Review Article

A Study on the Factors Influencing Consumers to Shop through Online: Evidence from Dhaka City

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Abstract - *The new dimension to the purchasing habit among the customersin the era of technology-based civilization is online shopping. It is a recent miracle in the ground of internet business. It saves the valuable time of the customers. Therefore, the present study has an attempt to investigate the factors influencing the consumers to shop online in Dhaka city of Bangladesh. The study mainly used primary data for the analysis, collected from 418 online shoppers of Dhaka city using a two-stage sampling technique. Multiple regression analysis methodsare employed to investigate the factors influencingthe online shopping decisionof the consumers. The empirical results of the analysis show that age, family size, total monthly income, and total asset value of the respondents are the significant factors that are positively related to the online shopping expenditure of the consumers. On the other hand, gender, education, and marital status are statistically insignificant factors affecting the online shopping expenditure of the consumers. This study suggests that if necessary steps aretaken to reduce the price of internet usage and to develop the website of the retail outlet, consumers will tend to spend more on online shopping.*

Keywords - *Online shopping, consumers, purchasing habit, influencing factors, shopping expenditure.*

I. INTRODUCTION

In the 21st century, where technology has taken over, the internet has become part and parcel of our everyday life (Thanuskodi, 2013). Communication across the globe has been facilitated by dint of the internet (Katawetawaraks and Wang, 2011). The Internet has changed the way consumers buy goods and services throughout the world (Sen 2014). The trends of the word shopping have been changed; people nowadays can shop being at home by connecting with the internet instead of visiting the physical outlet, popularly known as online shopping (Bourlakiset al. 2008). Online shopping is the action of buying goods and services over the internet using a web browser (Kaur and Kochar, 2018);it is

one of the most important attributes of the fourth industrial revolution, which emerged with the emergence of the internet (Botha *et al.*, 2008). Online shopping is considered as a revolution in business by pinning on some crucial factors such as technological advancement on the smart phone, saving valuable time and money as well. Expanding the availability of the internet throughout the whole world has managed to boost up this particular sector. Business and trade are much prolonged, where multichannel has already taken its space by boosting up asignificant number of increasing online shoppers (Johnson, Gustafsson, Andrassen, Lervik& Cha 2001).

Electronic commerce has become a new gratifying form of business by coalescing the prospect of this enormous usage of the internet and the exponential evolution of business. Back in 1994, the internet had started as a new scope and space of business after releasing the first sale of Sting's album, 'Ten Summoner's Tales'. By the next following year, Amazon did set up their business route by expanding for both Business to Business (B2B) and Business to Commerce (B2C) e-shopping (Parker-Hall, 2009). Internationally, electronic commerce sales were neared to3 trillion US dollarsin 2018 by having an increasing rate of total retail sales on the online share (Jessica Young, 2019) as well as expecting to be reached 4 trillion US dollars within the year 2020 (eMarketer, 2016). Consequently, the online business is booming due to global sales growth (15%), order rate (13%) (eMarketer, 2016) respectively in all kinds of electronic commerce on both B2B (Business to Business) and B2C (Business to Commerce) (Zuroni&Goh 2012).

The growth rate of internet users has already touched to approximately 976.4% since 2000 up to 2017 (Internet World Stats, 2017). As of 2019, the number of internet users has reached 4.39 billion, having an increasing number of 366 million (9 percent) in comparison to January 2018 (Digital Reports, 2019). Besides,there were 3.48 billion social media users in 2019, with atotal worldwidegrowth of 288 million (9

percent) since last year. In addition,3.26 billion people use social media on mobile devices as of January 2019, with the growth of 297 million new users representing a year-on-year increase of more than 10 percent (Digital Reports, 2019). Now the question would be raised that which factors are boosted for having this unforeseen growth? Indeed, technological progress is one of the crucial factors nowadays, along with the development of infrastructure, expanding the availability of the internet, and the reasonable price tag on mobile phones (ICT Facts and Figure, ITU, 2015).

As of 2016, shopping through E-commerce worldwide was 1.915 trillion US dollars(eMarketer 2016) and projected to be 4.06 trillion US dollarswithin 2020 (Statista). On the other hand, according to the United Nations Conference on Trade and Development (UNCTAD), the growth rate of online shoppers has been increased from 1.079 billion to 1.623 billion since2013 to 2018. Besides, there are some highlighting factors that have contributed to boosting up this figure of an increasing number of online shoppers such as availability of expanding internet, escalating of filtration rate on smartphones along with trust, convenient payment procedure through mobile phone internet (Neilson, 2017)

Another reason for the booming of online shopping is the rising number of single-family where both husband and wife are working as well as having less time to go to the market for purchasing now and then (Vishwagna, 2016). Conventionally, consumers would go to the retail outlet, observe the necessary product,and then comparing with an alternative product, would finally purchase the products by giving appropriate price to the counter (Sen, 2014). However, this system has altered significantly with the advent of online shopping.

Ecommerce has been a bright spot among retail channels during the coronavirus, as consumers became reliant on digital transactions amid physical store closures and fear of infection. However, the impact on e-commerce retail spending has not been felt evenly across the world. (https://www.businessinsider.com/global-ecommerce-2020-report)

Conversely, Bangladesh has been rolling either on the way to being a digital nation as expecting to assist their residents being prone towards internet usage.In today's e-business world, M-commerce (Mobile Commerce) and F-Commerce (Facebook Commerce) are very popular. E-commerce can work as a medium for improving the business structure and raising productivity in developing countries like Bangladesh. Currently, there are approximately 2,000 e-commerce sites and 50,000 Facebook-based outlets delivering almost 30,000 products per day. 80% of the online sales are taking place in Dhaka, Chittagong, and Gazipur (January 2020). Nevertheless, Bangladesh is economically progressing and underlining further on digital connectivity,

indicating an abundant potentiality in such space. According to market analysts, Bangladesh's e-commerce business market will reach USD 20 billion by 2020(https://thefinancialexpress.com.bd/views/views/e-commerce-in-bangladesh-where-are-we-headed-1578666791).

Dhaka is the capital and largest city of Bangladesh. It is one of the most densely populated cities in the world, with a population of 19.84 million (BBS, 2018). This city has experienced a higher urban growth rate in the current eras, and it has converted as a megacity (Hossain, 2006) as well as considered the busiest city among all others. Due to the excess population, the number of vehicles has been increasing. The roads are mobbed with vehicles. At present, Dhaka city is facing huge traffic jams, such that 15 minutes of road distance takes one hour (Haider, 2018). Therefore it's wasted valuable time to peoples being in working place and back home. According to a World Bank report, the traffic congestion of Dhaka city is wasting around 3.2 million working hours daily (Nabi, 2018). The estimated economic loss due to traffic congestion in Dhaka is 12.561 Billion USD, which is around 7% of the country's GDP (Chakroborty 2016). Besides, the Covid-19 pandemic has added an increasingly high number of online shoppers for health safety reasons. In this situation, online shopping is becoming the most important weapon for residents to savevaluable time. Hence, the present study investigates the factors affecting consumers to shop online.

II. LITERATURE REVIEW

Dissemination and sharing of business information, maintenance of business relationships,and conducting business transactions via telecommunication networks is called electronic commerce or e-commerce (Khan, 2016). E-commerce has opened a new domain in the field of business (Ohidujjaman et al., 2013).Nanehkaran (2013) reported that communication systems, data management systems, and security are the main components of electronic commerce. He has added availability round theclock, decrease in transaction costs, comparative ease, and comfort of the buyer are the potential advantages of e-commerce. However, security concerns, limited use of the internet, and after-sales services often refrain customers from benefiting from these advantages.

Through building up the relationship among the stakeholders rapidly and enabling multiple distributors, suppliers, buyers, and sellers to come together on a common platform offering a number of applications for easier connectivity, e-commerce has become an inevitable aspect of financial services in the modern era(Harris and Spencer, 2002; Bairagi, 2011). The E-commerce industry is functioning as a fuel for economic development and an indispensable element of business planning nowadays (Hasan, 2010).

Forsythe and Shi(2003) classified internet users into two categories- internet browsers and internet shoppers. According to him, internet shoppers are those who purchase goods and services online, whereas internet browsers are those who simply browse the internet and visit different online stores for gathering information prior to making any purchase from a physical store or just for recreational purposes. Khan (2016) has pointed out that the prevalence of fraudulent activities often restrains customers from shopping online.Forsythe and Shi(2003) have reported that most web browsers use the information for gathering online to make offline-purchase from traditional stores. These findings, thus, encourage understanding consumers' attitudes and the demographic characteristics that influence them to make a final purchase on a virtual platform.

Wu (2003) reported that predictions about consumers' attitudes towards online shopping could help online businessmen to adopt appropriate marketing strategies and assess the future growth of business in the virtual platform.Perception regarding a product available online and its transaction process online may serve as a stimulus for online shopping(Datta and Acharjee 2018).

According to Kotler's five-stage model demonstrating consumer's attitude towards online shopping, after problem recognition, the consumer looks for information on problem solutions. Then he does evaluate the available alternatives and make a comparative analysis. Finally, the after-sales service by the online vendor also influences the purchase decision (Kotler and Keller, 2012).

According to Shergill and Chen (2005), four types of online buyers-trial, occasional, frequent, and regular online buyers have different evaluations regarding the prominent factors as website design, reliability, customer service, and security concerns that influence their online purchase decisions. They also added that having full perception regarding customers' attitudes towards online shopping can help e-marketers to convert potential customers to regular ones by adopting required marketing strategies.

Extended studies have been done on different aspects of online shopping. Nguyen et al. (2015) showed that one of the modern shopping channels that provide satisfying goods is online shopping. This study demonstrated that shopping experiences and internet advertising has a positive influence on online shopping intention. Laohanpensang(2009) has derived that the lack of access to the internet is a major barrier to online shopping.

On the other hand, Vishwagna (2016) has used qualitative and quantitative research methods to study the impact of demographic factors of consumers on online shopping. It has revealed that different demographic determinants such as age, gender, marital status, family size, and income affected online shopping significantly. Besides, studies have revealed that online shoppers mainly consist of people with higher education, income, and working in the middle to senior management or professionals (Kehoe et al., 1998; Hoffman et al., 1996). In another study, it was reported that e-commerce is predominantly ruled by the people of the young generation (Bhatnagar and Ghose2004). According to Sim and Koi (2002), gender, income, and educational level appear to function as the main discriminating factor in terms of online purchase decisions. Lubis and Utara (2018) haveanalyzed the consumer choices of online shopping. Fascinatingly, this study has shown that online shopping decisions are strongly influenced by gender factors and income level. On the other hand, this study revealed that age and education do not significantly affect shopping preferences, both online and traditional. Sultan and Henrichs (2000) explained that the expectation of the consumer and preferences for accepting the internet as his or her shopping mode was also positively related to income, household size, and innovativeness. Besides, Osman et al.(2010) reported that gender, educational background, purchase perception, and website quality have a significant influence on consumers' attitudes towards online shopping, whereas age has no significant relationship with customers' online purchase decisions. These demographic characteristics influence the consumers either positively or negatively to shop online.

Among the features which influence the perception of the consumer towards online purchasewebsite design, reliability of the online store, customer service, and website security or privacy are noteworthy (Shergill&Chen, 2005, Liang and Lai, 2000, Reibstein, 2001, Zhang, Dran, Small, and Barcellos 1999). In another study by Keisidouetal(2011), it has been found that personal innovativeness of information technology (PIIT), perceived security, and product involvement have an effect on the attitude towards online shopping, though the extent of impact varies across the range of products. On the other hand, the trustworthiness of the online vendor is the prominent factor that stimulates the consumers to shop online (Hong and Cho, 2011). Nittala (2015) has identified that the perceived risk and price of the product positively influencethe online shopping decision of the customer. In contrast, positive attitude, product risk, and financial risk negatively affect the online shopping behavior of the consumers.

Andersone and Sarkane(2009) have clarified that buying process and interaction with the sales personnel are the most important benefits of traditional shopping, whereas money-saving, time-saving, conveniences and all-around-the-clock availability are the potential benefits of e-shopping.Jarvenpaa et al.(2000) reported that online stores' reputation and size are associated with risk perception by the customer and hence affect their purchase decision. Another study by Vellido et al.(2000) derived that customer service, ease of

navigation at the store's website, and security concerns are the major factors influencing the online shopping decision of the customers.

Robinson et al. (2007), Bhatnagar and Ghose (2004), Swaminathan (2004), Darian (1987) claimed that convenience in 24/7 shopping, home delivery, time-saving, and comfort in terms of physical effort is the major motivation for online purchase. Physical stores have been noted as reassuring compared to online shops (Evans, 2011). Lim et al. (2016) have used structural equation modeling to identify the factors influencing online shopping behavior. The findings of the study depicted that subjective norms and perceived usefulness have a positive association with online shopping behavior. Sen (2014) reported that the internet had become a new platform for electronic transactions by showing the cost factor (price of the product, offers, and discount provided), product factors (variety of product offered, quality of the product offered), and seller factors (advertising, information of the seller, after-sale service and feedback) influence on online shopping behavior. Rohm and Swaminathan (2004) and Morganosky and Cude (2000) reported that elimination of traveling time and hassles were required to go to the traditional store. Hence, rendering ease of operation in the life of the online shoppers acts as stimuli to influence the purchasedecision of the buyers.

Sulaiman et al. (2017) identified the availability of exclusive productsimpacts consumers to buy online.This study found that perceived risk, the brand of the product, and the brand of the e-commerce website directly influenced the consumer's online purchasedecision. Ramtohul et al. (2014) tried to show that online shopping conveniences, security, product risk, procedural complexity, waiting time, enjoyment, and pleasure were the major contributors to overall attitudes of online shopping.

Vijay and Balaji (2000) revealed that worldwide, consumers are increasingly moving towards an arena of e-commerce (Mohiuddin, 2014). Keeping pace with the global technological progress and changing the over-view of the

population, the country is observing rapid growth in this sector (Payza, 2015). According to BTRC statistics of June 2018, the number of internet users and penetration rate in Bangladesh has increased to 87.79 million and 52.77%, respectively (BTRC, www.btrc.gov.bd, 2018) (Karim et al. 2018). Mobile operators in Bangladesh has already launched 4G internet service in major cities, which will gradually spread to all 64 districts (Shahriar, 2018). Moreover, the government of Bangladesh has decided to test-run fifth-generation (5G) mobile data service (Karim et al. 2018) and declared by quoting 'Information Technology' as a thirst sector.Subsequently, the government has already done launching different promotional activities to exploit ICT potentials in economicdevelopment(Islam, 2018). The rapid increase in the number of internet users and the growing popularity of online shopping are pieces of evidence of e-commerce development in Bangladesh. However, Laisuzzaman et al.(2010) reported that Bangladesh is lagging behind to adopt the mainstream of e-commerce applications. Lack of adequate infrastructure, security concerns in terms of payment, technological challenges, and legal bindings were identified as the major obstacles to the boostof e-commerce in Bangladesh(Dey et al., 2009).However, the contribution of e-commerce as a percentage of GDP was less than 1%; this percentage can be raised to 2.5% if it takes into consideration the industries connected to e-commerce(Islam, 2018). With continuous efforts from government and non-government institutions, the volume of online shopping in Bangladesh is increasing rapidly, particularly during the festive seasons(Datta and Acharjee, 2018)

Many studies have been conducted to observe consumers' acceptance of this technology-based mode of shopping in their preference list. Nevertheless, a few studies have been conducted dividing the whole of Dhaka City into a number of clusters and collecting data from a heterogeneous group of customers scattered around the entire city. This study, therefore, aims to analyze the expenditure decision of the consumers of Dhaka city on online shopping in an econometric manner.

III. CONCEPTUAL FRAMEWORK

A. The Process of Online Shopping

In this era of technology and traffic congestion, online shopping has no alternative to efficiently allocate resources for the purpose of shopping. Online shopping results in both time and energy saving. The process of online shopping is given below:
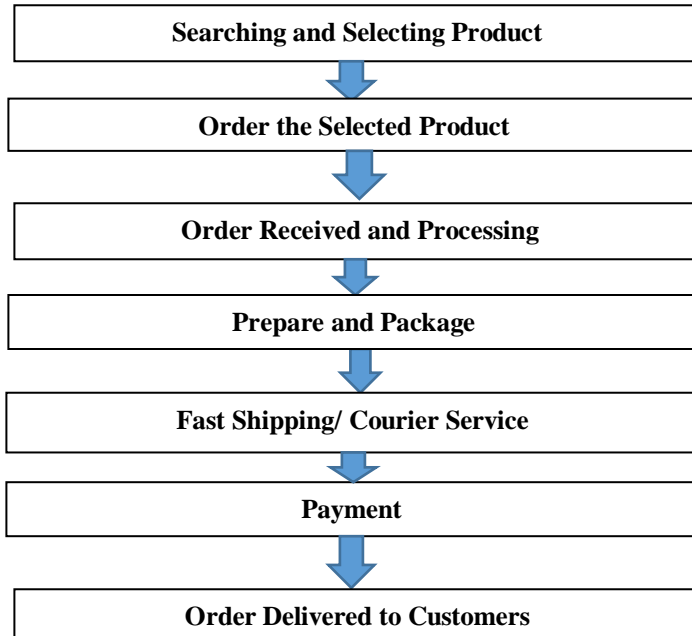
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┌─────────────────────────────────────┐
│   Searching and Selecting Product    │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│       Order the Selected Product     │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│      Order Received and Processing   │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│          Prepare and Package         │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│      Fast Shipping/ Courier Service  │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│               Payment                │
└─────────────────────────────────────┘
                 ↓
┌─────────────────────────────────────┐
│      Order Delivered to Customers    │
└─────────────────────────────────────┘
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Fig. 1 The Process of Online Shopping (Developed by author)

Customers search for a product through the internet by visiting the website or Facebook page. The seller gives adequate information to the customer meeting his/her queries. After selecting the product, the next task of the consumer is to confirm his/her order. The payment mode can vary across sellers and areas of delivery. Sometimes the customer pays the price of the product with courier/shipping costs after delivery, whereas some vendors ask for advance payment in full or partial. Some sellers claim to book money for order confirmation. Some of the online vendors use credit cards, debit cards, and pay pal accounts in order to receive payment. Next, the product is delivered/shipped to a customer designated address through some processes after finalizing the payment procedure.

B. Determinants of Online Shopping

We have analyzed the demographic factors influencing the consumer's expenditure on online shopping as independent variables. There are also some distinguishing features of online shopping like information availability on the website about the product and vendor, 24/7 open, money-saving, time-saving, security and availability of quality information, the relevance of product with the image on website instigate the consumer to shop through online considering its conveniences developing a positive attitude towards online shopping. Then the product is ordered online and delivered. After the product is delivered, post-purchase service by the vendor ensuring guarantee and warranty of the product influences the buyer to give a review on the website page of the seller at times. These after-sales services and positive review further has a positive impact on consumers' perception towards online shopping, stimulating them to purchase on the virtual platform.

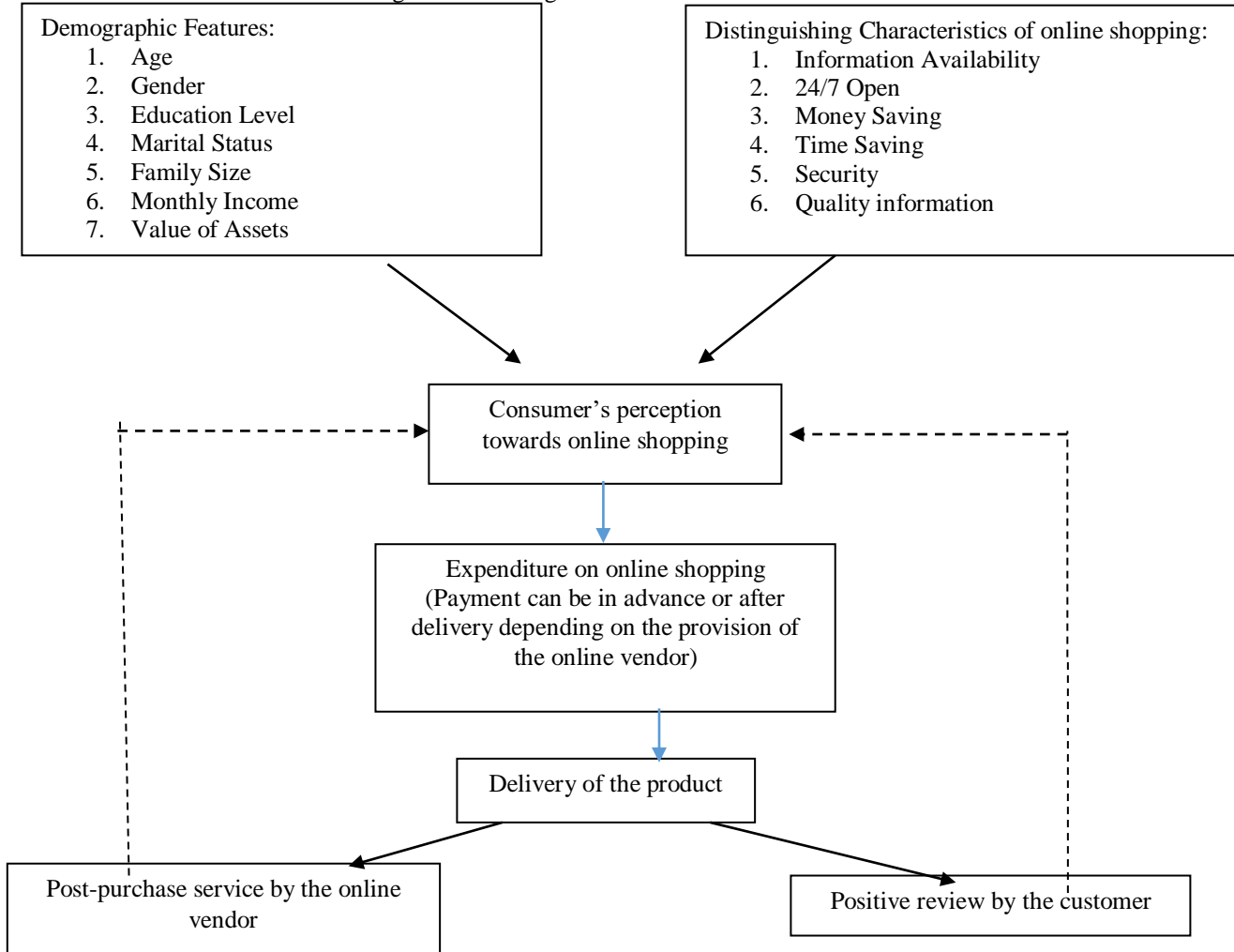The determinants are described through the following flowchart:

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Demographic Features:              Distinguishing Characteristics of online shopping:
    1. Age                             1. Information Availability
    2. Gender                          2. 24/7 Open
    3. Education Level                 3. Money Saving
    4. Marital Status                  4. Time Saving
    5. Family Size                     5. Security
    6. Monthly Income                  6. Quality information
    7. Value of Assets
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Consumer's perception towards online shopping

Expenditure on online shopping (Payment can be in advance or after delivery depending on the provision of the online vendor)

Delivery of the product

Post-purchase service by the online vendor

Positive review by the customer

Fig. 2 Online Shopping Framework (Developed by The Author)

IV. METHODOLOGY

A. Study Area and Data Collection

The present study is based on primary data that are collected from Dhaka city of Bangladesh. The survey was conducted in 2019 on the 2018-19 fiscal years. This survey has been conducted with great care, which covers different socioeconomic information of 418 general public who purchase products online.

A two-stage sampling method has been used to draw the sample. In the first stage, as the population is dispersed all over the research area and complete lists of the total population are not available, sample data is obtained using 'clusters' (Husain, 2015). Here, Dhaka city has been divided into 11 parts which we refer to as clusters. These are: Uttara (includes Kamarpara, Azampur, Nikunja, Khilkhet, Tongi and Airport); Mirpur and Agargaon; Gulshan and Banani (includesNiketon, Baridhara, Cantonment andMatikata);

Motijheel; Moghbazar, Shobujbag and Arambag; Badda, Natun Bazar, Rampura and Banasree; Dhanmondi, Shahbagh; Jatrabari; Farmgate, Greenroad and Tejgaon; Bashundhara R/A; Old Dhaka. In the second stage, data from 38 respondents have been collected from each cluster which accounts for a total of 418 respondents.

B. The Empirical Model

To identify the factors affecting the online shopping of the customers, different researchers have used different methods.Nittala, (2015) and Islam (2015) used multiple regression analysis to identify the factors. Ramtohul *et al.* (2014) used principal component analysis and binary logistic regression to identify the factors influencing online shopping. In the present study, multiple regression analysis is used to identify the factors influencing online shopping of the consumers in Dhaka city. The model used in this study is defined by the following equation:

$$\ln Y_i = \beta_o + \beta_1(\ln X_1) + \beta_2(\ln X_2) + \beta_3(\ln X_3) + \beta_4(\ln X_4) +$$
$$\beta_5(\ln X_5) + \beta_6(\ln X_6) + \beta_7(\ln X_7) + \mu_i$$

Where Y_i = Monthly expenditure on online shopping of ith shopper, X_1 = Age of the shoppers calculated in years, X_2 = Gender of the respondents specified as male or female;(0 if male, 1 if female), X_3 = Education level of the respondents measured in the number of years of schooling, X_4 = Marital status indicated by the single or married person;(0 if single, 1 if married), X_5 = Family size calculated as a number of family members, X_6 = Monthly income of the respondents measured in monetary units (Taka, Bangladeshi currency) and X_7 = Total value of assets measured in monetary units (Taka, Bangladeshi currency) and μ_i = Stochastic disturbance term.

V. RESULT AND DISCUSSION

A. Socioeconomic Characteristics of the Respondents

a) Age

Age is an important determinant of consumers' perception towards and expenditure on online shopping. Table-1 shows the age group of the respondents. Table-1 shows the age distribution of the respondents in the study area. From the sample data, it was found that most of the online shoppers are in the 22 to 29 years age group, which accounts for 56.2 percent. Only 1.2 percent of respondents' age were 62 years or above. The mean age of the respondent is 27.22 years.

b) Gender

Gender is another discriminating factor for the online purchasedecision of the consumer. The distribution of the respondent on the basis of gender is shown in Table-1. It indicates that 58.9 percent of the respondents were female. On the other hand, 41.1 percent of the respondents were male.

Table 1. Frequency Distribution of The Respondents and Their Socio-Demographic Characteristics:

Variables	Category	Frequency	Percentage
Age	Less than 22	86	20.6
	22 - 29	235	56.2
	30 - 37	50	12.0
	38 - 45	22	5.3
	46 - 53	12	2.9
	54 - 61	8	1.9
	62+	5	1.2
Gender	Male	172	41.1
	Female	246	58.9
Education Level	Primary	20	4.79
	Secondary	15	3.59
	Higher Secondary	23	5.50
	Tertiary	360	86.12
Marital Status	Single	286	68.4
	Married	132	31.6

Income(in Taka)	1,000-30,000	314	75.12
	30,000-60,000	56	13.40
	60,000-90,000	20	4.78
	90,000 or Above	28	6.70
Asset Value(in Taka)	Less than 20,000	5	1.19
	20,001-50,000	51	12.20
	50,001-80,000	61	14.59
	80,001- 1,10,000	80	19.14
	1,10,001-1,40,000	34	8.13
	1,40,001 or Above	187	44.75

c) Education Level

Education is an indicator to improve the quality of human resources. It also improves the quality of life of the people, which indicates that the people who are more educated will have a greater tendency to shop on a virtual platform. From the table, it is found that in the study area, 4.79 percent of online shoppers have primary education, 3.59 percent of online shoppers havesecondary education, 5.50 percent of online shoppers have higher secondary education, and 86.12 percent of online shoppers havetertiary education. It can easily be said that highly educated persons have a greater tendency to buy their product using the internet.

d) Marital Status

Marital status is another demographic feature of the respondent which may influence their online shopping behavior. The respondents' marital status is given in Table-1. It is clear that 68.4 percent of online shoppers in the sample group are unmarried, and 31.6 percent of online shoppers are married.

e) Income

Income is the sum of all the wages, salaries, profits, interest payments, rents, and other forms of earnings received in a given period of time. It is the most important indicator to know the consumption and saving patterns of the consumers. Higher-income earners lead a healthy life. The income of the respondents in the study area is given in Table-1.We can observe from the table that most of the online shoppers are in the first income group ranging from 1000 to 30000 taka (Bangladeshi currency). In contrast, only 6.70 percent of respondents' income is 90000 taka or above.

f) Total Asset Value

Total assets refer to the total amount of assets owned by a person or entity. Taking the market price of each asset, the total value of assets is measured. It is one of the most important factors determining the online shopping intention of the consumers. Taking a closer look from Table-1, it can be concluded that, higher value of asset possession indicatesa wider shopping intention of the consumers.

B. Factors Affecting Online Shopping Expenditure of the Consumers in the Study Area

Table 2. OLS Estimates of Multiple Regression Analysis			
Variables	**Coefficient**	**Standard Error**	**t-ratio**
Constant	-0.341	1.015	-0.336
Age	1.042**	0.249	4.175
Gender	0.023	0.136	1.716
Education Level	0.169	0.274	0.616
Marital Status	-0.285	0.188	-1.519
Family Size	0.293**	0.136	2.154
Monthly Income	0.124**	0.055	2.239
Asset	0.179*	0.043	4.139
*Source: Author's Own Calculations; Note: * and ** indicate 1% and 5% level of significance*			

The parameters of the multiple regression function are estimated by using the Ordinary Least Square (OLS) method, and the results are presented in Table-2. The co-efficient of age, family size, monthly income, and total asset value of the respondents who purchase a product online are 1.042, 0.293, 0.124, and 0.179, respectively, and they are statistically significant. The co-efficient of age is 1.042, which indicates that, for a 1 unit increase in age, consumers' expenditure on online shopping increases by 1.042 units, which is statistically significant at a 5% level of significance. In addition, the co-efficient of family size 0.293 indicates that, if family size is large rather than small, online shopping expense increases by 29.3%, which is statistically significant at a 5% level. This is because, when there are more members in the family, aggregate demand for products increases which leads to the need for doing more shopping. Again, the co-efficient of income is 0.124; that is, if the income of the consumer increases by 1% then, expenditure on online shopping increases by 12.4%, which is statistically significant at a 5% level. It is clear from this observation that higher-income people have a more positive attitude towards online shopping, and they spend more on online shopping as they have a larger amount of disposable income in their hands for online shopping. Moreover, we know that the marginal utility of money decreases as income increases. So, higher-income people can afford to take risks associated with online shopping. The co-efficient of the total value of assets is 0.179, which indicates that if the total value of asset increases by 1%, online shopping expense increases by 17.9%. This is because people with more assets are risk-neutral and have the financial solvency to shop on the virtual platform. So, age, family size, income, and the total value of assets have a positive impact on the consumer's expenditure on online shopping at a statistically significant level. This result is similar to Vishwagna (2016).On the other hand, the coefficient of gender and educationindicates that they have a positive association with the online shopping expenditure of the consumers, but they are statistically insignificant. The most interesting matter in the analysis is that online shoppingexpenditure is negatively related to the marital status of the respondents. The coefficient of marital status is 0.285, which indicates that if the respondent is married rather than single, then online shopping expenditure decreases by 28.5%, which is statistically insignificant.This indicates that married consumers in Dhaka city still prefer traditional shopping to online shopping. If the online vendors provide the chance for bargaining, return policy, make this virtual shopping platform more interesting and fun, then this preference level may become more positive towards online shopping in the near future.

C. Some Other Findings On The Basis Of Consumers' Perceptions towards Online Shopping instigating them to Shop Through Online

Table-3 shows some factors that affect the online shopping behavior of the consumers on the basis of consumer perceptions. For evaluating the relationship of specified determinants on consumers' attitude towards online shopping, each factor is tested based on a 5-point Likert scale ranging from 1 (strongly disagree), 3 (neutral) to 5 (strongly agree).Information availability is one of the most important variables to have a positive impact onthe online shopping intention of the consumers. If information is available on retailers' websites, purchase through the online platform will increase. 90.9% of the respondents in the study area agree and strongly agree in the case that online shopping is convenient if required information is available on the website. On the other hand, 90.7% of the respondents agree and strongly agree on the fact that the convenience of shopping on virtual platforms stimulates them to make their purchasedecision online. Money-saving is another important variable towards online shopping. 46.7% of respondents agree that they can save money by online shopping, whereas 24.4% of the respondents strongly agree regarding this issue. On the other hand, 14.4% of respondents are neutral,and 13.4% of respondents have disagreed that they are unable to save money online. Moreover, home delivery can play a vital role in increasing online shopping. 48.6% of the total respondents agree with this statement, whereas 43.1% of respondents strongly believe that online shopping is more convenient due to home delivery services. Time is a very important factorin the case of online shopping. To save valuable time, consumers concentrate on online shopping. 51.4% of respondents agree that they can save time through online shopping and 36.8% of respondents strongly agree with this issue. 9.6% of the respondents are neutral in this case. In addition, 83.2% of respondentsagree and stronglyagree thatif the website of the vendor is safe personal information is protected, and payment modesare reliable, they will purchase their product online. That is, security concerns often refrain customers to go for online shopping. 11.7% of respondents are neutral regarding this issue.

Table 3. Findings on The Basis of Consumers' Perceptions Towards Online Shopping

Variables	Category	Frequency	Percentage(%) 0f Total
Information Availability (measured on the basis of ease of navigation on the website of the online vendor and detailed specification about the product)	Disagree	3	.7
	Neutral	35	8.4
	Agree	155	37.1
	Strongly Agree	225	53.8
	Total	**418**	**100.0**
Convenience (measured on the basis of 24/7 availability for order and rendering comfort)	Strongly Disagree	1	.2
	Disagree	11	2.6
	Neutral	27	6.5
	Agree	195	46.7
	Strongly Agree	184	44.0
	Total	**418**	**100.0**
Money Saving	Strongly Disagree	5	1.2
	Disagree	56	13.4
	Neutral	60	14.4
	Agree	195	46.7
	Strongly Agree	102	24.4
	Total	**418**	**100.0**
Home Delivery	Disagree	8	1.9
	Neutral	27	6.5
	Agree	203	48.6
	Strongly Agree	180	43.1
	Total	**418**	**100.0**
Time Saving	Strongly Disagree	2	.4
	Disagree	7	1.7
	Neutral	40	9.6
	Agree	215	51.4
	Strongly Agree	154	36.8
	Total	**418**	**100.0**
Security (measured on the basis of the provision of payment and preservation of buyer's personal information)	Strongly Disagree	1	.2
	Disagree	20	4.8
	Neutral	49	11.7
	Agree	189	45.2
	Strongly Agree	159	38.0
	Total	**418**	**100.0**
Quality Information (measured on the basis of reliability and authenticity of the available information)	Strongly Disagree	4	1.0
	Disagree	18	4.3
	Neutral	65	15.6
	Agree	200	47.8
	Strongly Agree	131	31.3
	Total	**418**	**100.0**
Delivery of Quality Productsimilar to Reference Image	Strongly Disagree	9	2.2
	Disagree	51	12.2
	Neutral	71	17.0
	Agree	136	32.5
	Strongly Agree	151	36.1
	Total	**418**	**100.0**
Positive Review	Strongly Disagree	0	0
	Disagree	6	1.4
	Neutral	50	12.0
	Agree	248	59.3
	Strongly Agree	114	27.3

	Total	418	100.0
Previous experience in online shopping	Strongly Disagree	4	.9
	Disagree	29	6.9
	Neutral	53	12.7
	Agree	201	48.1
	Strongly Agree	131	31.3
	Total	418	100.0
Post Purchase Service	Strongly Disagree	6	1.4
	Disagree	16	3.8
	Neutral	93	22.2
	Agree	190	45.5
	Strongly Agree	113	27.0
	Total	418	100.0
Source: Author's Own Calculations			

Quality information is another important variable to increase the intention of the consumers to purchase something online. 47.8% of the respondents believe that if the information given on the website is reliable, they will be more attracted to online shopping. Furthermore, 36.1% of respondents strongly agree that if the given image of the product and original product isthe same, online shopping intention will be positively affected.Besides, for the variabilityof the status of the online retailer, 59.3% of respondents agree that positive reviews of the previous customers' reviews influence them to buy, and 27.3% of customers agree strongly on it. In case of whether consumers believe that their preceding purchasing experiences from online influence them; 48.1% and 31.3% respondents agree and strongly agree with it. Another selected variable, post-purchase service, concerning in-time delivery of the product, product guaranty, and warranty. 45.5% of respondents agree that online shopping providing the expected post-purchase service influences them to make future online purchases,whereas 27.0% of respondents strongly agree and 22.2% of respondents are neutral on it.

Finally, it can be said thatinformation availability, 24/7 availability of virtual stores, money-saving, home delivery service, time-saving, security concerns,quality information,the similarity of delivered product's quality withthe reference image,positive review, previous experience, and post-purchase service are the most important determinants which have an impact on consumers' perceptionstowards online shopping stimulating them to go for an onlinepurchase decision.

VI. LIMITATIONS OF THE STUDY
This study has some limitations which need to be mentioned for the fairness of the study. Due to the limited financial resources and time constraints, the researchers used the information of only 418 respondents. This study has faced challenges of the misconceptions, erroneous and misleading information about the online shopping of the consumers. In most cases, consumers do not keep the actual record of their online shopping. Sometimes, online shoppers do not want to cooperate with the data collectors due to sensitive feelings. In spite of having these limitations stated here, the present study can be used as a primary source for adopting appropriate policies.

VII. FUTURE RESEARCH
There is much scope to do research in this arena. Research can be conducted analyzing the factors refraining customers from doing shopping on the virtual platform and steps that are needed to be taken to motivate the traditional shoppers to shop online.

VIII. MANAGERIAL IMPLICATION
We are living in the 21st century, where the dominance of technology has ruled out the inconvenience of the conventional mode of living. Online shopping is a new dimension in the field of business, investment, and personal shopping. If adequate steps are taken like ensuring safety concerns, preserving of personal and conditional information of the shopper, elimination of online frauds, and smooth payment mechanism, consumers will be more attracted towards online shopping. Moreover, the conformability of online shopping in terms of 24/7 open for receiving an order, home delivery, detailed information about the products, time, and money-saving stimulates shoppers to purchase on a virtual platform. Besides, increasing traffic on roads and rush schedule of the citizens left only an option open for them in terms of online shopping rather than traditional. In addition, it can be said that in Dhaka city,a large number of small and medium entrepreneurs are gathering the courage to invest in online business. Therefore, they are getting some sort of employment, contributing to their family income and national Gross Domestic Product (GDP) as a whole. It is just a matter of time to popularize this newest version of shopping on a virtual platform and associate people from all walks of life with it.

IX. CONCLUSION

The present study makes a noteworthy contribution to the stream of research in the area of online shopping behavior. Although the rate of online shopping is comparatively a smaller amount in the country, the study shows that it is gaining momentum. Several studies have been conducted globally. The factors that influence online shopping behavior vary from country to country. The main objective of the study is to investigate the factors influencing the online shopping intention of the customers in Dhaka city of Bangladesh. The estimation results indicated that age, family size, total income, and total assets value are the crucial factors to increase the online shopping intention of the consumers. This study suggests that if required steps are taken to shrink the price of the internet and develop the website of the vendors, the online shopping plan of the consumers will boost up in the future. Therefore, the valuable time of the consumers will save and invest this time to other productive sectors, which will lead to the higher economic growth of the country.

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