

# Online Shopping: A Global Perspective

Ather Akhlaq<sup>1</sup>, Professor Ejaz Ahmed<sup>2</sup>

<sup>1</sup>PhD Scholar, University of Edinburgh, UK / Senior Lecturer, Computer Science, Institute of Business Management, Karachi Pakistan

<sup>2</sup>Dean, Faculty of Computer Science, Institute of Business Management, Karachi, Pakistan

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## ABSTRACT

Technology has shortened distances between continents, countries, cities and people. People living in different parts of the world now have similar tastes, perceptions, styles and accessibility. Online shopping has opened the doors of globalization as it allows consumers to buy products from anywhere around the world. This research develops a global online shopping model that will help e-tailers / e-vendors to increase their customers worldwide. We used exploratory factor analysis and multiple regression modeling, to develop a model relating Intention as a dependent variable to the number of independent factors. Our study revealed that Perceived Enjoyment, Perceived Ease of Use and Perceived Risk are statistically significant factors. Other factors such as Legal Framework and Distrust were found statistically insignificant. A global online shopping model for e-tailers is required to address large number of diversified customers. The current study represents an important contribution to the theories of consumer acceptance of technology, helping researchers to know and understand various factors having multiple effects on the acceptance of global online shopping.

**KEYWORDS:** global online shopping; e-tailer; acceptance; e-commerce; consumers; TAM

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## 1. INTRODUCTION

Since internet browsing became a regular activity, individuals have changed their behavior [1]. Initially internet was developed as an information disseminating channel but now it has become an essential tool in multiple fields. Previous years witnessed the transformation of internet as an inventive technology into a routine conduit for the presentation of data and facts, sending and receiving emails and messages, and retailers converting into e-tailers. It is presumed that online /retail market would flourish with the increasing number of internet users [2]and provide opportunities to businesses. The global reach of the internet benefits consumers to buy goods and services of different varieties anywhere and at any location [3]. Consumer-oriented electronic commerce is becoming a global phenomenon as consumers worldwide are turning to internet for the purchase of goods and services[4]. However, the fastest growing retail channel 'internet' is still not the most common method for shopping online [5].

Consumers all around the globe shop online, but how they perceive and purchase products widely varies. Online transactions are widely accepted but few countries still lag behind [4]. In spite of the global growth of e-commerce, most of the consumer-oriented practices and models were developed for the Western markets [4]. If global e-commerce needs to reach its acme, it is important to determine significant factors responsible for a globally successful e-commerce business. E-tailers that are planning to go globally must know common attributes that affect consumers' perceptions of shopping online. This research would find common factors that are responsible to influence online consumers globally. We intend to develop a global model for online shopping that could be compared with the other regional models developed in the past, see for example [6-8]. Rarely could we find any global model that could cater the needs of multinational e-tailers. This research is a unique contribution especially for e-tailers who need to change their regional online shopping models into a global model in order to increase business by tapping unexplored markets. Better understanding of consumers' preferences of shopping online around the world would give valuable insights to both academia and business firms, to improve theories, products and services, and electronic storefronts.

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\*Corresponding Author: Ather Akhlaq, PhD Scholar, University of Edinburgh, UK / Senior Lecturer, Computer Science, Institute of Business Management, Karachi Pakistan.  
Email: [ather.akhlaq@ed.ac.uk](mailto:ather.akhlaq@ed.ac.uk) / [ather.akhlaq@iobm.edu.pk](mailto:ather.akhlaq@iobm.edu.pk)

## 1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Online retailing has become an alternative shopping channel in recent years [9]. Previous studies [10, 11] on online shopping experiences found that frequency of online purchases is positively related to online shopping tendency and negatively related to the probability to terminate an online transaction. It was found that online shoppers have positive feeling towards online shopping than do non-shoppers[10]. A study based in Singapore found that the main reason users purchase online is to buy things that were not available in Singapore[12]. Convenience and time savings are the most important reasons of shopping online whereas the biggest obstacle is website security/ privacy as reported in a New Zealand based study [13]. A comparative study between US and Irish students indicated that Irish students buy fewer items online but spend more buying these items than US students whereas US students are slightly more satisfied with their online purchases[14]. Indian youth considers online shopping websites for attributes such as product features, product comparison, pricing and retail information but felt more comfortable in making cash transactions, because online transactions are anticipated to be more insecure [15].

Intentions are equally as important as actions, as evident from the theory of planned behavior. Intentions are the strong predictors of forthcoming consequences [16]. There are many factors and contingencies such as product price, product type, quality, information availability and discount level that have influenced intention to purchase [17]. However, browsing the product initiates the purchasing process, which consecutively may lead to the purchase of a specific item [16]. Browsing through a range of products is considered as being a result of either an exploration-oriented or a goal oriented behavior [18]. Exploration-oriented behavior emphasizes on consumers that have no specific task to complete in purchasing an item whereas goal-oriented behavior is considered to be the main cause for consumers that have a specific product in mind and want to gather information of that particular product before making its purchase [19]. These general classifications can be found both on electronic and conventional stores [16]. However, with the availability of internet, the exploration-oriented behavior is heightened compared with the goal-oriented behavior, as internet provides users to browse and explore products and services conveniently and easily. Many studies [20-22] have investigated consumers' intentions in order to predict actual purchases.

Dowling and Staelin[23] defined the concept of perceived risk as "the consumer's perceptions of the uncertainty and adverse consequences of buying a product or service". Recent findings indicate that perceived risk towards the website / product affects purchasing intentions through cognition and affect-based attitudes [24]. Sharing personal information with people you don't know, have not met, or know little, increases the risk of buying products online [6, 25] showed negative relationship between perceived risk (PR) and intention to shop online. A cross-cultural study by Ko et al.[26] showed that both American and Korean internet users had a similar degree of perceived risk towards online shopping.

We now formulate our hypothesis.

Hypothesis 1

*H<sub>1</sub>*: Perceived Risk (PR) is negatively associated with consumer intention to shop online.

Davis et al.[27] proposed that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are two antecedents of Technology Acceptance Model (TAM). Akhlaq and Ahmed[6] showed that both PU and PEOU have positive influence on intention towards online buying. Consumers take it for granted that all information systems would be useful if they are easy to use [28, 29]. A study by Khare et al.[9] showed that Indian consumers' attitude towards online shopping being convenient is determined by their PU and PEOU attributes of the website. Other researchers [7, 30] also suggested that online shopping behavior is influenced by consumers' perception regarding PU and PEOU of online websites.

Hypothesis 2

*H<sub>2</sub>*: Perceived Usefulness (PU) is positively associated with consumer intention to shop online.

Hypothesis 3

*H<sub>3</sub>*: Perceived Ease of Use (PEOU) is positively associated with consumer intention to shop online.

Perceived Enjoyment (PE) is defined as the intrinsic motivation to use new technology [31]. Individuals enjoy using information technology and benefits from its use [32]. PE motivates consumers to shop online [6] whereas Al Maghrabi et al.[33] found that PU, PE and subjective norms are the determining factors of online shopping. Users who find pleasure while shopping, spends more time visiting the retailer and tend to choose the retailer for shopping [34].

**Hypothesis 4**

*H<sub>4</sub>*: Perceived Enjoyment (PE) is positively associated with consumer intention to shop online.

Cheung and Lee[35] refers Legal framework (LF) as “perceived effectiveness of the law and code of practice established to protect Internet shoppers during electronic transactions”. A better legal framework for online consumers would motivate them to go for online shopping [6]. Internet is a goldmine and could become a landmine without adequate legal framework [36].

**Hypothesis 5**

*H<sub>5</sub>*: The perceived effectiveness of legal framework (LF) is positively associated with consumer intention to shop online.

Trust in the context of buyer – seller relationship can be defined as “a consumer’s willingness to rely on the seller and take action in circumstances where such action makes the consumer vulnerable to the seller” [37]. With the development of new e-business models and progression in the field of information technology, online trust is one of the dominating factors in Business to Business (B2B) and Business to Consumers (B2C) transactions [3]. Lack of trust in the technology inhibits its adoption and it was shown that distrust prevents users to shop online [6]. E-vendors’ sales would go down as number of distrusting consumers increases and that would in turn lead to low number of e-vendors [34]. Additionally, specific website design factors generate trust in online shopping [38]. Purchase intention for online shopping can be enhanced through the effective implementation of website design factors such as navigation and visual and information design [38]. Sultan et. al[39] also showed that trust has a mediating role between website design and purchase intention.

**Hypothesis 6**

*H<sub>6</sub>*: Distrust is negatively associated with consumer intention to shop online.

**2. METHODOLOGY**

The questionnaire used in this study consists of three demographic variables gender, age and qualification and 31 items of (7) unobserved variables. The latent independent variables are PR, PU, PEOU, PE, LF and Distrust while Intention is a dependent variable. All unobserved variables were required five-point Likert-scale responses ranged from 1 = “strongly agree,” through 3 = “neutral,” to 5 = “strongly disagree.”

We collected data through an online survey. Respondents chosen were from 14 different countries as shown in Table 1.

**Table 1: Respondents**

<b>Australia</b>	<b>5</b>
<b>Bahrain</b>	<b>1</b>
<b>Canada</b>	<b>1</b>
<b>China</b>	<b>2</b>
<b>Germany</b>	<b>1</b>
<b>India</b>	<b>8</b>
<b>Italy</b>	<b>1</b>
<b>Malaysia</b>	<b>2</b>
<b>Philippines</b>	<b>1</b>
<b>Saudi Arabia</b>	<b>1</b>
<b>Sweden</b>	<b>1</b>
<b>UAE</b>	<b>3</b>
<b>UK</b>	<b>6</b>
<b>USA</b>	<b>7</b>

Countries shown in Table 1 were chosen from Asia, Europe and North America. A big scale project is required to include more countries for research in future.

From each country, one university was selected randomly. Then, again 10 email addresses were chosen randomly from each university’s website. The link to the questionnaire was emailed to all the respondents chosen. The response rate was 28.5%.

Principal component analysis (PCA) was used on the items of the latent variables to test the measurement model. Results of the PCA justify the small sample size for this study. Finally regression analysis was conducted on the factors evolved by PCA

### 3. RESULTS

#### 4.1 Factor Analysis

PCA conducted on the sample data returned the Kaiser-Meyer-Olkin (KMO) value of 0.547 (which is greater than 0.5) that ensures that the data is suitable for factor analysis [40]. Bartlett’s test is found significant (Table 2) and confirmed that the items have correlation with other items in the sample.

**Table 2: KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.547
Bartlett's Test of Sphericity	Approx. Chi-Square	924.369
	Df	378
	Sig.	.000

All 31 items of the proposed latent variables were included in the factor analysis. PEOU, PR, PE, Distrust, LF and Intention, were formed from the pool of 31 items excluding PU.

#### 4.2 Regression Analysis

Regression analysis was conducted taking Intention as dependent variable and the other five factors (PEOU, PR, PE, Distrust, LF) as independent variables.

As shown in Table 3-c PEOU, PR and PE were found to be significant. The other two factors, Distrust and LF had no significant importance. The model is statistically significant and it shows almost 64 percent proportion ( $R^2 = 0.639$ ,  $p=0.000$ ) of variance in intention towards online shopping explained by the independent variables.

**Table 3a: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799 <sup>a</sup>	.639	.548	.48527

**Table 3b: Coefficients<sup>a</sup>**

Model	Standardized Coefficients (β)	t	Sig.
(Constant)		27.934	.000
PEOU	.497	4.372	.000
PR	-.236	-2.080	.047
<b>PE</b>	.556	4.894	.000
Distrust	-.125	-1.096	.282
LF	.107	.942	.354

a. Dependent Variable: Intention

### 4. DISCUSSION

The model shows that PEOU, PE, and LF have positive relationship whereas PR and Distrust have negative relationship with Intention.

PE is found to be more dominant among other factors as it has the highest beta value of 0.556. This confirms that consumers worldwide want online shopping to be full of fun, an enjoyable practice (see also [6, 33, 34]. Take an example of a 3D virtual world, Second Life ([www.secondlife.com](http://www.secondlife.com)), where users can socialize, explore, create, participate in activities and buy goods and services. Users can take on a digital persona called an avatar. Users may customize the selected avatar, changing its appearance, its clothing, and even forming something altogether different from human to humanoid. It has been reported by Wikipedia that in November 2010, 21.3 million users registered with Second Life.

Globally, online shopping is negatively affected by PR. This is because online shoppers cannot check the quality of physical products at the time of purchase. Users perceive internet as an insecure channel and are unwilling to share their personal and financial information [3]. Therefore, the increase in perception of uncertainty stops users to buy online.

Higher perception of PEOU would significantly affect the online shopping intention. Customers that

perceive a higher ease of use of shopping websites have more positive intention to shopping online [8].

To sum up, [41] proposed that e-vendors need to adjust the context of their websites to match the preferences of groups of customers and they should be well aware of purchasing behavior and the needs of consumers. Results of our study show that online shopping is a global phenomenon. E-vendors can take full advantage of this research by adapting their online shopping systems according to this research's findings.

## **5. RECOMMENDATION**

1. While planning websites and virtual stores, maximum importance should be given to PE.
2. Online sellers have to provide multiple preferences, alternatives, products and services to match customer's needs.
3. Innovation leads to motivation. Provide new products and services to customers.
4. PR should be minimized by developing trust between users and merchants. Trust can be developed if both the parties adhere to the social and business ethics.

The positive features of online shopping appear to be more important than the negative features, therefore marketers should focus on making the experience of online shopping more user-friendly and more accommodating [10].

## **6. RESEARCH IMPLICATIONS**

Technology has shortened distances between continents, countries, cities and people. People living in different parts of the world now have similar tastes, perceptions, styles and accessibility. A global online shopping model for e-tailers is required to address large number of diversified customers. This research mainly focuses on PEOU, PE and PR. Website developers and e-tailers need to concentrate on the motivational attributes of the websites (front offices) to attract customers. Easy interface, good layouts, updated information, multimedia contents (audio, video), effective search engines, e-catalogs, efficient navigation scheme, simple payment procedures and easy checkout process may all contribute more to consumers' motivation

In terms of theory building, this research attempts to build up a global model integrating variables from different regional streams and diverse research tributaries and applying those into a new context. The current study represents an important contribution to the theories of consumer acceptance of technology, helping researchers to know and understand relationships among motivation (PEOU, PE), PR and the acceptance of global online shopping by consumers.

## **7. LIMITATIONS**

In spite of multiple effects, our study was limited to a smaller sample size, thus generalizing results globally is quite difficult. Future research with a large sample may give a better understanding and development. Apart, there could be many other factors that could help in building a better global online shopping model.

However, this study provides an exploratory future research direction for online shopping. Transaction on the internet between merchants and consumers widens to a global scale without any physical boundaries [42]. Therefore, it is suggested that more research shall be conducted in order to identify and understand factors affecting global online shopping.

## **8. CONCLUSION**

This research contributes in the development of a global online shopping model. It advocates that PEOU, PE and PR are statistically significant with PE being the most dominating factor. The outcomes would be beneficial for universal e-vendors and e-tailers. This research will help merchants in getting ahead of customers' preferences and needs and offer the services accordingly to reap more profits from new e-commerce global opportunities.

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#### **Ather Akhlaq**

Mr. Akhlaq is a PhD scholar at the University of Edinburgh, UK. He works as a Senior Lecturer in Institute of Business Management, Karachi, Pakistan. His research primarily focuses on MIS and technology. He has publications in Journal of Internet Banking and Commerce, UKAIS Conference Proceedings, International Journal of Bank Marketing and Pakistan Textile Journal.

#### **Dr. Ejaz Ahmed**

Dr. Ejaz Ahmed is Professor at the Institute of Business Management, where he, currently is Head of the Computer Science department. Dr. Ahmed also worked at the Institute of Business Administration and at the Department of Statistics, University of Karachi for more than 34 years.

Dr. Ahmed received his PhD, in statistics, from the University of Strathclyde, Glasgow in 1987.

He has published in The Statistician, American Journal of Mathematical & Management Sciences, Journal of Textile Institute, Quality Engineering, International Journal of Bank Marketing and Pakistan Journal of Statistics. His field of research includes Quality Control, Design of Experiments, Operations Research, and Econometrics. Dr. Ahmed has conducted short courses on current topics of interest both for academicians and industrialists.