision Support Systems*, 42(3), 1819–1834. https://doi.org/https://doi.org/10.1016/j.dss.2006.03.009
- Joo, Y. J., Park, S., & Shin, E. K. (2017). Students' expectation, satisfaction, and continuance intention to use digital textbooks. *Computers in Human Behavior*, *69*, 83–90. https://doi.org/10.1016/j.chb.2016.12.025
- Kim, M. (2019). Export competitiveness of India's textiles and clothing sector in the United States. *Economies*, 7(2). https://doi.org/10.3390/economies7020047
- Koszewska, M. (2018). Circular Economy Challenges for the Textile and Clothing Industry. Autex Research Journal, 18(4), 337–347. https://doi.org/10.1515/aut-2018-0023
- Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205–223.
- Lee, J., Kim, J., & Moon, J. Y. (2000). What makes internet users visit cyber stores again? Key design factors for customer loyalty. *Conference on Human Factors in Computing Systems Proceedings*, 2(1), 305–312. https://doi.org/10.1145/332040.332448
- Lee, M. C. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation-confirmation model. *Computers and Education*, *54*(2), 506–516. https://doi.org/10.1016/j.compedu.2009.092

- Lin, C. S., Wu, S., & Tsai, R. J. (2005). Integrating perceived playfulness into expectation-confirmation model for web portal context. *Information & Management*, *42*(5), 683–693. https://doi.org/https://doi.org/10.1016/j.im.2004.04.003
- Lowry, P. B., Gaskin, J. E., Twyman, N. W., Hammer, B., & Roberts, T. L. (2013). Taking "fun and games" seriously: Proposing the hedonic-motivation system adoption model (HMSAM). *Journal of the Association for Information Systems*, *14*(11), 617–671. https://doi.org/10.17705/1jais.00347
- Mohamed, N., Hussein, R., Zamzuri, N. H. A., & Haghshenas, H. (2014). Insights into individual's online shopping continuance intention. *Industrial Management and Data Systems*, 114(9), 1453–1476. https://doi.org/10.1108/IMDS-07-2014-0201
- Odusanya, K., Aluko, O., & Lal, B. (2020). Building Consumers' Trust in Electronic Retail Platforms in the Sub-Saharan Context: an exploratory study on Drivers and Impact on Continuance Intention. *Information Systems Frontiers*, 2016. https://doi.org/10.1007/s10796-020-10043-2
- Okoli, C., & Mbarika, V. A. W. (2003). A framework for assessing e-commerce in sub-saharan africa. *Journal of Global Information Technology Management*, *6*(3), 44–66. https://doi.org/10.1080/1097198X.2003.10856355
- Oliver, R. L. (1977). Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation. *Journal of Applied Psychology*, *62*(4), 480–486. https://doi.org/10.1037/0021-9010.62.4.480
- Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, *17*(4), 460–469. https://doi.org/10.1177/002224378001700405
- Olubunmi, F., & Adeyemi, R. (2018). Determinants of Continuance Intention. *Journal of Internet Banking and Commerce*, *April 2020*.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275
- Pereira, R., & Tam, C. (2021). Impact of enjoyment on the usage continuance intention of video-on-demand services. *Information and Management*, *58*(7). https://doi.org/10.1016/j.im.2021.103501
- Persada, S. F., Miraja, B. A., Nadlifatin, R., Belgiawan, P. F., Perwira Redi, A. A. N., & Lin, S. C. (2021). Determinants of Students' Intention to Continue Using Online Private Tutoring: An Expectation-Confirmation Model (ECM) Approach. *Technology, Knowledge and Learning*, 0123456789. https://doi.org/10.1007/s10758-021-09548-9
- Prasetya, F. H., Harnadi, B., Widiantoro, A. D., & Nugroho, A. C. (2021). Extending ECM with Quality Factors to Investigate Continuance Intention to Use E-learning. 2021 6th

- International Conference on Informatics and Computing, ICIC 2021. https://doi.org/10.1109/ICIC54025.2021.9632995
- Shetty, S., & Pai, R. (2021). *Impact Of Covid-19 On Online Shopping-A Case Study. May*, 9–15. https://doi.org/10.36713/epra0414
- Shiau, W. L., Huang, L. C., & Shih, C. H. (2011). Understanding continuance intention of blog users: A perspective of flow and expectation confirmation theory. *Journal of Convergence Information Technology*, *6*(4), 306–317. https://doi.org/10.4156/jcit.vol6.issue4.33
- Statista. (2021). Statista. https://www.statista.com/
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. Computational Statistics & Data Analysis, 48(1), 159–205. https://doi.org/https://doi.org/10.1016/j.csda.2004.03.005