
FACTORS AFFECTING ONLINE PURCHASING BEHAVIOUR IN SRI LANKA: WITH SPECIAL REFERENCE TO ALI-EXPRESS CONSUMERS IN MATARA DISTRICT

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ABSTRACT

With the growth of technologies, online buying behavior has shown significant growth across the world during the last decade. More and more customers are switching to online buying due to 'their increased convenience. Development in information communications technologies has also positively contributed to this growth. With the increased information communications technology infrastructure and buying power in recent years, Sri Lankan consumers too increasingly use the internet to purchase products. Despite the importance of the industry with large potential, there is a lack of contextualized studies in the area. The study was conducted as a survey where questionnaires were distributed among 150 customers who used the Ali Express website. The questionnaire was developed to measure respondent attitudes on 4 independent variables and one dependent variable. The sample was selected using a purposive sampling technique to select customers who have already made purchases online through Ali express website. Multiple regressions were used to analyze the data. The study found out that Interface quality, product information quality, site awareness, and security perceptions were exerting significant effects on the online purchasing behavior of customers, out of which product information quality was the most significant contributor. The study could not comment on the impact of service information quality, since the variable was not significant. The study contributes to an area that is relatively understudied but at the same time exhibits potential for explosive growth.

Keywords: *interface quality, online purchasing behavior, product information quality, security perceptions, service information quality, site awareness*

1. INTRODUCTION

There has been rapid growth in the telecommunications sector as a result of the policies adopted by the successive Sri Lankan governments especially after 1978. Especially mobile communication spread around the whole island. Due to the positive attitude of the mobile telecommunication partners, they are improving their network facility in Whole Island (Prasad, 2011). However, these positive foundations improve and popular online businesses around the country (Athapaththu & Kulathunga, 2018). Due to that reason, all the sectors in Sri Lanka able to engage with e-commerce in the last few years.

Sri Lanka has fast development in information and communication technology and it has greatly contributed to enhancing human living standards. Sri Lanka after 1998 It has shown growth in accessing the internet and email in rural and urban areas. Now, as a developing country, Sri Lanka's e-commerce is in the developing stage (Aboobucker, 2019; Athapaththu & Kulathunga, 2018). As well as can be identified an increase in buying goods and services using online (Athapaththu & Kulathunga, 2018). But there is a gap between Sri Lanka and other countries in the world online buying (Internet World Stats). In general people in the Matara District, mainly do not do online buying, but there is an increase in online buying in Matara district. (Department of Census and Statistics Sri Lanka, 2017). But there is no study about influencing factors of online buying behavior in the Matara district. Therefore, the research problem is identifying what are the factors influencing online buying behavior in Sri Lanka. And the researcher decided to narrow down the research area around identifying factors affecting the online buying behavior of Ali-express consumers in the Matara district.

2. LITERATURE REVIEW

2.1. Factors affecting online buying behaviour

2.1.1. User Interface Quality

The independent variable user interface quality consists of the following components such as quality of the System layout, easy navigation sequence, and ability to simple browsing experience (Spiller & Lohse, 1997; Szymanski & Hise, 2000). Simply it is means Customer perception of the degree to comfortable and user-friendliness in using a Web site system. (Aggarwal, 2020). most of the online stores are a failure in the market due to the poor design. So, the marketers should understand the reliable layout types to the different online markets and organizational, searching, and navigation sequences on buying behavior. (Kadir, Nor, & Saaid, 2020; Lohse & Spiller, 1998).

2.1.2. Product Information Quality

This variable consists of the consumers' recommendations, collecting consumer's evaluation form and information on the product specifications. The

relevancy, sufficiency, playfulness, consistency, and understandability. The relevancy, sufficiency, playfulness, consistency, and understandability use to measure the quality of this variable (Aggarwal, 2020; Wang & Strong, 1996; Moon & Kim, 2001). As the product information display on the organization's online site, it enhances the consumers' product searching option and increases customer service. Providing updated information, easy and understandable content, information that persuades the consumer to buy online able to satisfy the consumer's needs relevant to the information. (Kadir, Nor, & Saaid, 2020; Wang & Strong, 1996; Zhang, Keeling, & Paur, 2000). Customer perception of the quality of information about a product that is provided by a Web site (relevancy, sufficiency, understandability, consistency, playfulness) is also called product information quality. (Aggarwal, 2020; Park & Kim, 2003).

2.1.3. Service Information Quality

In this variable, we can see the information regarding the membership, information relevant to the order, information on the delivery, and information of the promotion activities. By using the following components such as relevancy, sufficiency, playfulness, consistency, and understandability, the service quality can be measured (Kadir, Nor, & Saaid, 2020). (DeLone & McLean, 1992; Wang & Strong, 1996; Moon & Kim, 2001). And also, we can call the service information quality as Customer perception of the quality of information about service that is provided by the Web site (relevancy, sufficiency, understandability, consistency, playfulness) (Park & Kim, 2003).

2.1.4. Site Awareness

This independent variable mainly consists of the type and the description of the organization, organization image in the online market, the reputation of the organization, and the organization's awareness (Zeithaml & Bitner, 1997). Site awareness is improved due to the consumers' experience when they spend more time with the online organization and do more transactions (Chi, 2018). And also, online organizations provide their advertising and promotional events to the public. Through that organizations can increase new consumers and keep the existing consumers (Anderson & Lindestad, 1998). The capacity of consumers to recognize or review that an online store could be a part of a certain procedure. (Park & Kim, 2003).

2.1.5. Security Perception

The important factor in the online platform is security. As consumers, they pay considerable attention to the online transaction, or the online payment security, reliability of the store, privacy policies of each online store (Chi, 2018; Gefen, 2000). So, we can see how security is important when considering online buying. So, these factors are essential to improve our market size in a competitive online platform (Aggarwal, 2020). Due to the constraints like privacy issues and security concerns, consumers are not willing to online buying. Udo (2001)

mentioned that” there is an important and close relationship between security and privacy policy”. Mainly the security means that consumers revealed data to the organization will not be exchanged with any unknown third parties (e.g. Hacker and identify thief) and Salim (2000) as the organization they have to protect not only from the outside third parties but also from the inside organization employees. However, the critical task is to identify the hackers inside the organization. Consumers mainly consider, how the online store is controlling reliability and protect the consumers’ important data (Chi, 2018). Because consumers are highly considered about the online transaction data (credit or debit card information). They think that their data can be stealing or use by an unknown party in a harmful way (Park & Kim, 2003).

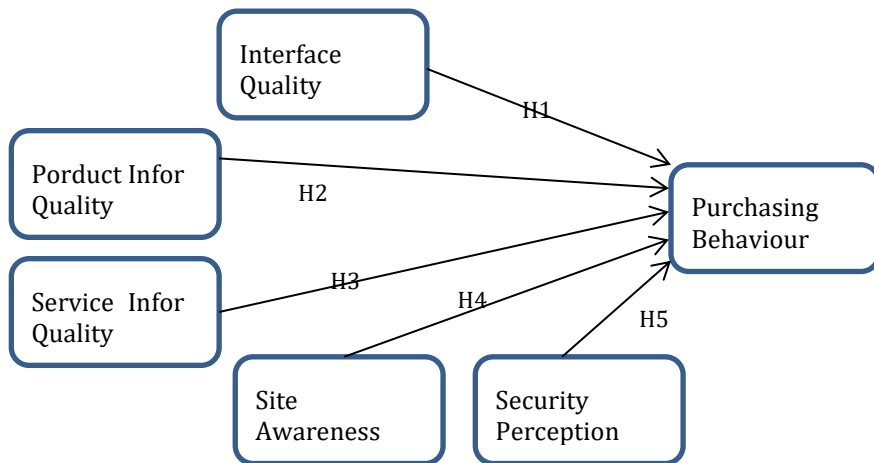


Figure 1: Conceptual framework

3. METHODOLOGY

The study was quantitative in nature and was conducted as a survey. Data was collected using a questionnaire that consisted of 27 attitudinal statements covering 6 variables. Figure 1 depicts the conceptual framework of the study. Those attitudinal statements were anchored on 5 points on a scale ranging from strongly agree to strongly disagree. Table 1 provides the operationalization of variables. The sample consisted of 150 Ali-express buyers who were selected using purposive sampling. Data was collected by distributing questionnaires online.

Table 1: Independent variables

Variable	Question Code	Indicators	Sources
User interface quality	U1	1. convenient to search	
	U2	2. convenient to order	
	U3	3. easy to navigate wanted pages	

	U4	4. user friendly	
Product information quality	P1	1. up-to-date product information	
	P2	2. sufficient product information	
	P3	3. easy to understand	
	P4	4. consistent information	
	P5	5. playful information	
	P6	6. relevant information	
Service information quality	S1	1. up-to-date service information	
	S2	2. sufficient service information	
	S3	3. easy to understand	
	S4	4. consistent information	Park & Kim, 2003
	S5	5. playful information	
	S6	6. relevant information	
Site awareness	SA1	1. Neighbors know this site very well	
	SA2	2. This site is very famous as an Internet buying store	
	SA3	3. This site is known through the advertising media (TV, newspaper, Internet, etc.)	
Security perception	SP1	1. private information is managed securely	
	SP2		
	SP3	2. payment information will be protected	
	SP4	3. detailed information about security	Park & Kim, 2003
Online Purchasing behavior	O1	1. Do my online shopping with this site in the future.	
	O2		
	O3	2. continuously purchase at this site	
	O4	3. recommend this site	
		4. visit this site first when I want to buy	

3.1. Reliability Test

Table 2: Reliability Test (Cronbach's Alpha)

Constructs	Number of Items	Cronbach's Alpha
User interface quality	4	0.841
Product information quality	6	0.876
service information quality	6	0.856

Site awareness	3	0.705
Security perception	4	0.771
Online buying behavior	4	0.723

Source: Survey Data, 2020

The researcher has utilized Cronbach's Alpha method to test the internal consistency. All the six constructs were tested for the internal reliability analyzing Cronbach's Alpha Value. According to Table 2, Cronbach's alpha for all constructs is above 0.7, which indicating that the measurement scales for these constructs were stable and consistent. Cronbach's Alpha value present in the study is above the required value of ≤ 0.7 (Hair, et.al 1995).

4. DATA ANALYSIS

4.1. Pearson Correlation Analysis

The main objective is to identify factors affecting the online buying behavior of Ali-express consumers in the Matara district. To examine that researcher performed Pearson's Correlation analysis for each indicator which affected to decide the online buying behavior. "Pearson's Correlation Coefficient is to measure the linear relationship through strength and direction between two variables" (McDaniel, 2012). Here, correlation analysis was run to find the relationship between independent and dependent variables.

Table 3: Correlations

	User	Product	Service	Site	VIF
User interface quality					4.938
Product information quality	.847***				4.068
service information quality	.518**	.464**			1.384
Site awareness	.541**	.499**	.335**		1.475
Security perception	.842**	.817**	.477**	.543**	4.101

Source: Survey Data, 2020

As far as correlation between individual variables are concerned, it is evident that correlations range from 0.335 (between service information quality and site awareness) to 0.847 (between product information quality and user information quality). Since three inter variables correlations were above 0.8 (i.e between, service information quality and site awareness, Security perception & user interface quality and security perceptions and product information

quality), the study decided to conduct a VIF analysis in order to check whether there are threats from multicollinearity to the model.

Through the Multi-collinearity concept, we can further understand how the independent variables are correlated among each other within the model. This multicollinearity should appropriately be measured, and for that purpose, we use the Variance Inflation Factors (VIF). According to Table 3, the VIF values for all independent variables are below 5.0, which is the conservative estimate (Ringle, Wende, & Jan-Michael, 2015), and well below the maximum level of 10 (Hair et al., 1995). So, we can conclude that there are no threats from multicollinearity to the model.

4.2. Multiple Regression Analysis

Multiple regression analysis was used in this research as an inferential analysis statistical tool to test the hypotheses which analyse the linear relationships between a dependent variable and the multiple independent variables by estimating coefficients for the equation for a straight line.” (McDaniel, 2012)

Table 4: Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876 ^a	.767	.759	.22829

a. Predictors: (Constant), security, service, site, product, User
Source: Survey Data, 2020

Above Table 4, R-Square is 0.767 which indicated 76.7% of the variances in online buying behavior explained by user interface quality, product information quality, service information quality, site awareness, and security perception. However, 23.3% of the variances in online buying behavior are explained by unknown factors.

Table 5, ANOVA shows that the F-ratio value of 94.687 and table 6, shows the contribution provided by each independent variable in explaining the change in the dependent variable along with the significance values. Accordingly, we can conclude that there is a statistically significant difference between the dependent variable (online buying behavior) and independent variables (user interface quality, product information quality, site awareness, and security perception). Out of which product information quality contributing to the most (B = 0.391, p=0.000).

Table 5: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	24.673	5	4.935	94.687	.000 ^b
Residual	7.504	144	.052		
Total	32.177	149			

a. Dependent Variable: online b. Predictors: (Constant), security, service, site, product, user

Source: Survey data, 2020

Table 6: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	.586	.163		3.600	.000		
User	.173	.071	.219	2.451	.015	.203	4.938
product	.343	.071	.391	4.815	.000	.246	4.068
service	.030	.043	.032	.681	.497	.723	1.384
Site	.101	.037	.134	2.734	.007	.678	1.475
security	.168	.064	.212	2.605	.010	.244	4.101

a. Dependent Variable: online

Based on the results, the study decided to accept four hypotheses out of the five. Accepted four are namely, that there is a positive relationship between user interface quality and online buying behavior; there is a positive relationship between product information quality and online buying behavior; there is a positive relationship between site awareness and online buying behavior and finally, there is a positive relationship between security perception and online buying behavior.

Table 7: Summary of the hypotheses testing

Hypothesis	Result	Supported
H1 - There is a positive relationship between user interface quality and online buying behavior.	Beta=0.219 P = 0.000 < 0.05	Yes
H2 - There is a positive relationship between product information quality and online buying behavior.	Beta=0.391 P = 0.000 < 0.05	Yes
H3 - There is a positive relationship between service information quality and online buying behavior.	Beta=0.032 P = 0.000 > 0.05	No
H4 - There is a positive relationship between site awareness and online buying behavior.	Beta=0.134 P = 0.000 < 0.05	Yes
H5 - There is a positive relationship between security perception and online buying behavior.	Beta=0.212 P = 0.000 < 0.05	Yes

5. DISCUSSION OF MAJOR FINDINGS

According to the results, the Beta value of user interface quality is 0.219 with a 0.015 p-value. This indicates that user interface quality is influencing online buying behavior. So, many online buying organizations/customers prefer and willing to have a user interface quality during their online purchase transactions. Therefore, we can conclude that user interface quality necessarily affects customers' online buying behavior. The user interface quality variable mainly consists of the system layout, navigation sequence, convenience to search, and simple to browse (Hoon Park & Gul Kim, 2003). According to our generated results, we can conclude that the user interface quality directly influences online buying behavior. So, the marketers or businessmen who are willing to invest in an online platform should consider the user interface quality variable.

According to the results, product information quality has the highest Beta value (0.391) with 0.000 significant value among five independent variables. According to the mentioned results, we can see a positive and significant relationship between product information quality and online buying behavior.

Therefore, it is evident that online buying consumers are concerned about the quality of the given product information and those information generates a positive impact on buyers' tendency to purchase on the same platform. The product information quality consists of factors like product attribute information and consumer recommendations (Hoon Park & Gul Kim, 2003). As this variable has a positive and significant impact according to our results, the

marketers should focus their attention and work to improve the product information quality also within their websites if they want the customer to purchase more online.

Based on the results, service information quality has a beta value of 0.032 and the value is statistically insignificant. This kind of situation may occur due to the fact that service information during online buying generally tends to be low especially due to the presence of a large number of consumers. The service information quality consists of some other facts like consumer membership, ordering, delivering information, and marketing activities (Park & Kim, 2003). In the Ali-express, there is a premium account facility that costs some money from the consumer. As a result, some consumers may have not considered that feature. However, this may also have happened due to the limitations of the research including the small sample size and narrow focus in selecting the sample. Therefore, researchers recommend more research in these areas.

Site awareness has a 0.134 Beta value and is significant. This means, that site awareness and online buying behavior are significant and the relationship is positive. So these results prove that consumers with a favorable attitude towards online buying will have positive beliefs in on-site awareness. Site awareness consists of factors including, consumer's ability to recall the site, attract new customers, and keep existing customers (Hoon Park & Gul Kim, 2003). According to our interpreted results, site awareness is supported by online buying behavior. So, the online platform users should consider increasing site awareness among potential users.

According to the generated results, the Beta value of security perception is 0.212 and the results are significant. These results proved that the online consumers who engaging with online buying activities will have a significant concern regarding the security of the transactions. Security perception deals with security in online transactions, reliability, privacy policies, and web environment security (Hoon Park & Gul Kim, 2003). According to our results, online platform marketers or business organizations should consider customer perception of security seriously and should actively work to improve this since it can directly impact customer purchase behavior. The reason for the current study to record a comparatively low beta value for security perception may be due to the fact that the website in question was well known. Therefore, the importance of security perception may be even greater if you are dealing with a website that has a lower awareness among shoppers.

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