E-commerce Development in Bangladesh

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Abstract

The whole world is experiencing the major transformation in retail business, and Bangladesh does not differ from the global trend. The e-commerce in Bangladesh is still a young and emerging industry; it is growing fast. In this paper, we have presented the characteristics of Bangladesh e-commerce, its past and present development based on secondary data from different sources. Also, a questionnaire-based survey conducted to know the perception of online consumers and their previous shopping experience. The study highlighted the challenges and areas for perfection in the e-commerce market in Bangladesh. The article comprises a suggestion for improvements in marketing activities for the Bangladesh online stores.

Keywords: e-commerce, Bangladesh, consumer attitude

1. Introduction

E-commerce or Electronic commerce has brought revolutionary changes in the business. The inception of internet technology made it possible. The whole world is experiencing a tremendous transition in business, now a day's internet is used as a tool for business. According to data statistics, 52% of the world population are internet users (Internet W. S., 2018). That gives us an indication of how e-commerce is going to make an impact on the future or currently impacting on our business and social life. E-commerce business principle can apply in all business models, i.e., B2B (Business to Business), B2C (business to consumer), C2C (Consumer to Consumer) and C2B (Consumer to Business). Last two decades the world has noticed incredible growth in e-commerce. In 2017, the worldwide e-commerce sales amounted to 2.3 trillion USD and projected to raise 4.88 trillion USD by 2021 (eMarketer, 2018).

In Bangladesh e-commerce still in developing phase, though it has started in the late 1990s (e-cab, 2016). During that time, small numbers of non-resident Bangladeshi used e-commerce services to send gifts and books to their dear one in Dhaka capital city of Bangladesh. Later in the year 2001-2008, it has experienced little growth due to lack of knowledge and infrastructure. The situation has started changing in 2012-2013 when two e-commerce site akhoni and ajkerdeal introduce themselves to the online consumers. It has received good appreciation from the consumers mainly in Dhaka. The outcome of the E-com venture not only enticed business entrepreneur to invest and hit the market from Bangladesh but also from abroad as well. Some foreign investor like Olx, daraz, and kaymu joined the competition along with local (Rashed, 2017). There has been decent growth in e-commerce in the last couple of years; some e-commerce service provider launches their service. A site like rokomari.com, who have adopted a similar business strategy like Amazon started selling books. Currently holding the top position in the industry and began expanding their business into other product categories. Bikroy.com is another example; they adopted the unique business model. They provide both buying and selling options for the consumer goods in their platform. FMCG and grocery sector also step into the e-commerce industry othoba.com, pickaboo and chaldal.com represent respective areas. Renown business conglomerate and business group of the country shown interest to join in e-commerce trade. Online food delivery services also got a very positive response from food lovers. Due to high traffic congestion and inadequate driving condition consumers prefer to order food online then visit the restaurant. Hungry Naki and Food panda two very well known delivery e-commerce platform in Dhaka and Chittagong (export.gov, 2017).

The growing popularity of online shopping and increased number of internet users showing great prospect of e-commerce development in Bangladesh. The application of e-commerce will be different in Bangladesh than it

is in China, Europe and America because of the social and cultural difference, overwhelming popularity of traditional business models, typical consumer behaviors, and consumer expectations.

2. The Objective and Methodology

The objective of this study to get a clear picture of the past and present situation of e-commerce in Bangladesh. How it evolves over the years, current status, infrastructure development, government policy and consumers perception about e-commerce all these issues will be address and discussed.

Our study is primarily based on secondary data. The data and information have collected from government reports, website, newspapers, online blogs, Journals, and Research paper, etc. We have conducted a small survey to get the primary data to learn about consumer's perception of e-commerce. Dhaka and Chittagong are two major cities that have seen significant development of e-business. So our questionnaire is distributed to that areas and data are collected from local consumers.

This paper analyzes those data that present in reports and survey. We also discussed the various factors that have a substantial impact on E-commerce development in Bangladesh. Our aim is to help the businesses that want to expand e-business in Bangladesh. Provide them with a better understanding of Bangladesh's e-commerce development, distinctiveness, and hurdles. The understanding of e-consumer behavior, preferences, and expectations are enormously crucial for businesses people, to ensure that they can apply the appropriate strategy when expanding e-commerce in Bangladesh.

3. E-Commerce in Bangladesh

The economic growth of Bangladesh is quite steady and showing an upward trend. Last one decade it has shown significant improvement, even during the world financial recession the GDP growth was remarkable. Now it is considered one of the fastest growing major economies in the world with a GDP growth rate of over 7.1%. It also got the attention and emerged itself as one of the leading frontier marketplaces for global investors. In 2016, the IMF stated that it was the 2nd fastest-growing major economy in the world (Payal, 2017).

3.1 Internet Users and Infrastructure Development

Bangladesh has seen e-commerce inception in the late 90's and early 2000's. Even though there was a lack of infrastructure, internet facilities, and government policy but it received better appreciation from the consumers. In 2013, the government allowed to purchase and sale of goods and online services by using international credit cards (export.gov, 2017). Before that wireless internet service, WiMAX and 3G roll out some major cities and internet speed got faster. To some extent, that gave a major boost to the online business. Initially, the growth was not that significant, but it was promising. In 2016, the e-commerce industry recorded a 67% growth in the first three quarters, and the country's e-commerce transaction reached 3.59 billion takas (50 million U.S. dollars) (Xinhua, 2016).

Fastest internet connection and internet users are the key factors that help to boom e-commerce business. Last couple of years, Bangladesh experiencing tremendous growth in this sector. In 2016, the internet penetration rate was 13.2%, and the number of internet users was 21.39 million (internetlivestats, 2016). In 2017, the number increased triple times, the internet users raised to 80.43 million and the penetration rate was 48.4% (Internet w. s., 2018). According to Bangladesh telecommunication regulatory commission (BTRC), latest statistics (June 2018) shows that the number further increased to 87.79 million users and the penetration rate is 52.77% (BTRC, www.btrc.gov.bd, 2018). Figure 1 shows a graphical presentation of users and penetration rate.

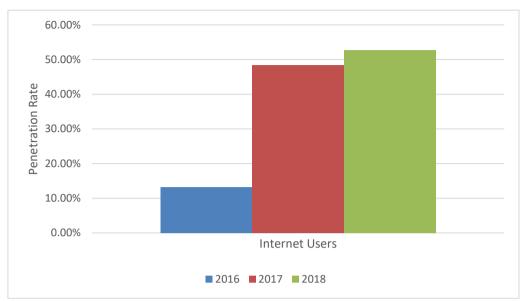


Figure 1. Internet users and Penetration rate

The statistic looks very promising and encouraging to the e-commerce traders and investors. The data also revealed that mobile internet users hold the majority of shares among a total number of users. Based on the latest data, 82.02 million users subscribe to the mobile internet, 0.081 million subscribe to WiMAX, and 5.685 million subscribe to ISP + PSTN connections. Figure 2 shows the breakdown of internet subscribers; the data source is the BTRC website (BTRC, www.btrc.gov.bd, 2018).

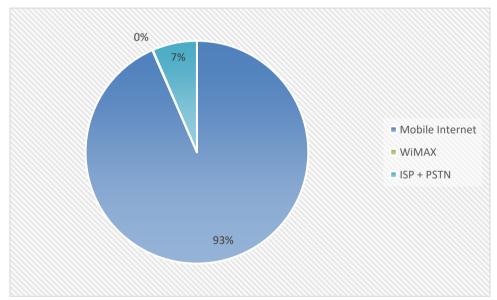


Figure 2. Total Internet Subscribers

In February 2018, mobile operators in Bangladesh launched 4G internet service in major cities, which subsequently introduced to all 64 districts (Shariar, 2018). The mobile operators are updating their infrastructures to provide un-interruptible internet and communication services. Recently the government has decided to test-run of the fifth generation (5G) mobile data service by July this year; the test will be run with the support of a leading telecom vendor Huawei (Dailystar, www.thedailystar.net, 2018). There is another news came out that the government is eying on to launch the fifth-generation wireless technology from 2020 (Hitler, 2018).

Another data statistics from BTRC shows that the total number of Mobile Phone subscribers has reached 150.945 Million at the end of June 2018 (BTRC, www.btrc.gov.bd, 2018). The gaining popularity of the Mobile and the increased numbers of Internet users are prerequisites for the E-commerce development. The government took multiple initiatives to provide high aptitude fiber-optic submarine cable bandwidth and state of

the art Internet Transfer facilities. Bangladesh Submarine Cable Company Limited (BSCCL) was formed in 2008 to run a smooth operation and provide better communication service. BSCCL is a party in both SMW-4, and SMW-5 Consortiums offer more capacity and redundancy in Submarine Cables for Bangladesh (BSCCL, 2018). The BSCCL annual reports indicate that in 2016 the total bandwidth capacity is increased to 500 GBPS, previously it was 200GBPS. Figure 3 illustrates to us the current bandwidth capacity and utilization scenario of Bangladesh. The data are retrieved from BSCCL annual reports (BSCCL, 2018).

Business Performance

The capacity and utilization level of bandwidth by the company is presented as follows:

Particulars	2016-17	2015-16	2014-15	2013-14	2012-13
Equipped Capacity (Gbps)	500.00*	200.00	200.00	200.00	200.00
Utilization (Gbps)	246.98	132.16	33.52	22.50	38.75
Capacity Utilization (%)	49.40	66.08	16.76	11.25	19.38

^{*} Total System Capacity of BSCCL from SMW-4 and SMW-5 Submarine Cable is 1800 Gbps.

Figure 3. Bandwidth Capacity and utilization

(Image source: BSCCL annual reports 2016-2017)

In UNCTAD report, it is mentioned that internet users one of the leading indicators along with the other three factors to judge e-commerce growth and development. A recent report shows that there are more than 60 million active 3G users by December 2017(though the number rises to 87 million by June 2018), 40 million users actively use the internet every day and 10.87 million new sims added in 2017. The report also reveals that mobile transaction getting popular among consumers, average 891.42 crore taka mobile transaction per day in October 2017 (Md. Farhan, Khaled, & Mehrab, 2018). The whole scenario presents an excellent illustration of the current situation and its future growth. It is very lucrative and enticing for the possible investors. The recent acquisition by Chinese internet giant Alibaba has proved this assumption. It has acquired Bangladesh's one of the leading e-commerce venture "Daraz" Though the acquisition took places four other Asian countries as well (Dailystar, www.thedailystar.net, 2018). The figure 4 collected from The Daily Star online version and the image designed by Mr. Shahriar Rahman (www.thedailystar.net, 2018).

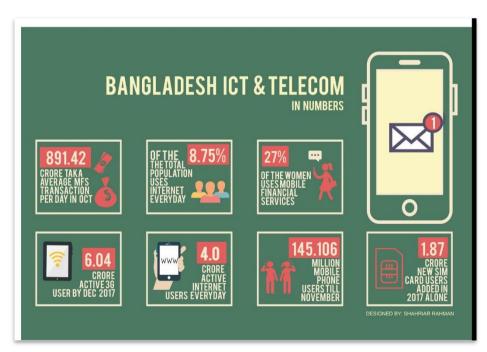


Figure 4. ICT and Telecom in Numbers

(Image source: The daily star)

3.2 Current Business Situation

According to e-commerce association of Bangladesh (e-CAB), the following three types of e-Commerce are popular in Bangladesh.

- Business-to-Consumer (B2C)
- Consumer-to-Consumer (C2C)
- Business-to-Business (B2B)

Business to Consumer has become popular in major cities in Bangladesh. A report published by e-CAB shows that E-commerce shoppers remained highly clustered. Dhaka, Chittagong, and Gazipur are three main cities that contribute 80% of the total shoppers. Dhaka (the capital city) draws the highest traffic 35%, Chittagong 29%, and Gazipur 15% respectively. Sylhet and Narayanganj other two cities that are showing promising growth (e-CAB, 2018). Another report shows that There are more than 2500 e-commerce websites and around 8,000 e-commerce pages on Facebook that operating business (export.gov, 2017) (Mohiuddin, 2014). UNCTAD B2C (business to consumers) E-Commerce Index 2016 shown that Bangladesh is one of the top 10 economies by the difference between the predicted and actual share of internet users buying online (UNCTAD, 2016). In November 2017, a report published by New Age (daily newspaper) it has mentioned that e-commerce sector expected to grow 70% and the market size is estimated \$110-115 million compared to 2016, which was \$65-70 million. Though e-commerce only contributes 0.7% of the country's total retail market (newagebd, 2017). The market is growing fast, and the sales volume is surging. The very recent report shows that the current e-commerce market size increased to \$230-240 million and annual growth is 45-50% (Muhammad, 2018). According to Goldman Sachs, Bangladesh e-commerce market size will grow to \$20 billion by 2020 (newagebd, 2017). If the current uprising trend persists, the prediction might become true or maybe more. Previously most of the traffic comes from the urban area, but recently some of the e-commerce sites extended their business in the rural area as well. The response is quite encouraging, "Customers from rural areas are also purchasing huge volumes of products, which is a new phenomenon for this kind of business" a former president of e-CAB Razib Ahmed said to the news agency (Muhammad, 2018). One of the major drawbacks of Bangladesh e-commerce business is delivery lead time, which is very high. A couple of product delivery companies noticed this and took the initiative; they build own warehouse for some companies that helping them to make faster deliveries.

Consumer to Consumer businesses are also rising, a significant amount of e-commerce websites are involved in C2C e-commerce. These sites are adopted eBay business model. They are individual and auction-based online marketplaces. Recently, the C2C sector has seen some merging, Telenor Group purchased CellBazar and Ekhanei.com purchased playeOLX (export.gov, 2017).

Business to Business is the model where a company conducts its trading and other commercial activity through the internet with business/trading partners. Generally, B2B engaged in providing manufacturing and supply-chain solutions. Few websites facilitate the B2B business in Bangladesh, for example, the Bangladesh Garment Manufacturers Employee Association (BGMEA) has deployed B2B e-commerce solutions for international RMG orders and procurement. Other websites feature business directories, trade deals, and information about suppliers such as Bangladesh Business Guide, Addressbazaar, and Bizbangladesh (export.gov, 2017). Some major e-commerce business sites name and website info listed in Table 1.

Table 1. List of e-commerce sites

Name	Website	Type of Business	
Rokomari	www.rokomari.com	B2C	
Ajker Deal	www.ajkerdeal.com	B2C	
Daraz	https://www.daraz.com.bd/	B2C	
Chaldal	https://chaldal.com/	B2C	
Othoba	https://www.othoba.com/	B2C	
Pickaboo	https://www.pickaboo.com/	B2C	
Bagdoom	www.bagdoom.com	B2C	
Clickbd	http://www.clickbd.com/	B2C	
Priyoshop	www.priyoshop.com	B2C	
Meenabazar	http://www.meenaclick.com/	B2C	
Kiksha	www.kiksha.com	B2C	
Sheba	https://www.sheba.xyz/	B2C	
Ghoori	Ghoori.com.bd	B2C	
Cellbazaar	https://cellbazaar.com/	C2C	
Buysellbazar	http://buysellbazar24.com/	C2C	
Kaymu	www.kaymu.com.bd	C2C	
Bikroy	www.bikroy.com	C2C	
Ekhane	www.ekhane.com	C2C	
Addressbazar	http://addressbazar.com/	B2B	
Bizbangladesh	https://bizbangladesh.com/b2b-trade	B2B	
Busytrade	http://bangladesh.busytrade.com/	B2B	

3.3 Law and Policy Framework

Internet security and trust are two fundamental to creating a favorable environment for e-commerce. That would comprise, legal and regulatory frameworks that assist paperless trade in goods and services, consumer protection, data privacy and protection, measures for cybercrime and market access. It is crucial to have strong policy and legal frameworks that should illustrate standard definitions of common keywords used in e-commerce, agreed-upon mechanisms of contract, finance and dispute resolution and should enable collaboration between different regulatory authorities.

The last couple of years, e-CAB is working with the government to formulate the draft guideline and national digital commerce policy. They organized more than 30 workshops to come up with e-commerce and local entrepreneur-friendly policy. Very recently, the government has approved the long-awaited National Digital Commerce Policy (www.thedailystar.net, 2018). The authority has mandated three crucial in the policy,

- It does not allow foreign investors to have a stake of over 49 percent in any e-commerce venture in Bangladesh.
- The e-commerce entities need to clearly state the details of the products they sell online, which include the product's quality along with its return policy.
- E-traders will have to sign a deal with the products' suppliers, delivery channels and payment gateways to ensure that customers' rights are appropriately protected, reads the policy.

The news brought massive relief to the e-commerce traders and will boost digital commerce and online shopping in the country. E-commerce businesspersons and traders hailed the new policy, believing it would turn up as a boon for domestic companies.

3.4 Online Payment

Products purchased over the Internet are often can be paid through online or offline. There are different ways to make the payment. Payment methods differ among countries and are a function of national financial regulations, credit riskiness, vendor strategies, and consumer preferences. It is quite challenging to choose a single payment method for measuring e-commerce payment readiness. Credit and debit cards are the most popular payment method worldwide in terms of online transaction purchase value (UNCTAD., 2017).

In Bangladesh, consumers are still reluctant to use the electronic mode of payment or online payment system. A survey report published in 2015 conducted by Kaymu, an online marketplace in Bangladesh. Their research shows that "Cash-on-delivery is the most commonly used payment method in Bangladesh, accounting for 95 percent of e-commerce transactions. Only 1 percent used credit cards, about 2 percent bKash or other mobile transactions and 2 percent banking channels" (Muhammad Z. I., 2015). Recent past the situation has improved a bit but still "cash on delivery" is the primary payment mode. Latest reports show that 90% payment made by Cash on delivery, 6% by MFS and 4% by Credit or Debit card. Figure 5 illustrates the current payment scenario.

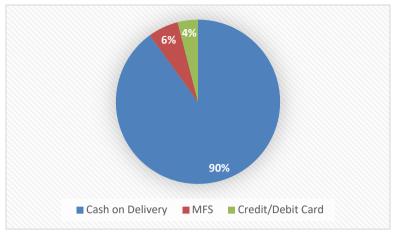


Figure 5. Online Shopping Payment Method

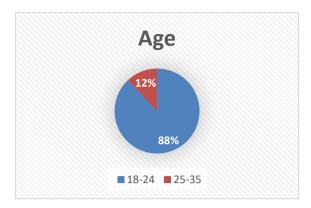
Government is keen to improve the payment system, earlier this year central bank approved a company to facilitate online payments and fund transfer between parties called "iPay." The startup will work like Paypal in the country. Other fintech company applied for government approval (A.K.M. Zamir, 2018). The technology still very new and will take time to get familiar among the consumers. However, analysts and policymakers are hopeful that it will get a similar response like MFS. Once get popular this will take mobile payment system to another era.

4. E-commerce in the Opinion of Bangladeshi Internet Users

A recent study found that Bangladesh currently enters to population dividend era. It means the percentage of young people will be the highest in the next 25 years. Currently, 65% of the total population of 168 million in Bangladesh is below the age of 35. It does not only make the country one of the largest (8th based on population) but also the youngest in the world (e-cab.net, 2017). It is a golden chance for Bangladesh to utilize e-commerce potential by providing a business-friendly environment. It will definitely change the economic landscape of the country. Goldman Sachs also did research and realized the potential of e-commerce in Bangladesh. They labeled it as one of the "Next Eleven" – a group of countries that have the prerequisites and capability to become key economic players in the twenty-first century (e-cab.net, 2017). Increasing urbanization and a larger middle class with higher disposable incomes – the ideal target group for e-commercial activities.

So far very few research has done to know about consumers perception of e-commerce in Bangladesh. (Rashed, 2017) Found that the majority of e-commerce buyers are young executives or students. He also mentions that the Bangladesh economy is scattering not only in Dhaka or Chittagong but also in villages, small cities with proper internet connectivity. (Syed, 2015) Found that aged between 20-35 years are more interested in shopping online. His survey reports show that 66% of his respondents already have the experience to buy a product online. (Mohammed & Tunazzina, 2015) Found that consumers prefer online shopping due to convenience in terms of less time consuming and hassle-free shopping. They also studied the relationship between family structure and likeliness to prefer online shopping. Their findings show that "when people do not have free time for shopping, especially in case of nuclear family or when both husband wives are employed, they prefer online shopping more than the people in the joint family."

To know about Bangladeshi consumer's perception of e-commerce/online shopping, we have conducted the questionnaire-based survey. Our data have been collected from Dhaka and Chittagong two major cities that most of the traffic comes from. Total 400 questionnaires distributed to the consumers but we have received 255 questionnaires. Five questionnaire removed from the analysis due to incorrect and missing answer. So the final number is 250, most of our respondents are aged 18 to 24 (88%), 174 are male respondents, and 76 are female respondents. Figure 6 and 7 present the demographics of the respondents.



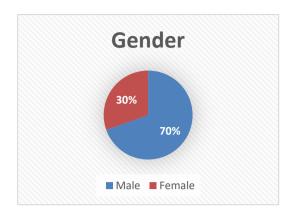


Figure 6. Age of respondents

Figure 7. Gender of respondents

The questionnaire was consist of 8 question, and we have adopted Seven-point Likert-type scale from *strongly disagree* (= 1) to strongly agree (= 7). Our findings show that 51% of respondents frequently buy products online and most of them are satisfied with the previous shopping experience. 54.8% felt that online shopping is convenient and 51.2% admitted the usefulness of the shopping. The result also shows that consumers enjoy shopping on the internet, 76.4% shown their comfort in buying products online. Though all the numbers are very encouraging surprisingly only 45.2% said that they would prefer to shop from the internet than the traditional channel in the future.

- Frequent online shopper- 51%
- Satisfied previous online shopping- 51.6%
- Online shopping convenient- 54.8%
- Online shopping useful- 51.2%
- Level of ease- 68%
- Level of comfort- 76.4%
- Easy and hassle-free- 53.6%
- Future shopping preference- 45.2%

Previous shopping experiences always have a significant impact on decisions concerning another purchase. Online shopping provides hassle-free shopping and saves valuable time. It facilitates access to a wide range of products with ease. It is convenient for them to roam around the virtual shopping world and choose their desired products. It is much more comfortable than visiting traditional brick and mortar stores. Therefore, building a long-term association with the client and transparent operation should be the primary business strategy. Client's pleasure and satisfaction with the purchase can be achieved with high-quality services. So, there should be a fast and easy interactive customer service system to answer all the question and queries. Good manners and behaviors will be the key to creating a relationship with clients.

5. Challenges

Bangladesh e-commerce is growing, and the market size is getting bigger. However, some obstacles are restricting the market growth and entrepreneurs having a tough time running their business.

- Lack of logistics and transportation System, restraining e-commerce traders to expand their business.
 That directly affects the delivery services, national road and highways are yet to be an international
 standard that facilitated the faster delivery services. The stagnant traffic hampers fast delivery of
 products in the city as well.
- The absence of government policy, traders, are misguided by several forums and managing bodies regarding business models, planning, and marketing. Lack of policy created a big understanding gap between entrepreneurs and consumers. Though recently the government has approved the e-commerce law and it needs to implement as soon as possible. That will clear all the confusion in the air and create a favorable environment for everyone.

- Shortage of capital, local entrepreneurs having a <u>tough</u> time to manage money and financial support. E-commerce still in development stage, so investors are not sure and certain about its growth. The government needs to step up and take the initiative to support those entrepreneurs.
- Trustworthy payment system, e-commerce in Bangladesh still have not earned the consumer's "Trust" that's why we see more than 90% payment made on delivery. Strict policy, reliable and safe payment system is the only way to overcome this issue. Another issue is a number of credit and debit cards users in Bangladesh; The number is deficient and insufficient. Bangladesh Bank has a huge role to play here; they should ask the public and private bank to take the initiative to encourage customers to use cards and lower the TXN cost for credit and debit card. Beginning of this year, we have seen the launch of the e-wallet or e-payment system; it will definitely help online and e-commerce payment.
- Integrate social media with an e-commerce platform; Facebook is the silent competitor of e-commerce. There are thousands of small merchants who are running their business through social media especially on facebook. Technology is changing fast and so does the consumers shopping behavior or pattern. Nowadays, consumers spent more time with their mobile phone than their laptop or desktop computers. So entrepreneurs need to understand the consumer's preference and act according to that.
- Lack of knowledge, Bangladeshi merchants and consumers yet to fully understand the benefits of
 e-commerce. ICT ministry, e-CAB, and BASIS have a considerable role to play here. They need to
 bring more expert and experienced persons in e-commerce to start campaigns to promote nationwide.
 Their collective efforts can make this a success.

6. Conclusion

The e-commerce in Bangladesh is still a young and emerging industry. In this paper, we have presented the characteristics of Bangladesh e-commerce, its past and present development. According to the report from UNCTAD, Goldman Sachs and other sources, Bangladesh e-commerce is growing with good pace and becoming competitive in Asian markets. In 2018, two major players in the global e-commerce industry Alibaba and Xiaomi announced their interest to run business in Bangladesh. From e-commerce business perspective it is excellent news for the government, consumers, and traders. This two company already established themselves as a global business leader, their experience and investment will be the significant boost for local e-commerce traders. It will definitely entice the other global players to come to Bangladesh and invest in the e-commerce industry. This paper we have pointed out some drawbacks of the current e-commerce industry, now policymakers need to shift their focus to those shortcomings, and act fast to take necessary measures to solve the problems. Besides that, they should provide healthy and level playing environments not only for local investors but also for foreign investors.

The number of websites/online stores and the number of online shoppers in Bangladesh growing steadily. According to our survey, the consumers of Bangladesh shown positive attitudes on e-shopping and at the same time expressed their concern about safety and privacy. So, e-commerce traders should take the initiative to build a long-term relationship with clients and earn their confidence, let them share their thoughts, create communities, listen to their opinions and use their ideas, more importantly, focus on the transparency of the operation. They should improve their marketing activities and develop a consumer-oriented strategy to entice more customers.

Recent time, global consumer's data privacy become a major concern. In our study, we found that both consumers and merchants have a lack of knowledge about the whole business system. So, the government has to play a prominent role here and ensure consumers data safety and provide the necessary platform to learn about e-commerce.

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