Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh

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Abstract: The World Wide Web has propelled in no small extent of changes in the attitude and behavior of people all over the world. Due to this blessing, online shopping has emerged which influenced the lives of ordinary citizens. Online shopping has also been started in Bangladesh, but consumers are not much habituated yet to go online shopping frequently. This study is undertaken to understand the behavior of online shoppers through a self-constructed questionnaire of 160 respondents from Dhaka city. The survey reveals that consumers shop online to save time, and for available varieties of products and services. Both male and female both have the same type of behavior towards liking and disliking factors; they like home delivery facility and dislike inability to touch and feel the product most. They acquire online shopping information from websites especially from the

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PUBLIC INTEREST STATEMENT

Online shopping is a buzzword in the modern tech-based business world. In Bangladesh particularly in Dhaka, the capital city of Bangladesh, online shopping is getting popular with the sequence of time. Buyers now consider several factors while they are planning to buy from the online platform. This study revealed the online shoppers’ behavior, i.e., what is the demography, what products or services they like, why they like or dislike online shopping, and which payment method they prefer, etc. We found that consumers are mostly young, who shop online to save time, and for available varieties of products and services and prefers to pay through cash on delivery method. They mostly get the online shopping information from the websites advertisements, especially from social networks. The more experienced they are with online shopping, the more they tend to buy online. However, male and female both have the same type of behavior towards liking and disliking factors.
Online shopping is the easy solution for busy life in today's world. In the past decade, there has been a massive change in the way of customer's shopping. Despite consumers' continuation to buy from a physical store, the users or buyers feel very convenient to online shopping. Online shopping saves crucial time for modern people because they get so busy that they cannot or unwilling to spend much time shopping.

In the twenty-first century, trade and commerce have been so diversified that multichannel has taken place and online shopping has increased significantly throughout the world (Johnson, Gustafsson, Andreassen, Lervik, & Cha, 2001). Globally, e-commerce constituted about 2.29 trillion dollar market (John, 2018) and expected to reach 4 trillion dollar by 2020 (eMarketer, 2016) due to the double-digit worldwide growth in sales (15%) and order (13%) (eMarketer, 2018) in all sorts of e-commerce such as business-to-business (B2B), business-to-consumer (B2C) (Zuroni & Goh, 2012).

Asia Pacific region is leading the growth of online shopping as compared to the mature market such as the US, UK, Japan and European Countries. The Asia Pacific recorded massive growth, especially in China. In 2016, Asia Pacific region made about $1 trillion in online sales and majority came from China constituting about $899 billion (eMarketer, 2016). With more and more consumers become increasingly familiar with the Internet and its benefit, online shopping is becoming popular and getting preference among a group of consumers seeking better value proposition regarding information, convenience, cost, choice. Like other young Asian citizens, youngsters in Bangladesh are experimenting with new ways of shopping that have led to the popularity and growth of online shopping in Bangladesh.

Unlike a physical store, all the goods in online stores described through text, with photos, and with multimedia files. Many online stores will provide links for much extra information about their product. On the other hand, some online consumers are an adventurous explorer, fun seeker, shopping lover, and some are technology muddler, hate waiting for the product to ship. Consequently, online consumer behavior (user action during searching, buying, using products) became a contemporary research area for an increasing number of researchers to understand this unique nature of online shopping.

The primary goal of a business is to offer product and services that best serve their consumer needs. A business which fulfills the customer needs with satisfaction very well is more successful than its competitors as satisfied buyers tend to make a repetitive purchase. Moreover, in Bangladesh, online shopping has been evolving fast and has the potential to grow exponentially in time to come, as Internet penetration reaches far and wide across the rural areas. However, it is also true that Bangladeshi people are traditionally conservative in their approach to shopping due to modernization and fast-paced life, dependence on online shopping will increase. Thus, the purpose of this study is to understand the consumer behavior towards online shopping, their liking, disliking, and satisfaction level.

2. Methodology
To understand the consumer behavior of newly launched online shopping in Bangladesh, we have undertaken a descriptive study through a survey by forming a self-constructed questionnaire.
considering the research objective. A Likert five-point scale ranging from strongly agree to strongly
disagree been used to collect a quick response from the respondents.

Convenient non-probability sampling method has been adopted in this study to acquire data from respondents in Dhaka city where about 50% e-commerce customers reside (Jagonews24.com, 2015) in Bangladesh. A convenient sampling method is easy to implement and cost-effective and more common in IS research that gets higher response rate (Eze, Manyeki, Yaw, & Har, 2011; Ritchie, Lewis, Nicholls, McNaughton, & Ormiston, 2014). We have targeted 200 respondents belong to different age-group, student, service holder, business person and the homemaker with various experience in online shopping for a personal interview and 179 participated in the survey resulting in 90% response rate. However, after sorting 160 useful and valid responses were used for further analysis. Accumulated data were analyzed through Microsoft Excel.

3. Literature review
Online shopping indicates electronic commerce to buy products or services directly from the seller through the Internet. Internet-based or Click and Order business model has replaced the traditional Brick and Mortar business model. More people than before are using the web to shop for a wide variety of items, from house to shoes to airplane tickets. Now people have multiple options to choose their products and services while they are shopping through an online platform.

Online shopping has unique characteristics. Huseynov and Yıldırım (2014) emphasized that the lack of physical interaction tends to be the critical impediment in online retail sales followed by the privacy of individual information and security of financial transactions over the Internet. Demangeot and Broderick (2010) also revealed that perceived ease of use does not affect the behavioral pattern in this case rather influenced by security and privacy issues. No relationship is built between the customer and the online shop in the presence of perceived online risk even if a customer spent hours on the Internet (Zuroni & Goh, 2012).

Day-by-day taste, preference and choices are varying regarding different factors such as the Internet emergence. However, this development needs some more understanding related to the consumer’s behavior. Consumer behavior research identifies a general model of buying behavior that depicts the processes used by consumers in making a purchase decision (Vrender, 2016). Those designs are paramount to the marketer as they can explain and predict consumer purchase behavior.

Jarvenpaa, Todd, Jarvenpaa, and Todd (1997a) proposed a model of attitude, behavior, and shopping intention towards Internet shopping in general. The design includes several indicators classified into four broad categories like product value, quality services offered through the website, the shopping experience, and the risk perception of the online shopping. Chang, Cheung, and Lai (2005) studied categories of variables, which drive online shopping activity. In their study, they divided the features into three broad categories. Perceived characteristics of the web sale channel are the first one which includes risk, online shopping experiences, advantage, service quality, trust. The second category is a website and product features which are risk reduction measures, site features, and product characteristics; and the last group is consumer characteristics. Various types of features, demographic variables, consumer shopping orientations, consumer innovativeness and psychological variables, computer, Internet knowledge, and usages drives consumer characteristics. Consumer attitudes toward online shopping usually been determined by two factors; one is trust, and another is perceived benefits (Hoque, Ali, & Mahfuz, 2015). Therefore, trust and perceived benefits seem to be the critical conjectures of consumer behavior toward online shopping (Al-Debei, Akroush, & Ashouri, 2015; Hajli, 2014). Moreover, information quality, merchandise attribute, website design, transaction capability, payment, security/privacy, delivery, self-consciousness, state of mind, the consumer’s time sense and customer service are strongly predictive of online

In Malaysia, information quality and purchase quality linked with the post-purchase quality are statistically significant in the case of customer satisfaction (Vegiayan, Ming, & Harun, 2013). However, brand image and quality of products, goodwill of country of origin also influence significantly on purchase intention of online products (Haque et al., 2015). Moreover, online data extraction about the products, services along with the historical data for individual customers is ingredient element to choose an online store or make re-purchase decision (Liao, Chu, Chen, & Chang, 2012).

Koufaris (2002) identified that both shopping enjoyment and perceived usefulness (website) strongly predict the intention to re-purchase over online. On the contrary, Lee and Lin (2005) found shopping enjoyment can increase the intent of new customers but does not influence customers to return. In fact, the web store which utilizes value-added mechanisms in the search engine and providing customers a challenging experience may increase customers’ shopping enjoyment. Furthermore, if there are more often customers back to the web store, their shopping enjoyment then be determined by their involvement with the product (Marios Koufaris, Kambil, & LaBarbera, 2001).

Also, demographic variables such as age, gender, and level of income play a facilitating role because they influence consumer perception and consumer behavior that drives them towards online shopping (Kim, Zhao, & Yang, 2008; Laforet & Li, 2005; Sabbir Rahman, 2012). In China, online shopping intention depends on consumers’ age, income, and education as well as marital status most importantly their perceived usefulness (Gong, Stump, & Maddox, 2013). For more succinct understanding, Table 1 summarizes the previous study results on online shopping followed by advantages of online shopping (Table 2) and disadvantages of online shopping (Table 3).

### 3.1. Advantages of online shopping

### 3.2. Disadvantages of online shopping

Despite the success of buying through online shopping store, there are still some difficulties that most people always complain. Those are giving in the following table:

### 3.3. Overview of online shopping in Bangladesh

Increasing diffusion of ICTs especially the Internet forcing the global business community to move towards e-business. Online shopping gives consumers the access to the world market, enabling them to compare price across the region and various sites, find out whether price varies by order fragmentation, get awareness about alternative products (Jagonews24.com., 2015). Consequently, the sellers ensure that they portrayed themselves in the cyber world through websites and portals. The sellers like consumers also benefit from the increase and more efficient access to the global market through the Internet.

Over the last several years, UNCTAD (United Nation Center for Trade and Development) has emphasized the importance of e-commerce, especially online shopping for developing countries (UNCTAD, 2017). To facilitate developing countries to transition into all sectors of e-commerce, UNCTAD has special programs. UNCTAD has also developed rules and guideline for all types of a global e-commerce transaction. The private sector in Bangladesh should be well prepared to meet the requirement and expectation of the customer and also stand out in the competition against rivals from home and abroad because of increasing globalization (Khan, 2014).

In such a scenario, businesses need to automate their internal processes with those of ICTs to become increasingly competitive and efficient in a global context. Also, businesses have to have adequate presence and participation in the cyber world. Particularly, these two issues are becoming essential for Bangladeshi corporate sector (Dhaka Tribune, 2015).
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<th>Title</th>
<th>Findings</th>
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<tr>
<td>Identifying key factors affecting consumer purchase behavior in an online shopping context</td>
<td>The user interface quality, product and service information quality, security perception and site awareness were found to have significant effects on consumer’s site commitment. They investigated whether information satisfaction and relational benefit play a significant mediating role in consumers’ relationship purchasing behavior</td>
<td>Multiple regression analysis was done on data collected through web</td>
<td>Park and Kim (2003)</td>
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<td>Consumer attitudes towards online shopping: The effects of trust, perceived benefits and perceived web quality (Jordan)</td>
<td>The empirical findings of this study indicate that trust and perceived benefits determine consumer attitudes toward online shopping</td>
<td>Factor analysis and structural path model analysis was used to test the hypothesized relationships of the research model</td>
<td>Al-Debei et al. (2015)</td>
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<tr>
<td>Factors influencing consumers’ online shopping in China</td>
<td>Chinese consumers’ age, income, education, and marital status, and their perceived usefulness are significant predictors of online shopping intention</td>
<td>Hierarchical regression analysis is used on 503 Chinese customers</td>
<td>Gong et al. (2013)</td>
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<td>Customer perceptions of e-service quality in online shopping</td>
<td>The analytical results showed that the dimensions of website design, reliability, responsiveness, and trust affect overall service quality and customer satisfaction. Moreover, trust significantly related to customer purchase intentions. However, the personalization dimension is not significantly related to overall service quality and customer satisfaction</td>
<td>Confirmatory factor analysis and structural equation modeling are done on data collected from a sample size of 297 online consumers</td>
<td>Lee and Lin (2005)</td>
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<tr>
<td>Internet users’ attitudes toward business-to-consumer online shopping</td>
<td>Lack of physical interaction is a central impediment to online retail sales. Respondents stated that privacy of personal information and security of financial transactions are their top concerns when using the Internet. The top factors that increase consumer trust levels in online stores are guarantee and insurance policy, security and privacy seals, pictures of products, company address and contact details, necessary details about the company and privacy policy.</td>
<td>Descriptive statistics techniques analyzed survey-based data, and the results of the data analysis are presented.</td>
<td>Huseynov and Yıldırım (2014)</td>
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<tr>
<td>An empirical study on behavioral intent of consumers in online shopping</td>
<td>The effect of demographic characteristics like income, gender, occupation, education levels, a sector of employment is found to be statistically insignificant on both behaviors for products as well as services intention and purchase behavior in the online environment for products and services. Regarding actual behavior, it is the ease of use, past experiences, and compatibility that are much more effective in determining the behavior.</td>
<td>Consumer intention in web-based shopping is analyzed through the comparison of the factors that facilitate or inhibit online purchasing of products and services using the theory of planned behavior.</td>
<td>Kim et al. (2008)</td>
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<tr>
<td>Consumer behavior in web-based commerce: an empirical study</td>
<td>Perceived control and shopping enjoyment can increase the intention of new web customers to return, but seemingly do not influence repeat customers to return. It also finds that a web store that utilizes value-added search mechanisms and presents a positively challenging experience can increase customers’ shopping enjoyment. Further, the more often customers return to a web store, the more their shopping enjoyment is determined by their product involvement.</td>
<td>Exploratory study</td>
<td>Marios Koufaris et al. (2001)</td>
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<td>Consumer reactions to electronic shopping on the World Wide Web</td>
<td>World Wide Web merchants need to think more about how they perform on the factors known to affect consumer behavior; namely, product perceptions, shopping experience, and customer service</td>
<td>Experimental survey Focus group discussion Dana analysis through regression analysis</td>
<td>Jarvenpaa et al. (1997)</td>
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<td>Factors influencing consumers’ attitude towards e-Commerce purchases through online shopping</td>
<td>There is a significant relationship between e-Commerce experience, product perception and customer service with the attitude towards online shopping among the respondents. There is no relationship of hours spent on Internet and customer risk with the attitude towards online shopping among the respondents</td>
<td>One-way ANOVA Pearson’s correlation</td>
<td>Zurani and Goh (2012)</td>
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<td>A study on consumers’ attitude towards online shopping in China</td>
<td>This research found that there were relationships between the perceived usability, perceived security, perceived privacy, perceived after-sales service, perceived marketing mix, perceived reputation and consumers’ attitude to adapting online shopping in China. Only marketing mix and reputation have a greater influence on consumers’ attitude towards online shopping</td>
<td>Multiple regression analysis</td>
<td>Jun and Jaafar (2011)</td>
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<td>Influencing the online consumer’s behavior: the web experience</td>
<td>This study classifies the main ingredients of the online experience or web experience as being the functionality of the website that includes the elements dealing with the site’s usability and interactivity; the psychological elements intended for lowering the customer’s uncertainty by communicating trust and credibility of the online vendor and web site; and the content elements including the aesthetic aspects of the online presentation and the marketing mix</td>
<td>Review of previous 6 years’ research</td>
<td>Constantinides (2004)</td>
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<td>The impact of social networks on consumers’ behaviors</td>
<td>A significant correlation between customers’ interaction with UGC and customers’ buying behavior</td>
<td>Regression analysis method</td>
<td>Alsubagh (2015)</td>
</tr>
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<td>Online shopper behavior: influences of online shopping decision</td>
<td>Factors that motivate customers to buy online include convenience, information, available products and service and cost and efficiency. Factors that impede customers to buy online include security, the intangibility of online product, social contact and dissatisfaction with online shopping</td>
<td>Descriptive analysis</td>
<td>Katawetaworaks and Wang (2011)</td>
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<td>Online shopping and customer satisfaction in Malaysia</td>
<td>Information quality, purchase quality, and post-purchase quality have a statistically significant relationship with customer satisfaction in Malaysia</td>
<td>Reliability analysis</td>
<td>Vegiayan et al. (2013)</td>
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| A study of Indian online consumers and their buying behavior         | • The ratio of male consumers is very high in online shopping (73%)  
• Income of respondents largely falls in the bracket of Rs. 10,001 to Rs. 20,000 (49%)  
• Employees of various companies are purchasing more than others through online shopping (51%)  
• Maximum numbers of respondents (38%) feel that online shopping has easy buying procedures; others think that they can have a wide variety of products, lower price of the products, various modes of payments, etc.  
• Most of the respondents think that availability of online information about products and services is excellent (54%)  
• Most of the respondents purchase the products 2-5 times annually (46%)  
• Some respondents are facing problems at the time of online buying (23%)  
• Most of the respondents Search and buy online but pay in cash on delivery (61%) | Primary data have been collected from 200 respondents and analyzed | Rastogi (2010)               |
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<td>Initial trust and online buyer behavior</td>
<td>It is found that perceived usefulness, perceived security, perceived privacy, perceived good reputation, and willingness to customize are the essential antecedents to initial online trust. Both online initial trust and familiarity with online purchasing have a positive impact on purchase intention</td>
<td>The research examines consumers’ online initial trust by using four significant categories of determinants: perceived technology, perceived risk, company competency, and trust propensity. Data have been analyzed through: descriptive statistics; reliability, validity and correlation analysis; regression analysis; analysis of variance</td>
<td>Chen and Barnes (2007)</td>
</tr>
<tr>
<td>Understanding online purchase intentions: contributions from technology and trust perspectives</td>
<td>As the profile data show, this group is relatively homogeneous regarding age and balanced regarding Internet experience. It is found that the trust-antecedent “perceived risk” and the technology-antecedent “perceived ease-of-use” directly influenced the attitude towards purchasing online</td>
<td>An empirical study on 228 students. Reliability and validity test Structural equation modelling (SEM) estimation</td>
<td>Heijden, Van Der, Verhagen, and Creemers (2003)</td>
</tr>
<tr>
<td>An empirical investigation on the adoption of e-Commerce in Bangladesh</td>
<td>The findings of the study show that all the four constructs, namely, computer self-efficacy, perceived credibility, perceived usefulness and perceived ease of use have a significant effect on the adoption of e-commerce. The study has also demonstrated that perceived usefulness appeared as the most critical factor in describing the user’s adoption of e-Commerce</td>
<td>TAM (Technology Acceptance Model) Two hundred samples were examined</td>
<td>Hoque et al. (2015)</td>
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<tr>
<td>Web-based shopping: consumers’ attitudes towards online shopping in New Zealand</td>
<td>This research found that website design, website reliability/fulfillment, website customer service and website security/privacy are the four dominant factors which influence consumer perceptions of online purchasing. One of the results also indicated that different types of online purchasers (i.e., trial, occasional, frequent and regular online buyers) have different appraisals of website design and website reliability/fulfillment. They have a similar evaluation of website security/privacy and website customer service.</td>
<td>Factor analysis and a series of ANOVA test of factors were done on responses from 102 samples</td>
<td>Shergill and Chen (2005)</td>
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<tr>
<td>Mining customer knowledge for exploring online group buying behavior</td>
<td>This study finds some online group buying buyers are more from the high-income group and prefers to pay by credit card and ATM. They want 24/7 customer service and well feedback</td>
<td>This study uses the Apriori algorithm as an association rules approach, and clustering analysis for data mining, which is implemented for mining customer knowledge among online group buying customers in Taiwan</td>
<td>Liao et al. (2012)</td>
</tr>
<tr>
<td>A study of the impact of social media on consumers</td>
<td>The study shows the influence of social network on increased trust and intention to buy</td>
<td>The study was conducted on 237 respondents through online and paper questionnaires. SEM-PLS used to validate the proposed model</td>
<td>Hajji (2014)</td>
</tr>
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</table>
3.3.1 Emergences of online shopping in Bangladesh

Although e-Commerce operation first started in late 90s to deliver gifts to Bangladeshi friends and family members by NRBs (Mohiuddin, 2014), the first real local e-commerce or m-commerce operation was launched by CellBazaar.com in 2006 through WAP service accessed only by mobile phones (Zainudeen, Samarajiva, & Sivapragasam, 2011).

The growth rate of e-commerce was prolonged in Bangladesh from 2000 to 2008. During that period, there were some e-commerce websites, but there was no system for an online transaction (Mahmood, 2015). Hardly few people knew about those sites for the high cost of Internet, telephone connections, few credit card holders (Hasan, 2014) and lower penetration rate. The opening up of online payment systems, mobile payment systems, inter-banking payment gateways in the 90s by Bangladesh Bank propelled the growth of e-commerce in Bangladesh.

The continuous investment of succeeding governments in the country’s ICT infrastructure to fulfill the vision of digital Bangladesh pulled down the Internet cost and spread the availability in each 492 Upazilas of Bangladesh. The initiative of Bangladesh Government to provide a stable Internet backbone to connect all government offices through the Internet, to encourage a well-grounded telecommunication sector, and opening IT parks are all leading indicators that point to the online shopping industry growth potential. Tables 4 and 5 show the Internet usage and penetration rate of Bangladesh.

According to BTRC, the total number of Active Internet subscriber has reached 62.004 million at the end of April 2016.
There is an increasing maturity in the way Bangladeshi people use the Internet. It is a standard curve. The online user typically starts by using email, social networking gradually moves on to browsing for news, information, entertainment, and finally, graduate to do shopping and conducting business online (Khan, 2014). In the UNCTAD (2017) B2C e-commerce index report, Bangladesh achieved the rank of 103 among 144 countries studied; however, Bangladesh is also in the biggest annual index ranking changing status (more than 10%).

Today there are more than 7000 e-commerce firms are operating through the website and social media and among these most dominating are chaldal.com, ekhanei.com, bikroy.com, rokomari.

<table>
<thead>
<tr>
<th>Year</th>
<th>Users</th>
<th>Population</th>
<th>% Pen.</th>
<th>GDP p.c.*</th>
<th>Usage source</th>
</tr>
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<tbody>
<tr>
<td>2000</td>
<td>100,000</td>
<td>134,824,000</td>
<td>0.1</td>
<td>N/A</td>
<td>ITU</td>
</tr>
<tr>
<td>2007</td>
<td>450,000</td>
<td>137,493,990</td>
<td>0.3</td>
<td>US$ 466</td>
<td>ITU</td>
</tr>
<tr>
<td>2009</td>
<td>556,000</td>
<td>156,050,883</td>
<td>0.4</td>
<td>US$ 574</td>
<td>ITU</td>
</tr>
<tr>
<td>2010</td>
<td>617,300</td>
<td>158,065,841</td>
<td>0.4</td>
<td>US$ 624</td>
<td>ITU</td>
</tr>
<tr>
<td>2011</td>
<td>5,501,609</td>
<td>158,570,535</td>
<td>3.5</td>
<td>US$ 700</td>
<td>ITU</td>
</tr>
<tr>
<td>2012</td>
<td>8,054,190</td>
<td>161,083,804</td>
<td>5.0</td>
<td>US$ 700</td>
<td>ITU</td>
</tr>
<tr>
<td>2015</td>
<td>53,941,000</td>
<td>168,957,745</td>
<td>31.9</td>
<td>US$ 1,080</td>
<td>IWS</td>
</tr>
</tbody>
</table>

Note: GDP in US dollars.
Source: International Monetary Fund (Internetworldstats.com, 2015)
com, pickaboo.com, and daraz.com (Islam, 2017). Interestingly, these trends are not limited only to Dhaka, the capital city, but semi-urban and to an extent, rural areas as well (Dhaka Tribune, 2015). There are about 2.55 million online shoppers, who are about 2% of the total population of Bangladesh (UNCTAD, 2017). Internet users in Bangladesh spend over Tk 7184.018 crore in online shopping each year. A Google research paper titled “Research Insight: Emerging Trend as Bangladesh goes Digital” found that 22% of the country’s total Internet users shop online and spend Tk 7594.10 annually on average (Dhaka Tribune, 2015).

According to the study of Kaymu.com in 2015 (Jagonews24.com., 2015), Dhaka (35%), Chittagong (29%), and Gazipur (15%) are the primary zone for online shopping traffic of Bangladesh. Of the total traffic, new online shopping visitor stands at 49%, while returning visitor is 51%. 71% of online shoppers have used either a desktop or a laptop, followed by mobile phone and tablets. Google and Facebook are primary click-through points for online shoppers. About 69% of the online shoppers use the Windows operating system for online shopping.

Observing the popularity, foreign investors are coming to the Bangladeshi market, for example, recently Chinese giant Alibaba group bought daraz.com and bKash – a mobile payment system to operate in Bangladesh (Ovi, 2018). However, analyzing customer behaviors is crucial especially in the case of online shoppers who do not get the touch and feel of the actual product during purchase. The findings of this research may shed light on this issue.

4. Findings and discussion

4.1. Demographics of the respondents
The respondents were categorized into several factors, such as gender, age, occupation, income.

4.1.1. Gender
Among the respondents, we found 62.5% were male, and 37.5% were female (see Table 6).

4.1.2. Age
From Figure 1, we can interpret that majority of the respondents were below 36 years old. 19% male respondents were below 20 years old, 25% between 20–25 years, 30% between 26–30 years, 17% of 31–35 years and 9% of male respondents were 36 or more years old. Whereas 18.33% female respondents were below 20 years of age, 35% between 20–25 years, 28.33% between 26–30 years, 13.34% of 31–35 years and only 5% female were 36 or above years old.

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<th>Operator</th>
<th>Subscriber</th>
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<tr>
<td>Mobile Internet</td>
<td>58.661</td>
</tr>
<tr>
<td>WiMAX</td>
<td>0.124</td>
</tr>
<tr>
<td>ISP + PSTN</td>
<td>3.219</td>
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<tr>
<td>Total</td>
<td>62.004</td>
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*Note: Subscriber in a million. Source: BTRC (2018).*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>62.5</td>
</tr>
<tr>
<td>Female</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Table 5. The Internet subscribers

Table 6. Gender of the respondents
4.1.3. Occupation
In case of occupation, 46.88% of them were students, 28.13% of them were service holders, 13.12% was homemakers, and the rest of them were doing business (see Figure 2).

4.1.4. Income
From Figure 3 we can see that nearly 54% interviewees’ average monthly income fall into Tk. 0–10,000 categories, 15.62% respondents’ monthly income was into Tk. 10,001–20,000, 14.38% earn Tk. 20,001–30,000, and 16.88% of the interviewees have more than Tk. 30,000 income per month.

4.1.5. Experiences of online shopping versus online shopping frequencies
About 41.88% of the respondents have less than 0–1 years’ experience of online shopping, 36.25% of them have 1–2 years’ experiences, 14.37% of them have 2–3 years’ experiences and 7.5% of the respondents have experiences in online shopping for more than 3 years. Among those
respondents, 57.5% of them occasionally shop online, 28.75% do shop once every month, 10% of the respondents shop online fortnightly, and only 3.75% of them buy online weekly.

From Figure 4, it is observed that 70.16% of the 0–1 years’ experienced online shopper do shopping occasionally, and 20.89% do shopping monthly. 55.17% of 1–2 years experienced buyer do shopping occasionally, and 37.93% are a monthly online shopper. 39.13% of 2–3 years’ experienced online shopper are occasional customers, and 30.43% of the respondents are monthly and fortnightly online shopper. Among more than 3 years’ experienced respondents, 16.67% do weekly online shopping, 33.33% do occasionally, and 25% of them are monthly and fortnightly online shopper. It is evident that the frequency of shopping is increasing when they become more experienced in online shopping. This confirms the study of Heijden et al. (2003), Chen and Barnes (2007), Zuroni and Goh (2012), Jarvenpaa et al. (1997) and Hoque et al. (2015), where they found perceived ease of use which comes from experience helps to adopt the online shopping.

4.1.6. Sources of online shopping information
For selling and promoting products through online, it is essential to inform the consumer about online shopping, the advantages, disadvantages and website address which are related to it. About 56.25% of the respondents know about online shopping from websites especially from different social media like Facebook, Twitter, Linkedin, Instagram, etc. About 24.37% of them get information from friends and family members. 13.13% of them from TV advertisements and 6.25% of them from other sources like a billboard, signboard, newspaper, magazine, etc. (see Figure 5).

Additionally, website advertisement, friends and family members are the primary sources of online shopping information for the online consumer. This result confirms the findings of Haji (2014) and Alsubagh (2015). Publicity through various websites (primarily Facebook) will be more beneficial for organizations to promote their online shopping sites and products.
4.1.7. Reasons for choosing online shopping

Both male and female respondents assured that there are specific reasons for choosing online shopping. 38.75% respondents (26.25% male, 12.5% female) mentioned saving time is their primary reason for choosing online shopping and about 29.38% of the interviewees prefer online shopping because of availability of the varieties of products. Nearly, 19% of the respondents prefer online shopping because product comparison is much easier for online shopping and 13.13% choose for a comfortable reason (see Figure 6).

Time-saving and available varieties of products are the main grounds for shopping online. All these four factors motivate an online shopper to buy over the Internet. Therefore, companies should design strategies and develop varieties of products to attract and retain online shopper. This findings also confirm the findings of Gong et al. (2013) and Hoque et al. (2015), where the respondents found to adopt e-commerce for the usefulness.

4.1.8. Preference for product/service

While respondents were asked to know about the offered goods and services, 33.75% of the respondents preferred Apparels (21.88% male and 11.87% female) and accessories 32.49%
(19.37% male and 13.12% female). 20% (16% male and 7% female) respondent preferred online ticketing. About 11.88% of the interviewees preferred healthcare and fitness products and only 1.88% respondents prefer books (see Figure 7).

Apparels, accessories, and online ticketing are the main three categories that are bringing about online shopping culture among online shoppers. Online shopping tends to grow in the coming years as consumers want to buy more in the future. Merchants should bring out innovative ways so that there is a growth in other categories of goods and services.

4.1.9. Factors for liking online shopping
Figure 8 shows, among the male respondents, 42% like online shopping because of the home delivery facility, while about 29% male respondents said that it is easier to order for which they would like to shop online. 12% of the male respondents like discount offer most for online shopping and 17% of the male respondents like available options for buying and payments gateways. On the other hand, 38.34% of the female respondents also do online shopping for a home delivery facility, 25% do for the easiness of ordering, rest of the 23.33% (13.33% female respondents) like for discount offer and available options respectively.

Both male and female respondents have the same attitude towards liking factor of online shopping. Both like home delivery facility factor most. However, female likes discount offers more than the male does. These findings confirm the study of Rastogi (2010) and Katawetawaraks and Wang (2011), where the online shoppers also preferred the online shopping for ease of use and products’ variety.

4.1.10. Factors for disliking online shopping
We also asked respondents if there is any disliking factor that impedes them from deciding doing online shopping. Figure 9 shows that 48% hate the inability to touch and feel or trial factor about online shopping, while about 24% male said that it is the high price of products or services for which they dislike online shopping most. 16% male respondents dislike after sale services on online shopping and 12% male respondents dislike poor return policy.

Among the female respondents, 45% dislike online shopping for lack of inability to touch and feel factor. 23.33% dislike the high price of the products and services. 16.67% and 15% female respondents hate poor return policy and lack of after sale service factor most respectively.

![Figure 8. Factors for liking online shopping.](image-url)
Inability to touch and feel the product or trust is still the primary disliking factor about online shopping, or we can say the primary barrier to online shopping which confirms the study of Chen and Barnes (2007), Heijden et al. (2003) and Huseynov and Yıldırım (2014). The high price of goods and services is another big issue for the consumers. Marketers need to develop better return policies, improve the products quality and after sale services and charge a reasonable price to encourage online shopping.

4.1.11. Modes of payment preference

Figure 10 shows the different payment options for customers which is a very crucial segment for buying decision. 76.25% of the respondents are doing transaction by cash on delivery facility whereas 15.62% of the interviewees is paying through a debit card. 3.13% respondent pay by credit card and 5% through mobile banking. Most of the consumers prefer cash on delivery as a mode of payment for online shopping. This finding confirms the study of Rastogi (2010) but contrasts the findings of Liao et al. (2012), where the online shoppers mostly prefer to pay through credit or debit cards. The contrast may be due to the less developed financial sector of Bangladesh, where credit cards are less available than that in developed countries.

4.1.12. Payment system security

From the survey it is found that (Figure 11) none of the respondents highly agreed to the fact that the payment system for online shopping is highly secured in Bangladesh. 15% of the interviewees agreed to the fact that online payment system is much secured where 27.5% of respondents disagreed. 51.87% of respondents remain neutral about the fact, and 5.63% profoundly disagreed.

Above all, secured payment is a significant concern in Bangladesh. Most of the consumers believe that the payment system for online shopping is not secured. Usually, they do not prefer...
to use their credit or debit card while shopping from online sites. Companies should introduce new improved technologies to create and gain confidence in the payment system among the consumers.

4.1.1.3. Online shopping satisfaction
50% of regular online shoppers are satisfied whereas 17.5% are dissatisfied. 28.12% of them are neither satisfied nor dissatisfied. Only 3.75% of regular online shoppers are highly satisfied while 0.63% is highly dissatisfied (see Figure 12).

Satisfaction level plays a significant role in online shopping. Satisfied consumers tend to shop more frequently online. After analyzing data, we found that half of the respondents are satisfied with their overall online shopping experience. A note should be taken that only 3.75% of the online shopper is highly satisfied which shows that there are still concerns, which hinder the consumer from using online shopping frequently. Companies should undertake measures so that dissatisfied and neutral category of online shoppers can move towards satisfied or highly satisfied category and shop online more often and it has to be done through better information quality, quality service in during purchase and post-purchase (Vegiayan et al., 2013).

5. Conclusion
Online shopping is more and more driven by the ICT infrastructure development, online payment systems and the Internet penetration rate in Bangladesh. Earlier studies showed that unlike brick and mortar shopping behavior, online shopping behavior is influenced by net connectivity, website esthetics (Constantinides, 2004), security, customers’ experience, age and learning curve, etc. Studying these unique characteristics of online shopping and consumer behavior of online shoppers would benefit the tech-entrepreneurs and policymakers to craft their strategies properly for the market. This study empirically reveals the consumer behavior of online shoppers in Bangladesh.
Bangladeshi online shoppers are young (mostly below 40 years) similar to other parts of the world. They do online shopping because it saves time, offers home delivery, provides ease in shopping and offers more variety of products for apparels, accessories, and ticketing than that of brick and mortar stores. They mostly rely on price and their experience as the basis of the quality judgment of items in online shopping and for payment system they prefer cash on delivery option. Most of the shoppers get the information primarily from Facebook advertisements which is pursued by friends and family by following their “word of mouth” communication. However, privacy and inability to touch and feel are the most disliking factors for online shoppers. These findings of our study have both theoretical and practical implications.

5.1. Theoretical implications
This study provides a foundation for the future researchers in studying the consumer behavior of Bangladeshi online shoppers. Further research can be possible by increasing sample size including a rural population that may reflect the entire scenario of consumer behavior of online shopping in Bangladesh. Furthermore, the variables that have been identified in this study may not be sufficient rather more variables are to be considered in future research. Researchers may also look for factors that influence the online shopping behavior, customer satisfaction, and loyalty.

5.2. Managerial implications
The findings of the paper provide managers guideline about the attributes that must be included in their products and service quality, mode of delivery channel, payment gateway, security, trust-worthiness, and pricing strategy. Managers should choose the social network for advertisement. As, until now the online payment systems through credit card are not that much available, managers must maintain the cash on a delivery program to gain trust among the customers. To elevate the touch and feel concern, managers can send alternative products to the customer to choose from options and pay after they prefer one. If the managers consider these factors, they might have a competitive advantage in the market.

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