

# Consumer acceptance of apparel e-commerce–Ethiopia

Nagender Singh<sup>a</sup>, Manisha Yadav<sup>a</sup>, Omprakash Sahu<sup>b,\*</sup>

<sup>a</sup>Apparel Production, Ethiopian Institute of Textile and Fashion Technology EiTEX, Bahir Dar University, Ethiopia

<sup>b</sup>School of Chemical and Food Engineering, BiT bahir Dar University Ethiopia, Ethiopia

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## Abstract

In Ethiopia e-commerce for apparel products is growing by leaps and bounds among customers. It plays a significant role in the development and economic growth of country. Moreover, many companies are more active in focusing on online trade. It is very important to focus on the consumer acceptance towards e-commerce for apparel. According to famous researches consumer acceptance is one important ingredient for the companies to be successful and profitable. An investigation has been made to identify the key factors related to acceptance of e-commerce for apparel products in Ethiopia. An online survey has been used for this research to obtain the feedback from the customers all around Ethiopia; their feedback/response has been assessed using statistical analysis techniques. The results revealed that the inability to physically interact with an item, fear of risk security and privacy and lack of e-commerce infrastructure are the main barriers that prevent the consumers from online apparel product shopping. Acceptance levels are likely to be influenced by offering infrastructure like encouraging the use of Information and Communication Technology (ICT), improving the level of information on clothing sizes and fit on product web pages, trailing different checkout processes and different levels of information on product web pages, adding customer ratings and reviews to the website, offering free returns, providing virtual fitting, robotic mannequin which can adopt their precise, individual body shape and Substantial changes have been identified in this work to broaden the acceptance of e-commerce for apparel in Ethiopia.

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*Keywords:* E-commerce; Consumer acceptance; ICT; Robotic mannequin.

## 1. Introduction

Over the last years it has been notice an increase of e-commerce in Ethiopia. Consumers are more and more attracted by online shopping due to its convenience in terms of times, price flexibility and availability of varieties of product and product range on a single platform (Ferri, Grifoni, & Guzzo, 2008). The outlook for e-commerce depends on consumer acceptance of the use internet technologies. Consumer acceptance in

\* Corresponding author: Tel.: +251 940209034/933520653.

E-mail address: [ops0121@gmail.com](mailto:ops0121@gmail.com) (O. Sahu).

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terms of trust is considered to be important when using new technologies, including the web and e-commerce (Windham & Orton, 2000). Nowadays ways of doing things usually create uncertainty among consumers. Trust is generally an important factor which plays a crucial role in acceptance of online purchase. An often mentioned reason for consumers' not purchasing from online is the lack of trust (Petrovic, Ksela, Fallenbock, & Kittl, 2003). Thus, for consumer acceptance of online shopping, there is need of promoting trust and confidence on the use of e-commerce. Security, privacy issues and lack of e-commerce infrastructure are seen as main barriers to shopping online (Windham & Orton, 2000). The anonymity and lack of physical interactions distance are the potential risk in e-commerce (Cazier, Shao, & St. Louis, 2006). In the offline environment many elements of personal interaction are used, for example, gesture and body language, facial expression, are not applicable in an online environment (Grabner-Krauter & Kaluscha, 2003). Many consumers appreciate the real shopping experience of physically trying on and touching the items. So, in order to understand why consumers are not engage in e-commerce activities, it is vital to study the methods which improve consumer acceptance of apparel e-commerce (Cazier, Shao, & St. Louis, 2006).

E-commerce is an outcome of Information and Communications Technology (ICT) revolution in economic fields or the most suitable way of contribution to economic growth. A common definition of e-commerce is to provide trade processes through transaction of goods and services and data interchange, via computer networks such as the Internet (UNCTAD 2010, Tsai, Huang, & Lin, 2004). The contexts for e-commerce are both commercial (e.g., e-tailing and e-banking) and non-commercial (e.g., e-government and e-health). E-commerce offer the promise of increased convenience, lower transacting costs, increased consumer choices, price flexibility and greater accessibility by eliminating space and time constraints (De Ruyter, Wetzels, & Kleijnen, 2001).

Despite all the facts, uncertainty and fears of opportunism still characterize the online context, and varying degrees of consumer acceptance and engagement in the use of e-commerce have been observed (Harridge-March, 2006). This research study describes the factors important for development of e-commerce acceptance by individual consumers. The purpose of this research study is to determine appropriate measures for the acceptance apparel online purchasing by consumers.

This study provides government, e-retailers and website developers with a framework for which areas they need to focus upon when launching new online products, making their website user friendly, and improving the perceived usefulness of the technologies that allow consumers to access their products online and encouraging the use of information and communication technology.

## 2. Literature review

E-commerce involves business communication and transmission over networks and through computers, specifically the buying and selling of products and services, and the transaction of funds through digital communications. E-commerce is a way to do business in particular markets and for selected customers, which can increase sales volume, lower cost or provide more real-time information to customers (Hutt & Speh, 2004). The users do not even have to go outside the door. Many customers seek information online and make their purchase offline (Slevin, 2000).

Indirect and direct are the two types of e-commerce i.e. Indirect e-commerce is when a consumer orders a product online, pay through an invoice or by cash on delivery and received the product in a traditional way. Direct e-commerce is when the consumer orders, pays and also gets the digitalized product, such a games, music and services delivered online (SOU-Statens Offentliga Utredningar 1999). Other types of e-commerce, which are more known, are: B2C (Business-to-Consumer), B2B (Business-to-Business), C2C (Consumer-to-Consumer), B2G (Business-to-Government), C2B (Consumer-to-Business) and M-Commerce (mobile commerce) (WikiBooks, 2006). In this research we have chosen B2C e-commerce for the study of consumer acceptance (Hutt & Speh, 2004). Electronic commerce acceptance is broadly described as the consumer's engagement in buying and selling of goods and services and electronic exchange relationships with e-retailers. Hence, online transactions can be viewed as specimen of interactive marketing communications (Pavlou & Stewart, 2000). Consumer's acceptance is depends on trust of consumer on e-commerce, which is a defining factor of social interactions and economic in which uncertainty is present. Practically all interactions require a trust element, particularly those conducted in the uncertain environment of e-commerce (Ba & Pavlou, 2002). Trust has long been regarded as a catalyst in consumer-retailers relationships because it provides expectations of successful transactions (Schurr & Ozanne,

1985). For instance, trust has always been an important component in influencing levels consumer acceptance and has been highly significance in uncertain environments of e-commerce, such as the Internet-based e-commerce context (Gefen & Straub, 2002). Lack of trust has been recommended as one of the main reasons for consumers not engaging in online shopping. Thus one may reasonably claim that the importance of trust has been elevated in e-commerce acceptance because of the high degree of apprehension present in most online transactions (Fung & Lee, 1999).

ICT, as a tool of socio-economic development, is a notable matter for developing countries. During the past decade, ICTs have become important part of poverty reduction strategies and development plan of developing countries (UNCTAD 2010). The success and growth of e-commerce, depends on efficient telecommunication facility, ICT infrastructure, secure electronic payment system, automated financial network and efficient regulation. For the effective deployment of ecommerce, it is necessary to have a reliable and cost effective infrastructure that can be accessible to the majority of the population.

Nowadays, information communication technology is one of the most decisive factors to achieve, economic development. Information and communication technologies can be an extremely powerful enabler to bring sustainable and positive socio economic and political development to countries around the globe. Information communication technologies facilitate the delivery of basic social services: health, education, agricultural extension services, and good governance. Conducting old businesses in new ways and embracing new business opportunities has now become part of any economic transformation (Admassie & Taye, 2007). ICT has become an integral part of Ethiopia's development programs over the last decade. The country faces a substantial gap between interest in the ICTs and regulatory instruments and the policy available to enable economic development of country. ICT is one of the major elements of Plan for Accelerated and Sustainable Development to End Poverty that runs between 2005 and 2010 (Federal Negarit Gazeta, 2010, Government of Ethiopian Federal Democratic Republic, 2010).

### 3. Research methodology

The aim of research was to get a better understanding of consumer acceptance in apparel e-commerce in Ethiopia and to find out the factors that are vital for establishing consumer acceptance in apparel e-commerce, as well as investigate how important certain factors are applicable for consumer acceptance of online purchase. In order to find relevant consumer acceptance establishing factors, reviewed and searched literature on consumers acceptance of apparel e-commerce in Ethiopia. The factors that were found to be relevant, guided our statistical research. Conducting an online survey, in form of a questionnaire, which seemed like the most suitable strategy, to be able to get a bigger picture of consumer opinions in the matter. We have used two data collection methods namely: Secondary Data and Primary Data collection methods. Different sources of secondary data such as books, publication, articles and internet has been used to mainly searched literature related to this topic. Primary data have been collected via online questionnaires. (<https://docs.google.com/forms>). The purpose with the questionnaire was to obtain the feedback from the customers all around Ethiopia. The questions in the questionnaire have been based on the searched literature review. The collected feedback/responses has been assessed using statistical analysis techniques; by using the software program SPSS and Microsoft Excel.

Different types of questions have been included in the questionnaire. According to Saunders et al. (2007), there are different kinds of questions to use, depending on data requirement. The first six questions have been background questions, where question number 1 and 2 based on data collected about gender and age, which are attribute variables. And rest main questions; have been used to collect consumer opinion to highlights the different factors which lively to influence the level of consumer acceptance of apparel e-commerce in Ethiopia.

### 4. Data analysis and results

The respondents of this paper were 127 people in Ethiopia. The online questionnaires (<https://docs.google.com/forms>) have been used for data collection.

#### Questionnaire data

First six questions served as background questions, asked to get information about the respondent's gender, age, experience of online shopping, hours spend on internet a day and trust & attitude towards online purchase through SPSS descriptive statistics.

Table 1  
What is your gender?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Female	37	29.1	29.1	29.1
	Male	90	70.9	70.9	100.0
	Total	127	100.0	100.0	

Table 2  
What is your age?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	16–20	22	17.3	17.3	17.3
	21–30	45	35.4	35.4	52.8
	31–40	28	22.0	22.0	74.8
	40+	32	25.2	25.2	100.0
	Total	127	100.0	100.0	

Table 3  
How many hours do you spend on the internet a day?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1–2 h	30	23.6	23.6	23.6
	3–4 h	36	28.3	28.3	52.0
	5–6 h	29	22.8	22.8	74.8
	More than 6 h	32	25.2	25.2	100.0
	Total	127	100.0	100.0	

#### 1. What is your gender?

Table 1 shows the descriptive statistics of respondents' gender characteristics.

As shown in Table 1, the majority of male respondents, 70.9% compared to 29.1 female respondents. The reason might be because we tried to ask people that did not seem to be in a hurry, both men and women, and the male respondents were more willing to take a minute to fill out the questionnaire.

#### 2. What is your age?

Table 2 shows the descriptive statistics of respondents' age groups.

As shown in Table 2, the 35.4% respondents lie in the age group 21–30 and 17.3% respondents lie in age group 16–20. The reason could be the younger people may not have understanding about e-commerce and they use internet only for entertainment. However people lie in the group 21–30 have knowledge and experience of the internet and e-commerce.

#### 3. How many hours do you spend on the internet a day?

Table 3 shows the descriptive statistics of respondents' when asked hours spend on the internet a day.

As seen in Table 3, Majority of respondents lie 3–4 Hours a day, 28.3 as compared to other Hours intervals. This might be because less and expensive availability of Internet and less awareness towards the use of Information and Communication Technology (ICT).

#### 4. How often do you purchase apparel clothing online?

Table 4 shows the descriptive statistics of respondents' purchase behaviour.

A majority of respondents, 40.9%, have no experience of online shopping. And 40.2% of people purchase on a yearly basis and only 6.3% purchase apparel clothing online one in a month.

Table 4  
How offend do you purchase fashion clothing online?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Never	52	40.9	40.9	40.9
	Once in a month	8	6.3	6.3	47.2
	Once in year	51	40.2	40.2	87.4
	Twice in 2 month or 3 month	16	12.6	12.6	100.0
	Total	127	100.0	100.0	

Table 5  
Do you trust online fashion shopping?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Don't have much idea	37	29.1	29.1	29.1
	I am confident enough	25	19.7	19.7	48.8
	Kind of, but I keep being careful	49	38.6	38.6	87.4
	Not at all	16	12.6	12.6	100.0
	Total	127	100.0	100.0	

Table 6  
Why do you prefer online shopping for fashion clothing?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Availability of varieties of products and product range	35	27.6	27.6	27.6
	Price flexibility	32	25.2	25.2	52.8
	Saves time, Convenient and Flexible	44	34.6	34.6	87.4
	Security	16	12.6	12.6	100.0
	Total	127	100.0	100.0	

5. Do you trust online apparel shopping?

Table 5 shows the descriptive statistics of respondents' trust factors.

When asked about trust on online apparel shopping majority of respondents, 38.6% have kind of trust on shopping online and 29.1% respondents don't have much idea about online shopping. 19.7% people have trust on online shopping; the reason might be proper knowledge of e-commerce and its benefits.

6. Why do you prefer online shopping for apparel clothing?

Table 6 shows the descriptive statistics of respondents' preference attitude towards online shopping for clothing. The results seen in Table 6, shows that majority of respondents prefer online shopping for clothing because it saves time, convenient and flexible, 34.6%. And 27.6% people prefer because of availability of varieties of products and product range.

7. If you do not purchase apparel clothing online why? (Choose as many as applicable)

Fig. 1 shows, the graphical representation of respondents' feedback towards online apparel clothing purchase behavior.

It is seen in Fig. 1, 55.6% respondents believe that the inability to physically interact with an item is the main barrier that prevents consumers from shopping for apparel online. A majority of people (47.6%) also accepted that if they do not purchase apparel clothing online because of lack of e-commerce availability in the country.

8. Is Ethiopia having good e-commerce infrastructure?

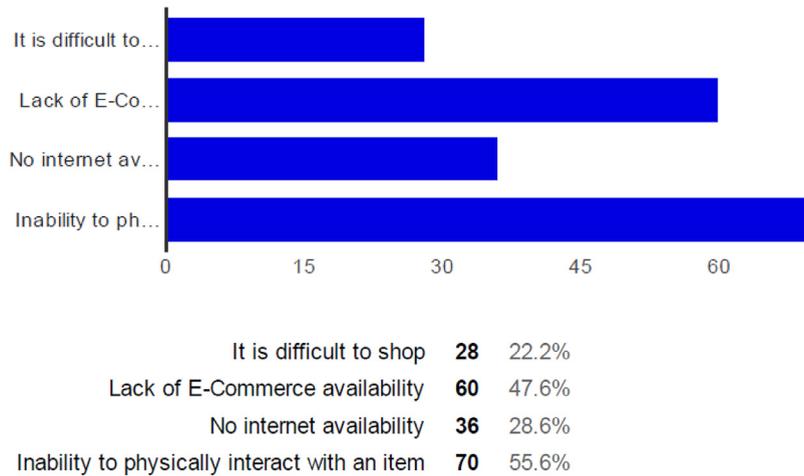


Fig. 1. Shows, the graphical representation of respondents’ feedback towards online apparel clothing purchase behavior.

Table 7  
Is Ethiopia having good e-commerce infrastructure?

		Frequency	Percent	Valid percent	Cumulative percent
Valid	No	92	72.4	72.4	72.4
	Yes	35	27.6	27.6	100.0
	Total	127	100.0	100.0	



Fig. 2. Shows, the graphical representation of respondents’ opinion for effective methods of influencing the acceptance level of e-commerce in Ethiopia.

Table 7 shows the descriptive statistics of respondents’ opinion about the e-commerce infrastructure in Ethiopia. As shown in Table 7, majority of respondents have the opinion that Ethiopia don’t have good e-commerce infrastructure, 72.4%. And 27.6% people respond that Ethiopia have good e-commerce infrastructure.

9. In your opinion, what would be the effective methods of influencing the acceptance level of e-commerce in Ethiopia? (Choose as many as applicable)

Fig. 2 shows, the graphical representation of respondents’ opinion for effective methods of influencing the acceptance level of e-commerce in Ethiopia.

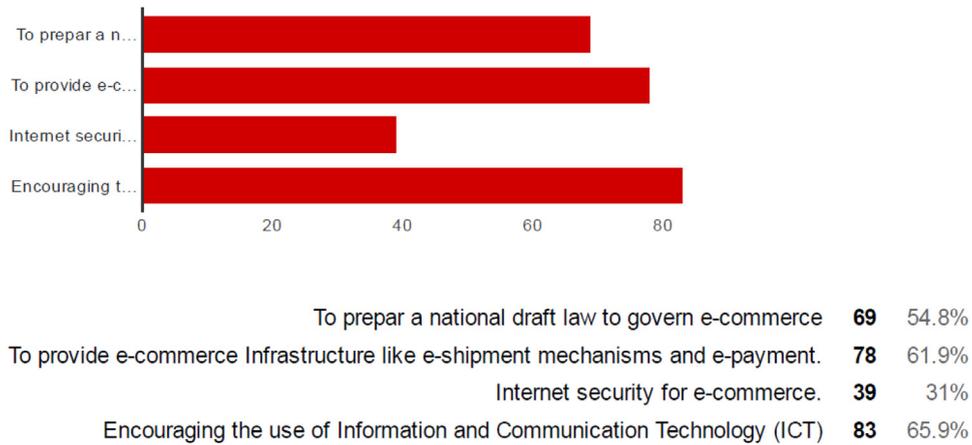


Fig. 3. Shows, the graphical representation of respondents’ opinion, what government has to do to enhance apparel e-commerce.

As per the graphical representation of respondents’ majority (65.9%) of respondents suggest that improving the level of information on clothing sizes and fits on product web pages has an effective method of influencing the acceptance level of e-commerce in Ethiopia because as per Fig. 1, 55.6% respondents believe that the inability to physically interact with an item is the main barrier that prevents consumers from online shopping. This can be improved by enhancing the level of information on clothing sizes and fit on product web pages. Adding customer ratings and review to the website and offering free returns has been responded by 46% and 47.6% of people because this could help to improve the level of customer acceptance. Lack of physical interaction in the online environment of e-commerce, make it more difficult to establish level of acceptance with the consumers.

In addition to this, an e-commerce website should include timely and complete and accurate information about products on the product page, services, purchase policies and procedures of the digital companies.

10. In your opinion, what government has to do to enhance apparel e-commerce? (Choose as many as applicable)

Fig. 3 shows, the graphical representation of respondents’ opinion, what government has to do to enhance apparel e-commerce.

The result of this figure shows that 65.9% respondent believe that government should encouraging the use of information and communication technology (ICT) and 61.9% respondent believe that to provide e-commerce infrastructure like e-shipment mechanisms and e-payment could be helpful to improve and enhance apparel e-commerce. The ministry of communication and information technology, Ethiopia should prepare a national draft law to govern electronic commerce as 54.8% respondents believe that to prepare a national draft law to properly govern e-commerce in country could be the solution to improve the level of consumer’s acceptance of e-commerce in Ethiopia.

**5. Conclusion**

The online survey of people in Ethiopia revealed several interesting facts about respondents and the nature of apparel e-commerce. This study shows that Ethiopia doesn’t have significant and effective e-commerce platforms and Information and Communication Technology (ICT). The risk in e-commerce is greater because of lack of physical interaction. Physical interaction in the traditional shopping environment, such as the appearance of the store and the direct contact with sales persons that affect consumer sense of acceptance, are absent in the online environment, make it more difficult to improve consumer acceptance of e-commerce. Therefore, it is important to find factors that help to establish consumer acceptance in e-commerce. This study conclude that levels of consumer acceptance in e-commerce are likely to be improved by providing level of information on clothing sizes and fit on

product web pages, trailing different checkout processes and different levels of information on product web pages, adding customer ratings and reviews to the website, offering free returns. Based on these findings, we argued that Ethiopian e-commerce web sites that pose such characteristics will be considered as acceptance of web sites from consumer point of view. For the enhancement of e-commerce in Ethiopia, government has to prepare draft law to govern e-commerce, encouraging the use of information and communication technology (ICT) and provide e-commerce infrastructure like e-shipment mechanisms and e-payment. A finding of this research study provides useful guidance for future e-commerce researchers, businesses and website developers.

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