

The Consequential Difference between Bangladesh and China in e-commerce: Challenges and Opportunities

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Abstract:

This study investigates the difference between Bangladesh and China in e-commerce current scenarios and emphasizes the specific obstacles and prospects. We focused on three key factors in countries, (1) Internet users and growth rate (2) e-commerce sales (3) mobile payment user's volume. The study uses SWOT analysis based on review the number of the empirical literature and employed secondary data over the period from 2012 to 2020. Recently, e-commerce has launched in Bangladesh swiftly but lacks reliability and trustworthiness to encourage customers. On the other hand, China's e-commerce sector has occupied the highest place in the domestic and international market with fame. However, both countries' e-commerce is playing a prominent role and boosting significantly. This study contributes to providing analytical knowledge for creating new policy and offers effective suggestions this support to overcome the critical challenges. Therefore, tried to bounce a message on the weakness of e-commerce in Bangladesh differentiate between China which is invisible until. Finally, the study will help to better understand both country's e-commerce including the economy.

Key Word: Bangladesh, China, E-commerce, Challenges, and Prospects

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I. Introduction

Recently, with the significance of modern technology and potentially changing consumer aspirations, e-commerce has advocate enterprises to rethink their service policies. The extensive use of the smart phones and internet in particular has become a novel steam engine for financial and business growth. Specifically, China has become the largest e-commerce nation in the world, and Bangladesh is another densely populated country in South Asia. As a large population of these two Asian countries, there are ample e-commerce trading opportunities that may contribute to providing better services to consumers as well as increase the national economy (Pratim Datta, 2011). An online business is known as e-commerce trading where sellers and customers administrate all of their activities over online like product choosing, purchase, sells, payment, delivery, products return, refunds, etc. (May, 2000). As a result, it's inconvenient for a customer to go to the shopping mall or supermarket physically. In this situation, e-commerce has started and provided an attractive idea that a person is able to purchases all categories of products from home or even the workplace.

Nowadays, there are numerous trusted and popular e-commerce sites in China (Alibaba, Jingdong, Daraz, Walmart) and Bangladesh (Rokomari.com, Bikroy.com, Othoba.com). All of these online-based platforms are buying and selling products to local customers, but also international customers. Although Bangladeshi e-commerce sites are not worldwide getting popularity, these companies are playing a prominent role in local markets. Notably, the expectation is raised because 116.14 million people have used the internet in Bangladesh since March 2021 (BTRC, 2021), which 70% of the total population (UN, 2021; BTRC, 2021). In the modern information technology, every country is taking of these benefits. The use of modern information technology has increased in industry, commerce, technology, manufacturing, transportation, agriculture, communication systems, and everywhere. Therefore, many changes have taken place in commerce, industry, trade, and payment. After the abolition of the barter system, people used to feel comfortable going to the market to buy goods, but one of the groundbreaking ideas of business in the current modern and busy life is to purchase products by using electronics devices without going to market. The process of buying and selling products using digital platforms and electronic devices has increased a lot in developed countries. In comparison, developing countries have not made much progress. The scope of this modern e-commerce business in developing countries is declining due to the sale of forgery and counterfeit products, non-delivery of products after receiving advance payment, embezzlement of customers, sudden shutdown of companies, delay in delivery of goods, lack of security of secured transactions, non-implementation of government policies and so on.

Therefore, this study purposes to highlights the current scenario of e-commerce between Bangladesh and China. In addition, reviewing the popularity of e-commerce strategies of these two Asian countries as well as highlighting some key milestones. The results of this study will contribute for depth understanding that covers the customers, merchants, and e-commerce pioneers in both countries. Finally, the study will contribute both of country to provide effective knowledge which may help to create an attractive policy in e-commerce industry as well as few recommendations that overcome challenges individually.

II. Literature Review

E-commerce business is not expanding easily in developing countries due to high prices to enter in the international market and the high cost of transactions for foreign customers (John Humphrey, 2004). A suitable cost of using the internet with speed, socio-economic development of the people, and infrastructural development is needed in the information technology sector (Lawrence & Tar, 2010). The success of e-commerce businesses in developed countries such as the UK and USA as have advanced information technology (Sridhar Vaithianathan, 2010), while developing countries like India have lagged behind due to lack of progress (A & M. R, 2018). Mutual trust between the company and the customer is important in the progress of the online-based company (Teo & Liu, 2007; AnolBhattacharjee , 2002; (Jarvenpaa et al., 2000).

Although e-commerce business is considered as a potential sector in Bangladesh, but the expected outcomes didn't come yet. 4G network service was launched in Bangladesh in June 2016, but the speed of internet is still relatively weak (Islam, 2019). Poor internet connection and the high cost of using the Internet are tied to the progress of e-commerce growth in Bangladesh (Islam & Eva, 2019; Hossain et al., 2013). Also, the secured transaction is one of them (Roni Bhowmik, 2012). With the progression of innovative information technology, business is expanding rapidly in developed countries; update and latest technology is needed to apply for the expansion of e-commerce industry in Bangladesh (Islam et al., 2015).

It also can be seen that the success of e-commerce business in developed countries, especially China, USA, UK, they emphasized on the development of information technology, growth of communication system, increase in facilities for transportation of goods. They also focused on achieving the company's status by customers' satisfaction, buying and selling quality products, maintaining a flow supply chain, prioritizing customer needs. Not only China's e-commerce company, but also China's government following effective laws against fraud, punishing fraudsters, establishing a safe and secure transaction medium, and so on (Hongfei, 2017; Xiao, 2018). On the other hand, the image of Bangladesh is completely different. Bangladesh has enough employees, internets users, per capita income, but e-commerce businesses are far behind yet than other developing countries for many reasons. Suppose an organization has gas, electricity, equipment, information technology, manpower, but if fraud takes refuge and the legal system of a country cannot suppress it, then fraudulent organizations will continue the same occurrence to appear.

The definition of E-commerce

Buying and selling products or services through the internet is called e-commerce. Basically, e-commerce is the online shopping of any favorite items through electronic devices at home without going to the shopping mall (Laudon & Traver, 2003). It's completely a wireless means to purchase goods. This medium of shopping is called e-commerce because everything like product selection, shopping, payment, etc. is done over online. In this case, websites, emails, social media, and other electronic media are widely used. For example, you have a new or old mobile, computer or any other product that you think is for sale online. An online business or internet marketing system is a sale of a product by showing a picture or video with the description of that product on a particular website, and the website through which the product is presented to the buyer is called the e-commerce site (Meng, 2009).

Model of E-commerce

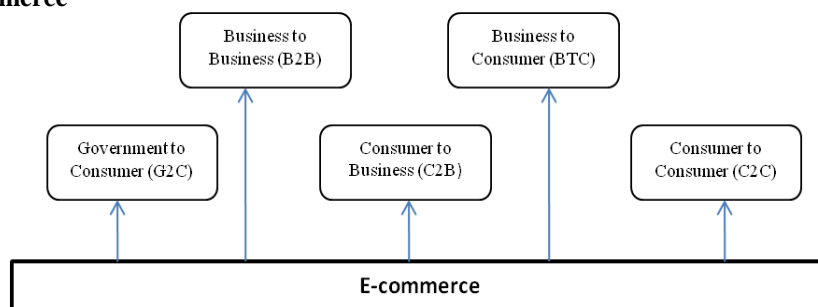


Figure 1:E-commerce Model

Source: Author organized

When a product is bought and sold between two or more businesses, it's called B2B e-commerce. In particular, a business organization is called a B2B company when it buys products for the purpose of processing and reproduces them before selling to the consumer (Madhavaram & Hunt, 2017). If a buyer purchases a product directly from a business organization, a manufacturing company, or an individual for the purpose of final use or personal use, it is called C2C e-commerce (Ghamdi et al., 2013). Moreover, when a business organization or production company purchases their needed raw materials from consumers, it's considered C2B e-commerce (Chen et al., 2008). In the case of consumer-to-consumer e-commerce (C2C), there are no intermediaries or businesses parties. In this case, the business is done directly from consumer to consumer. For example, if a consumer buys rice, pulses, or paddy from a farmer for final use over an online platform, it will be considered as C2C e-commerce (Leonard, 2012).

Out of the above four, we can consider one more thing as e-commerce. That is, government-to-consumer or consumer-to-government e-commerce. However, many scholars in a similar field don't want to bring it into the e-commerce business. For example, governmental departments accept various fees online in exchange for services provided to the peoples. Some even refer to it as e-governance commerce. When government pays the price by purchasing any services or products from the general public online for government needs, it can be called government-to-consumer commerce. In addition, the governments of different countries purchase various products from online companies for the needs of their ministerial departments. Even, the public paying their several bills to the government online, like gas bills, Electricity bills, Water bills, etc. (Devi, 2018; Hussein et al., 2011).

A Brief history of E-commerce

E-commerce was started in the 1970s, mainly through the assessment of Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT) (Zwass, 1996). As a result, commercial documents such as purchase orders or invoices are exchanged electronically. Marijuana was sold using ARPANET in 1971-1972 to students at the Stanford Artificial Intelligence Lab, along with students at the Massachusetts Institute of Technology (Power, 2013). Gradually, in 1979, Michael Aldrich was able to show a sample of the first online shopping that successfully enabled online transaction processing between consumers & businesses (Tkacz&Kapczynski, 2009; Kelly, 2013).

Thomson Holidays was established in the UK in 1981 to introduce the first business-to-business (B2B) online shopping (Palmer, 1998). In 1982, a French telecom company called Mintel took online orders for the first time (Mohiuddin, 2014). In 1990, Tim Berners-Lee, the inventor of the WWW, launched the first web browser, known as the World Wide Web (Bory et al., 2016). This innovation brought about a huge revolutionary change in the world of the internet. With the addition of enterprise resource systems and data mining systems this year, the path to online business has become easier. This allows airlines to launch a reservation online ticketing system and in 1992 launched the first e-commerce called Book Stacks Unlimited Books.com by using online payment processing (Sathyapriya & Manochithra, 2020). Jeff Bases started e-commerce giant Amazon.com in 1995 (Sadq et al., 2018). Dwell and Cisco also started their online transactions. The journey of the auction giant eBay started immediately with the hand of computer programmer Pierre Omidyar, formerly known as the Auction Web (Khoshnampour&Nosrati, 2011; Sheehan et al., 2004).

The story after that is still growing and updating. In different countries of the world, partially full B2B, B2C, B2G, and various types of online transactions continue to grow. At the same time, various horizons of trade and commerce expanded and free trade policy also spread in the country.

Although the concept of e-commerce business was invented in the seventies, e-commerce activities were fully introduced in the nineties, which were launched commercially in 1991. In particular, with the advancement of the Internet in 1994, e-commerce business began to gain popularity. However, e-commerce security protocols (for example, HTTPS) and DSL took about four years to develop (Aoyama, 2001).

By the 2000s, several businesses in the United States and Western Europe had launched their services on the World Wide Web (WWW). Then two supermarkets named Albertsons and Safeway successfully started e-commerce (Graff, 2006). Even at the end of 2001, e-commerce's business-to-business model had about 700 million in transactions. If we review the growth and growth rate of e-commerce from 1998 to 2007, it can be seen that with the increase in time, the expansion of e-commerce also increased continuously.

Scenario of E-commerce in Bangladesh

Bangladesh is a densely 8th populated country in the world with a population of 166.6 Million (UN, 2021). The element that is needed to make a business more profitable is the population. Because, when a country has a large number of populations, the consumption of the product also increases, besides increases the production and sale of the product. Another important element is needed for e-commerce is internet users, the total number of internet users in Bangladesh is nearly 117 million (BTRC, 2021). n the other hand, the number

of active mobile phone operators has also increased in the country with over 171.85 million till January 2021 (Khatun et al., 2021).

Already many e-commerce companies are leading their business in Bangladesh. However, they did not gain as much popularity and credibility as the developed countries like China, USA. Not all sectors of Bangladesh are yet under e-commerce but in recent years, B2C, C2C, F2C e-commerce has hinted at the potential in Bangladesh.

The B2C e-commerce companies rely on their products as well as foreign products, Daraz one of them. Such, Chaldal.com is a C2C categories business platform. G2C is such a governmental e-commerce shop in Bangladesh. F2C business (Facebook-based e-commerce) collects products from third parties, importers and resells them to consumers. Besides, homemade commodities and food are also sold here.

There are various allegations and complaints against e-commerce companies in Bangladesh including non-delivery of goods even after getting payment, lack of quality of products, late delivery of goods, duplicate products, high price, etc. However, a number of e-commerce companies, including Evaly, e-Orange, Dhamaka, have cheated customers (DailyStar, 2021; FinancialExpress, 2021), while a number of Bangladeshi e-commerce companies have gained a good reputation. Figure 2: Category of E-commerce Business in Bangladesh and Table 1: Mentioned some of their business strategy as follows as;

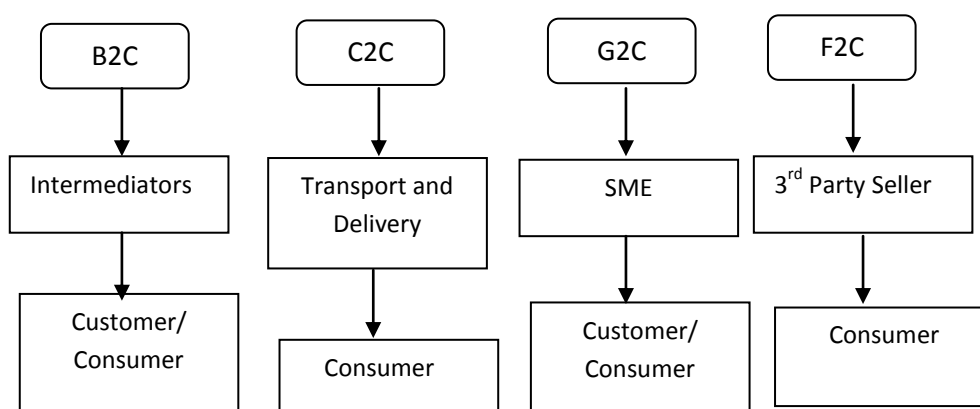


Figure 2: Category of E-commerce Business in Bangladesh
Source: Author organized

Table 1: The renowned e-commerce sites in Bangladesh

E-commerce site	Delivery Charge	Delivery Time	Payment Method
Daraz	0.3-0.4 (US\$)	5-10 days	Mobile Banking, Cash-on-delivery, Credit/Debit Card
Pickaboo	0.4-0.6 (US\$)	3-8 days	Mobile Banking, Cash-on-delivery, Credit/Debit Card
Ajkerdeal	1.0.4\$ (For advance payment and cash on delivery). 2. 0.8\$, (For advance payment), 3. 0.8\$ (cash on delivery).	3-12 days	Mobile Banking, Cash-on-delivery Credit/Debit Card, i-Pay
Bagdoom	0.4-0.7 (US\$)	4-6 days	Mobile Banking, Cash-on-delivery Credit/Debit Card, Bank Deposit
Rokomari	1. 0.45\$ (Order over online) 2. 0.93\$ (Order by phone)	7-10 days	Mobile Banking, Cash-on-delivery Credit/Debit Card, Bank Deposit
Chaldal.com	0.2-0.28 (US\$)	In a specific time/In a day	Cash-on-Delivery, Credit card, Mobile Banking
Social media Based e-commerce	Depend on logistics	In a specific time	Cash-on-Delivery, Mobile Banking, Bank Deposit

Daraz is a Chinese marketplace. Daraz was established in 2012. Initially, it started its journey as a fashion retailer in Pakistan. In September 2015, it started business in Bangladesh and Myanmar. This is a B2C

business platform. Currently, Daraz is one of the most popular e-commerce sites in Bangladesh. Daraz has domestic and local products of Bangladesh as well as foreign products. Daraz's website runs a flash sale every day, through which the customer gets a 10 to 18 percent discount on the product. One of the famous e-commerce giants Alibaba has bought this in 2018.

Pickaboo is a completely Bangladeshi online platform have Launched in 2016, founded by Silver Water Technologies Bangladesh. They have now been transformed into a popular e-commerce company in Bangladesh. Pickaboo tries to keep almost all products according to the needs of the buyer, but it is especially known for its lifestyle and electronics products. For example, mobiles, laptops, desktop computers, kitchen appliances, make-up items, etc.

Ajkerdeal is the first Bengali language e-commerce site in Bangladesh. It was established in 2011 by Mr. AKM Fahim, founder of Bd jobs.com. The company sells fashion, cosmetics, jewelry, and various electronics products as well as food items.

In 2010, Bagdoom became the first e-commerce website in Bangladesh. Although in the beginning, it started its business called Akhoni dot com. At early in the business, only lifestyle products were available here, but now almost all types of products keep stock in their shop. One of their special features is that they have launched a facility called same day delivery. Through which the buyers in Dhaka will get the product on the day they buy the product. In this case, the buyer has to purchase the product before 1 pm.

Rokomari.com is the first and only online book shop in Bangladesh. This site has an enormous collection of books on literature and culture including science and technology, thriller, Geological, history, etc. This organization was established in 2012. At first, only books were sold here but now tutorial books, science boxes, and various electronics products are also selling. It has gained a huge reputation and popularity by maintaining quality standards towards good services.

Chaldal.com is basically the first grocery online shop in Bangladesh. Its C2C structured e-commerce. They started their business in 2013. The site has already gained a lot of recognition and reputation for providing essential products. Not only groceries but also rice, pulses, fish, meat, fruits, vegetables, and cleaning supplies like detergents are available here. They also sell personal care and personal protection products for children. It has become very popular because of the one-hour delivery service. Now their average daily order is around 800. However, they now can deliver more than 1500.

Ekshop is a G2C e-commerce platform, the first rural e-commerce platform to support rural enhancement in Bangladesh, Instituted on 20 October 2019. It has been launched under the A2I project of the Bangladesh ICT department. The Ekshop platform is an amalgamation of e-commerce and logistics concerns, post offices, mobile phone payment facilities, and the Union Development Center (UDC) network. In addition, they have also been launched together more two services, Ek-Pay for bill payment and Ek-Seba for digital municipality services. Ekshop will soon be launched in Malaysia and Singapore, and plans are afoot to enlarge its service to more than 23 countries in the future (A2i-Innovate, 2019).

Besides, three e-commerce companies named Evaly, e-Orange, Dhamaka has conducted e-commerce business in Bangladesh for a long time. However, the companies are currently shutting down on various charges including sale of counterfeit goods, non-delivery of goods, sale of substandard goods, and embezzlement of customers' payment. Although Evaly's current assets amount to Tk 105 crore, their current debt is Tk 544 crore. On the other hand, E-Orange has embezzled Tk 1,100 crore and suddenly they closed down their business without giving any notice to customers. The other one has gone missing after embezzling Tk 569 crore from the customers. Evaly registered in December 2016, e-Orange in 2007, and Dhamaka e-commerce company registered and took trade license in the name of 'Invariant Telecom Bangladesh Limited' in 2015. Later, they used this trade license in the online platform called 'Dhamaka shopping' to lure customers with lucrative offers of various products and the temptation to sell virtual signature cards (FinancialExpress, 2021).

Social media Based F-commerce in Bangladesh

F-commerce is the promotion of products, product preferences, bargaining, buying, sales, transactions, etc. through the international social media Facebook. Although f-commerce is a part of e-commerce, but it has different features. By e-commerce, we mean conducting business using electronic appliances. Although e-commerce is considered to be associated with all types of electronic media, the business conducted using the social media Facebook is called Facebook Commerce or F-Commerce.

Currently, there is a lot of discussion about F-Commerce in Bangladesh. With more than 80 percent of the younger generation now connected to Facebook (Raisa, 2018), that is why F-commerce has become quite popular in Bangladesh. Doing business on Facebook is easier than doing e-commerce by a website. Because there is no need to manage and bear the charge of the website separately. F-commerce can be conducted through a Facebook profile, pages, and groups. As a result, the cost of running F-commerce is less than e-commerce. The number of F-Commerce operators among young entrepreneurs, especially college and university students, is increasing at a significant rate every day in Bangladesh. The young generation of Bangladesh as well as most of

the women has been inspired to buy and sell domestic and foreign products through social media Facebook. Women's and E-commerce Forum (WE), such a women's Facebook-based shopping group in Bangladesh, currently there has about 1.2 million members. Apart from domestic and foreign products are also bought and sold here (Hossain M. S., 2021).

Scenario of E-commerce in China

China's e-commerce market is the biggest industry in whole of the world. China has accounted for about 42% of the global e-commerce market, while the United States accounts for only 24% (Rob Smith, 2018). During the Coronavirus era, China's e-commerce business lengthened swiftly. China's forecast was that e-commerce business growth would be 44%, while at this time; online shopping in China surpassed the global average of more than 50% (Buchholz, 2021). The number of Internet users in China has grown at an incredible pace in the last few years. Moreover, China is far ahead of the US and Europe in terms of mobile payments. Mobile payment systems like WeChat Pay and Ali Pay have revolutionized China's e-commerce transactions. E-commerce means investment in venture capital companies, and China is rapidly overtaking the United States and European countries in this sector. Recently, 44% of the global e-commerce market is in the hands of four Chinese e-commerce giants (John Koetsier, 2020). Those are follows as:

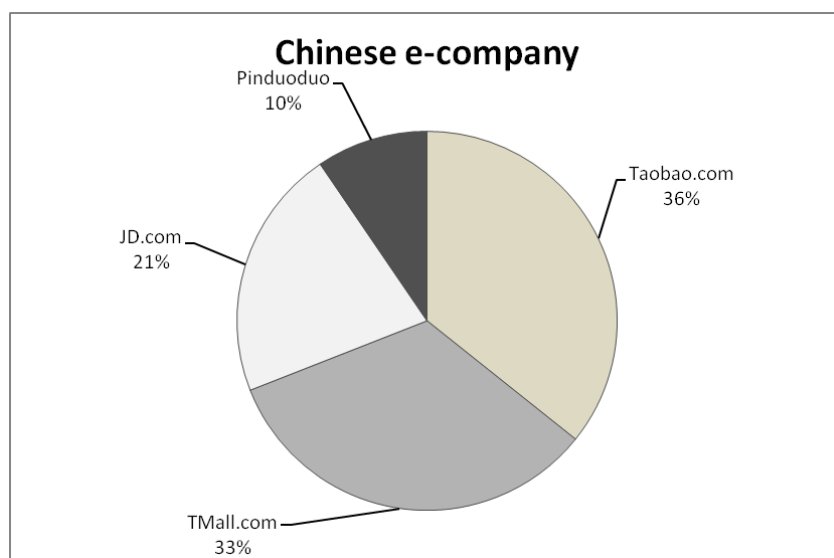


Figure 3: Chinese four leading e-commerce company in the world market
Source: Forbes¹

However, compared to Chinese cities, rural areas are not yet covered by e-commerce services. Because of, lack of sufficient internet facilities, with over 582 million Chinese people out of the internet (Ang, 2020). As China's communications system improves and the number of Internet users grows, China's e-commerce market is expected to grow further in the next few years, expanding into urban as well as rural life.

Alibaba is a B2B, B2C e-commerce platform. It is one of the popular and prime e-commerce companies in the world. Alibaba is very popular and known for its domestic retail, wholesale and international trade. Alibaba's three main online stores in this series are Taobao, Tmall, and Alibaba.com. Taobao's business style is consumer-to-consumer. It is China's internal e-commerce platform. On the other hand, Tmall is a business-to-consumer retail e-commerce site. It opened in 2007 as Taobao Mall. Here domestic and international buyers, sellers can buy and sell products of their choice. Alibaba's revenue until 2020 was 717.2 billion yuan, it's early, 109.480 US dollars (Ma, 2021). In terms of revenue, JD.com is the largest retail e-commerce company in China, founded in 1997. Initially, it was established as 360buy.com but in 2013 it was re-established as the name of JD.com. It is a business-to-consumer retail e-commerce company. Here, electronics products, clothes, beverage products, shoes, household items, books, etc. are available at affordable prices. At the end of the year 2020, their net revenue was 114.3 billion US dollars (JD.COM, 2021).

Tencent Holding Limited is an internet service provider. They mainly provide services like internet, mobile services, and advertisements. The Shenzhen-based company was founded in 1997. The company is the creator of platforms such as QQ Instant Messenger, QQ.com, QQ Games, Q-zone, QQ Music, QQ wallet, WeChat, and Tenpay. It is almost impossible to move in China even for a moment without their products and

¹<https://www.forbes.com/>

services. Tencent Holding Ltd.'s products are search engines, social media, web portals, e-commerce, web browsers, antivirus, music, artificial intelligence, online money transactions, production, video games, and various online services. Their total net revenue till 2020 was 74.50 Billion US Dollars (482.064 Billion Yuan) (Tencent Holdings, 2020).

Baidu Inc. is an internet and technology service provider, established in 2001. Their service allows users to make transactions easily and quickly. One of their special services is Baidu Wallet, this is not only connected to the Baidu platform, it is also used to purchase third-party products and services. For example, anyone can buy movie tickets and food through Baidu Nuomi. There is even the advantage of traveling through Uber. After the fiscal year of 2020, their total net revenue was 107.07 billion yuan (16.41 billion US Dollar) (Baidu, 2020).

Dangdang is a business-to-consumer departmental store, founded in 1999. Initially, the company operated as a bookstore, but now has all kinds of household products of daily life in their store, especially electronics products. They are well known especially for cosmetics, personal care, home decoration, clothes, baby goods, and electronics products. The company is able to connect about 10 million new customers with their business every year. Those with net revenues in 2020 were 1.36 billion US dollars (Noor, 2021).

Pinduoduo is basically a C2M, C2C, B2C e-commerce Company based on agricultural products. The main feature of this business is that they are directly connected to the farmer. They collect products directly from the farmer and sell them to the consumers. This e-commerce platform has founded in 2015, it is one of the fastest-growing e-commerce companies in China. Even, this is a consumer to Manufacturer business too. Here, consumers can sell their raw materials directly to the manufacturing company. At the end of September 2020, their number of active buyers was about 731.3 million, of which 643.4 million buyers used their website every month. Those with net revenues in 2020 were about 59491.865 Million Yuan (9117.527 Million US Dollar) (Pinduoduo, 2021). Furthermore, there are several more popular e-commerce sites in China. Among them are Yihaodian, Douyin Flagship Store, 58.com Inc, NetEase Inc., etc. These companies are becoming more and more popular day by day and speedily mounting their business.

Key factors of rapid expansion E-commerce in China

Since 2020, total internet users about 989 million in China. Currently, nearly one billion people in China use the Internet (CNNIC, 2021). It is estimated that this number will reach 1.29 billion in 2026. Since one of the right fields for e-commerce is the internet and most people in China are connected to the internet. In addition, the number of Internet users in China is increasing due to the reasonable price of using the Internet package. As of 2020, around 928.7 million people are connected to social media in China except for Facebook, YouTube, Twitter, etc. (Thomala, 2021). The Chinese peoples are much more active on their own social media. In this consideration, Chinese e-commerce companies promote, offer, and advertising their products using Chinese social media like Weibo, WeChat, Douyin, Kuaishou, Qzone, QQ, Tiktok, Baidu Tieba, etc. As a result, people can easily know about the product and are attracted towards purchasing continuously. The number of online shoppers in 2020 was 782.41 million in China (CNNIC, 2021).

Chinese e-commerce companies rely on domestic companies to fulfill the demands of customers. Furthermore, most of the international reputed brands manufacturing their products in China at a low and affordable price, so Chinese e-commerce companies are not worried about importing goods from abroad. Consequently, e-commerce companies can maintain their flow supply chain and can send products smoothly to their customers. However, other key reasons for the success of China's e-commerce business are to sell quality products at a reasonable price. Besides, Chinese companies can send products according to the needs, demand of the customers within the budget of the customers. Basically, low-cost to high-priced products are in the stock of every Chinese e-commerce company, and they also bear in mind the customer's income and purchasing ability. Therefore, a company's reputation depends on selling quality products. Hence, as the reputation grows so do the company's customers grow and also revenue.

Chinese e-commerce companies pay a lot of attention to packaging when sending products to customers. As an example, for glass, ceramic, and light products they use foam, soft material on the product when shipping to the customer. So, the product does not break easily even if it is shaken or falls. In addition, frozen foods, fish, and meat they use ice and similar substances to preserve for a long time. Moreover, every e-commerce company emphasizes mobile payment to make the payment method easier in China. After purchasing the product, the customer can easily and instantly pay the bill through mobile banking. In the case of mobile payment, the customer does not have to pay any extra charge separately (Alimo & Zhao, 2018). Even, product's return way is correspondingly sophisticated. After purchasing a product if the customer figure out that the product is defective, broken, or disliked, the customer can return the product to the company by texting or contacting according to the company's address. In this case, customers often have to bear the transportation cost.

Contemporarily, customers can review and comment on the product if the customer sees the product quality is not good enough as per the price and advertisement. Later, seeing those product reviews, another customer is motivated or discourages to buy the product. Even, if a customer has any negative review, nobody

has the power to delete the review except that the customer. Furthermore, every e-commerce company in China is enclosed by the third party secured payment through Ali-pay, WeChat pay. Those are similar to ESCROW and Online Payment Gateway. At this, customers can purchase products safely and securely. Ali-Pay, WeChat-Pay, ESCROW, and Gateway are a third-party organization that acts as an intermediary between the seller and the buyer protects the transaction. Which guarantees a refund if the customer does not receive the product for any reason. In these circumstances, the customer can apply for a refund for any exact reason or be unable to receive the product within a specified day. If the company sees after inquiries that the product has not reached the customer in the authentic sense, then immediately they refund the customer's actual fund.

Specifically, every Chinese e-commerce company has its mobile application in. It provides easy service to customers and any of Chinese can easily run it. This allows the customer to purchase the product of their choice whenever they want. In addition, Chinese mobile sim operator companies have facilitated data-free online shopping and offline shopping system so that customers can order products using both of the platform easily (Yingsheng Du & Youchun Tang, 2014). Interestingly, a customer during purchases a product from company, it is possible to track the location of the product from the moment it is picked up. This means that if the product does not arrive within the specified time, the customer can cancel the order and apply for a refund.

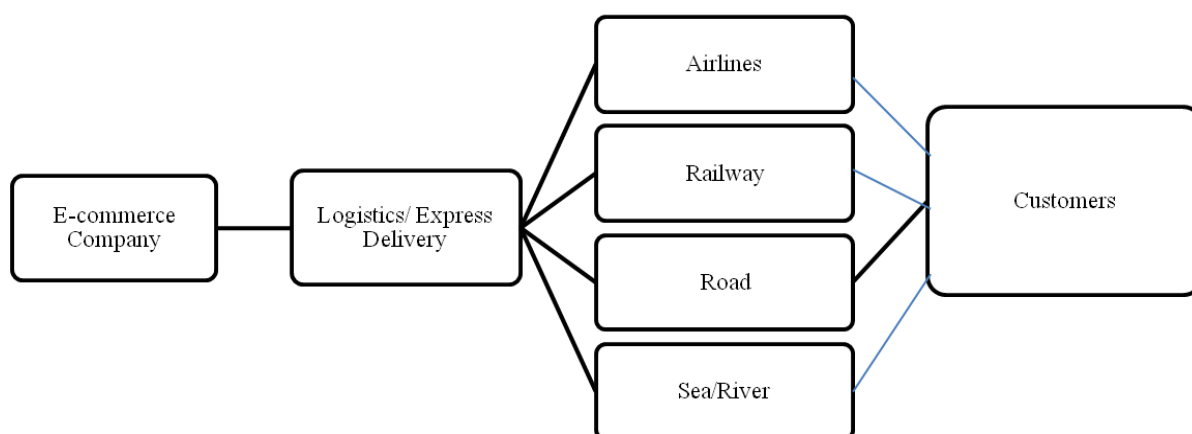


Figure 4: The Chinese transportation approach for delivering products
Source: Author organized

Currently, Chinese entrepreneurs and consumers are flocking to e-commerce with low cost and fast delivery of products. The improvement of China's communication and transportation system brought success in China's online shopping. Figure 4 shows that the establishment of new and modern airports, development of railway stations, roads, and highways, radical changes in shipping and sea routes have resulted in less time to transport goods in China.

III. Material and Methods

Data analysis and procedure

The nature of this paper is descriptive and explicative. The study of this paper is based on secondary data composed from various official websites. In order for an organization to succeed, it is necessary to analyze that is the potential state. The SWOT analysis plays an important role in achieving business organization goals and helps identify the strengths, weaknesses, opportunities, threats of an organization, company, country, person, sites, etc. Especially, the strengths and weaknesses are internal issues of the organization or individual. On the other hand, opportunities and threats are a matter of the external environment of the organization or individual. In this consideration, we have conducted a SWOT analysis study in this paper to find out the reasons for the rapid growth of China's e-commerce business, and the decline of e-commerce business in Bangladesh.

Table 2: Distribution of secondary data sample

Title	Empirical Research	Field study	Analytical Study
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Number of publications	38	11	18
Proportion	56.72%	16.42%	26.86%

IV. Result

SWOT Analysis of Bangladesh phenomena

Based on the empirical literatures, we have employed SWOT analysis which briefly highlighted that the e-commerce business is growing and expanding in Bangladesh. Besides, the e-commerce business in Bangladesh has its strengths and Opportunities, it also has its weaknesses and threats are follows as-

Strength	Weakness
<ol style="list-style-type: none"> 1. Recently, the number of Internet users increased in Bangladesh and reached 117 million. Especially, regular mobile phone internet operators have also increased in the country by about 160 million. These are creating convenience in e-commerce business for customers and sellers (BTRC, 2021). 2. An increase in per capita income also surges the purchasing power of the people of a country. In this case, the purchasing power of the people of Bangladesh has increased manifold in the last twenty years. Since 2020 Bangladesh per capita GDP around \$2227 (DailyStar, 2021). 3. The young generation is the most contributors to the expansion of e-commerce in Bangladesh. According to the E-Commerce Association of Bangladesh (E-CAB), Over 80% of the young generation leading e-commerce business in Bangladesh, and more than 50 thousand entrepreneurs are handling business using social media (ITA, 2021). More than 20 thousand of them are active entrepreneurs, and 75% of e-commerce users are between the ages of 18 and 34 (Raisa, 2018). 4. The role of electricity is essential to keep the internet connection active (PDB). In general, in towns and villages around 22,031 MW of electricity are available to people using. The total capacity of Power generation is 25,235 MW (including captive and renewable energy). 5. In Bangladesh, 28 high-tech parks in actively working, and twelve of these constructions are in the final stages. The purpose of establishing these parks is to develop information and technology, freelancing, development of software and IT sector, and employment (ICTDivision, 2019). 6. Bangladesh is the 2nd largest garments products exporter in the world. In addition, some of these sectors also contributing to business export such as agricultural ingredients, handicrafts, jute products, and fisheries items. 	<ol style="list-style-type: none"> 1. Lack of proper strategy to return products and get back to refund securely in e-commerce industry (Evaly, Pickaboo, Ajkerdeal, etc.). 2. Opening and maintaining an e-commerce company's website is so costly. 3. Lack of skillful workforce, and ICT infrastructure. 4. Using Advance technology is not affordable. 5. E-commerce companies don't have their own transportation system and rely on a third party. Therefore, there is a lot of risk of the product being damaged or stolen. 6. Lack of training to handle customers over online. 7. At present, fraudulent issues are being discussed as many e-commerce companies (Evaly, Dhamaka, E-orange) didn't deliver products to customers after getting payment, which is insecure financial transactions. 8. Supply chain does not flow and fair. Every E-commerce companies in Bangladesh are mostly dependent on foreign products. As a result, there has a possibility of losing the customer if an e-commerce company does not keep sufficient products in their stock and don't deliver to the customer in time. 9. Most of the e-commerce companies are city-centric, and it's unable to reach the remote area. In particular, there are obstacles in shipping goods whole country. 10. Many people are turning away from e-commerce as the price of the product is higher in the e-commerce site than in the local market. 11. There is no third party supported fully secured payment system of e-commerce sites in Bangladesh(ESCROW, Gateway, Alipay, WeChat-pay). 12. Poor internet connection and costly internet packages.
Opportunities	Threats
<ol style="list-style-type: none"> 1. The Government of Bangladesh has declared the e-commerce business as completely tax-free. 2. Recently, 66% of university students are jobless in Bangladesh with 5.3% of total population (WB, 2021). In that case, e-commerce companies have sufficient young manpower and can easily 	<ol style="list-style-type: none"> 1. Some of fraud e-commerce sites that never deliver products but get the advance money from the customers. In this circumstance, customers do not trust them to order through online (Dhamaka, e-Orange). 2. Duplicate, Qualify less products and similar

<p>create the workplace as well as expand their business.</p> <p>3. Opportunity for Bangladeshi companies to enter the global market using e-commerce business.</p>	<p>products in a lot of e-commerce sites (F-commerce).</p> <p>3. The investment and expansion of foreign e-commerce companies in Bangladesh will be a major challenge for domestic e-commerce companies. If domestic companies cannot compete with foreign e-commerce companies with same range, they will face losses (Alibaba, Amazon, Microsoft).</p>
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SWOT Analysis of China phenomena

<p>Strength</p> <ol style="list-style-type: none"> Huge Number of Internet users and population. Using advanced Technology and a good internet facility. Flow Supply chain and management, especially, easily can handle mobile Banking and secured transactions. Operating business by own logistics and transportation scheme (Alibaba, JD.com). Well-class Products and Company's reputation. Products rate is cheap more than in other countries. 	<p>Weakness</p> <ol style="list-style-type: none"> In general, the payment procedure can be made smoothly within the country, but the payment system is not yet secured for cross-border (B2B) e-commerce. Since most of the China's B2C,C2C e-commerce companies operate their businesses using local language, it also becomes complicated for foreign customers to negotiate in some cases (Pinduoduo, Taobao). Counterfeit and similar products in many sites.
<p>Opportunities</p> <ol style="list-style-type: none"> Belt and road initiative a plan to connect China's mainland with 65 countries around the world. As part of this plan, China will be connected to Central Asia and Europe by two main roads. Along with this road there are also railways and oil pipelines. As a result, the convenience of transporting goods to other countries will be easy and transportation cost will decrease. (Sikder et al., 2020) 	<p>Threats</p> <ol style="list-style-type: none"> Political violence, basically with USA, UK, Australia etc. Competition is growing day by day with foreign companies like Amazon, eBay etc. Trade Prohibition by USA, UK, Australia and other developed country.

Analysis of comparison between Bangladesh and China's e-commerce

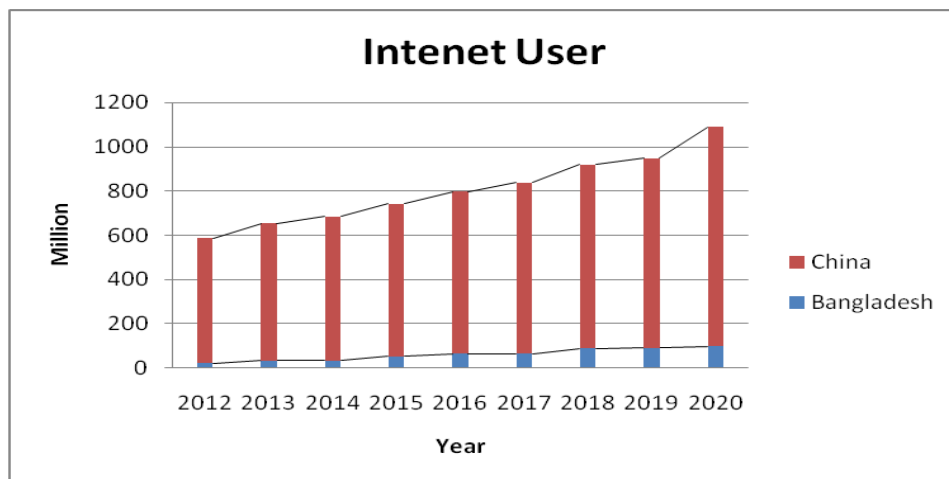


Figure 5: Internet Users growth in Bangladesh and China (2012-2021)

Source: [BTRC²](http://www.btrc.gov.bd/), and [CNNIC³](https://www.cnnic.com.cn/)

²<http://www.btrc.gov.bd/>

³<https://www.cnnic.com.cn/>

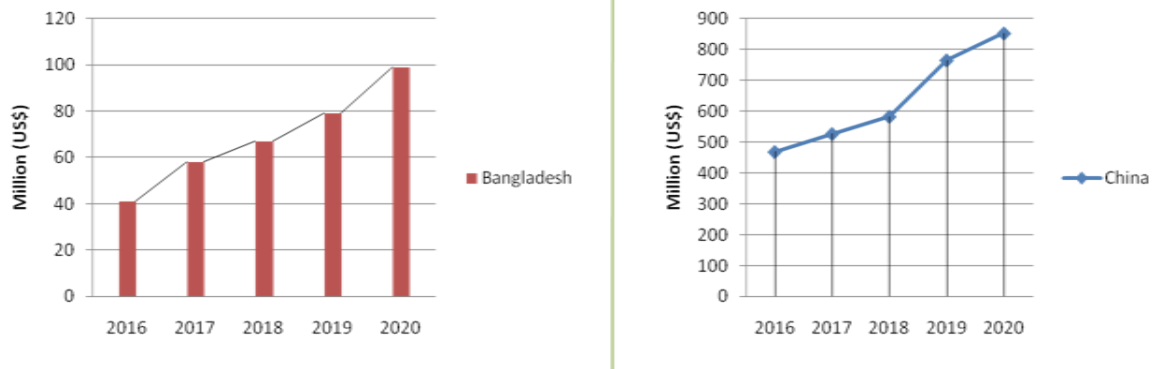


Figure 6: Users of Mobile Payment Bangladesh and China (2016-2020)
 Source: Bangladesh Bank⁴ and China Internet Network Information Center⁵

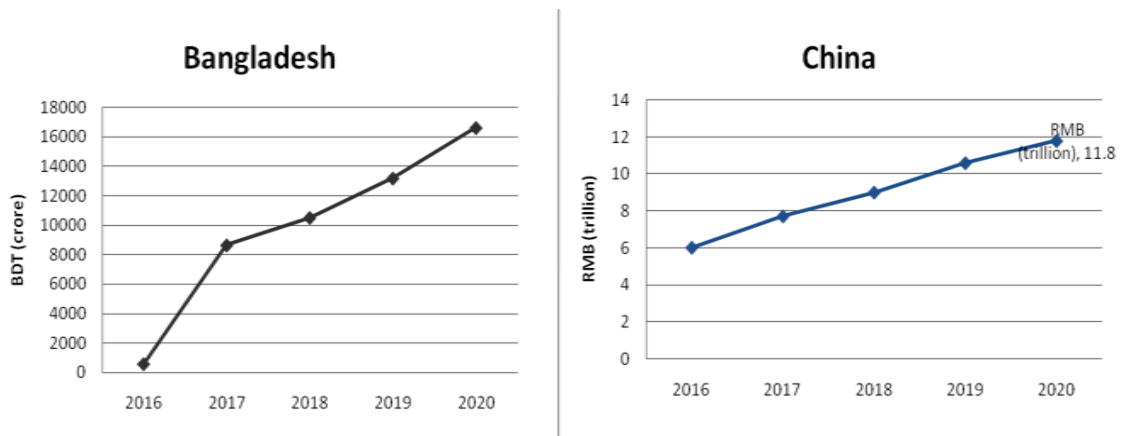


Figure 7: Growth of e-commerce market in Bangladesh and China
 Source: Global Data (GlobalData, 2021), and E-commerce Association of Bangladesh (E-CAB)
 Note: 1 \$US=85 BDT, and 6.8 RMB

V. Discussion

Recently, e-commerce has also become very attractive to the young generation of Bangladesh, and are interested in high investment in this sector. In particular, the young generation of Bangladesh has paid attention to the sale of domestic products using social media besides student activities. On the other hand, women entrepreneur has been successful in selling their handmade food and homemade products online. However, it is known that both customers and sellers have an unsatisfied due to inadequate quality and insecure payment system in Bangladesh.

China became the most populated country globally and has a substantial demand for each product. At the same time, using modern IT has led to great success in all Chinese businesses as well as in e-commerce business. Incredibly, the Internet speeds and increased huge number of subscribers, technological innovations, the creation of a business environment, government crackdowns on fraud, have helped propel China's e-commerce business to go forward. In 2020, China's e-commerce business users exceeded 37.21 trillion (Wu et al., 2021). As of December 2020, 989 million people in China has access to the Internet. Since March 2020, there has been an increase of about 85.4 million Internet users (CNNIC, 2021).

In figure 5 showsthat the number of Internet users in China and Bangladesh has grown rapidly from 2012 to 2020. However, the Bangladesh internet user's growth rates are slower than China comparatively. The most important elements are needed for E-commerce businesses ' internet and its users. The mounting number of internet users in China has contributed to the expansion of the e-commerce business.

⁴<https://www.bb.org.bd/>

⁵<https://www.cnnic.com.cn/>

China is such a country which is the most populated country in the world. The population of this country is about 1.41 billion (WorldBank, 2020). Even, the highest number of Internet users has in China than the world. In 2020, about 989 million people in China used the Internet (CNNIC, 2021). It is projected that this number will reach 1.29 billion in 2026. By 2021, nearly one billion people in China will be using the Internet. In previous years, the number was 695.31 million in December 2016, 752.75 million in December 2017, and 816.98 million in December 2018 respectively. Besides, mobile payments have also increased dramatically with 852.52 million (CNNIC, 2021). This helps china to grow in E-commerce industry.

Figure 6 mentioned since 2016, Bangladesh has mobile payment users of around 41 million which increased slightly and reached 99 million in 2020 within a certain period. On the other hand, being 2016, approximately 469 million people use the internet for e-commerce, but since 2020 which is the highest volume around 852 million. The most important components for e-commerce are the specific number of Internet and mobile banking users. All of these have in Bangladesh. So, the e-commerce business market in Bangladesh is expanding gradually. In that case, Bangladesh also has better opportunities for developing an e-commerce business in the future.

Figure 7 shows Since 2016, that the size of the e-commerce sector in Bangladesh was only Tk 560 crores, but in 2020 it was more than Tk 16,617 crores (E-CAB: E-commerce Association of Bangladesh). Whereas the figure indicates, there are many e-commerce companies in China and mentions that the growth of Chinese e-commerce industry is incredibly improving since 2016 to 2020, which has better performance more than Bangladesh. By the end of 2020, there were 64 domestic public e-commerce companies in China. Of these, 34 listed e-commerce companies are online retail providers.

Therefore, many e-commerce companies are leading their business in Bangladesh. However, they did not gain as much popularity and credibility as China. Not all sectors of Bangladesh are yet under e-commerce but in recent years, B2C, C2C, F2C e-commerce has hinted at the potential in Bangladesh.

Challenges and Obstacles of E-commerce in Bangladesh

Customers are not fully trusted to purchase products from any online platform in Bangladesh. Some of the reasons for E-commerce companies are unable to deliver the product to the customer after getting advance payment and taking plenty in time to deliver the products. Notably, sometimes companies are sending fake and adulterated products to customers. Until a reliable delivery system has not been developed in Bangladesh. Recently, the Bangladesh Postal Department has recently trying to solve it but unable to set up e-commerce delivery systems across the country. Moreover, there is no reliable and trustworthy payment system. Specifically, mobile banking is not also safe because of hacking. On the other hand, ESCROW and Gateway facilities didn't yet fully reflected in the e-commerce industry in Bangladesh.

Subsequently, the e-commerce business is only based on urban-centric in Bangladesh, while 80% of the country's rural population is outside the scope of e-commerce services. Most of the people in Bangladesh are still not accustomed to buying products online like in China. Most of the customers realized comfortable buying their demandable products or services by walking around the market physically. Because, the high price in online isn't affordable and often customers don't get a proper reply in detail from the e-commerce sites about products quality, price particularly.

The customer in Bangladesh is interested in visits social media and feels comfortable more than visiting any official websites. They prefer to use mobile applications which can get connected to social media easily. In that case, e-commerce companies in Bangladesh have not yet been able to operate their business through mobile applications. Therefore, customers are reluctant to shop online because of the high price of a sim operator-based internet package, and the slow connection of the internet is one of the principal obstacles to the expansion of e-commerce in Bangladesh.

Importance of E-Commerce in Bangladesh

In Bangladesh Consumers and companies are not the only parties involved in e-commerce business. There are many aspects involved in this industry.

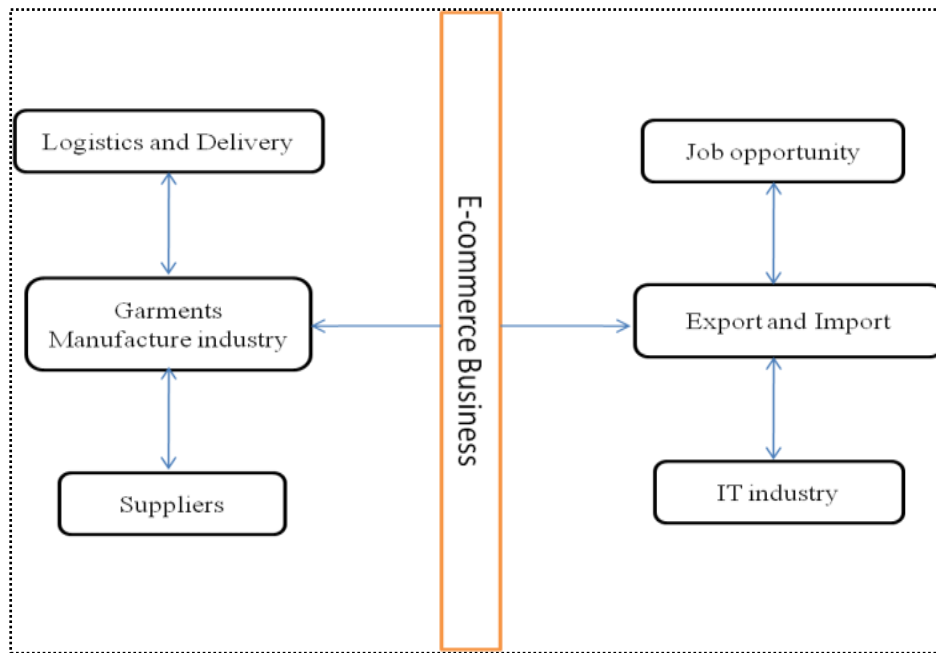


Figure 8: Parties Involved with E-commerce in Bangladesh
Source: Created by author

According to Figure 8, the Manufacturer for production, suppliers for the supply of goods, logistics for the transportation of goods, banks, and financial institutions for money transactions. Besides, a lot of manpower is required to carry out the activities of all these parties. As the scope of e-commerce business grows and progresses, domestic and foreign markets sell increases, also raising productions and distributions. Besides, the atmosphere is created for huge employment and economy also involved all of these.

Table 3: The position in production of Bangladesh and China globally

Production Items	China	Bangladesh
Garments Industry	1 st	2 nd
Rice	1 st	4 th
Vegetable	1 st	2 nd
Mango & Guava	2 nd	8 th
Jute	3 rd	2 nd
Fish	1 st	3 rd
Tea	1 st	10 th

Source:FAOSTAT⁶

Table 3 observed of production situation between China and Bangladesh, it exhibited that Bangladesh is moving forward with China in many respects. In the fiscal year of 2019-2020, Bangladesh is in the second, fourth, second, and third position by cultivating 8.8% of the total production of the world in textiles, 8% in paddy, 24% in jute, and 10% in fish respectively. Besides, Bangladesh ranks second in vegetable production and

⁶<http://www.fao.org/home/en/>

eight in mango and guava cultivation. China ranks first with 30.6% of the world's total textile production, 30% rice, and 18% fish production. China is also the third-largest producer of jute at 3.6%.

The contribution of the agriculture sector to the GDP of Bangladesh is 13.7%, even 80% of the people of this country are involved in farming and agriculture. Though, due to a lack of proper marketing, processing, and preservation, 20-44% of fruits and vegetables are wasted in Bangladesh every year (FTO, 2020). In this situation, just as the farmers are suffering, so are the country face losses. For declining this wastage, Bangladesh could be applying one of the Chinese e-commerce company's comparable Pinduoduo farmers to manufacturer (C2M) business strategies. With the cutting-edge business policy, gradually all the manufacturing, farming, production companies are shifting their business under e-commerce in the world. In particular, the world's second-largest garment industry in Bangladesh. Bangladesh improving not only in the garment industry, but also in fish and meat production, fruits and vegetable production, jute and rice production, and IT, etc.

At last, 500 IT and software companies registered in Bangladesh with a market value is about 300 million US dollars. Of these, 100 companies regularly sell their products and services in about 30 countries. In this situation, Bangladesh has prospects to keep pace with the developed countries.

VI. Conclusion and Recommendations

In this study, we have analyzed Bangladesh and the Chinese e-commerce industry and highlighted few challenges. Based on internet users, mobile payments users, growth of e-commerce market, employing SWOT analysis results, Bangladesh and China both countries have more opportunities to continue e-commerce business. However, some particular challenges are facing both nations. Based on theoretical analysis over the period of 2012-2020 where the Chinese e-commerce industry performance is better than Bangladesh in a different category. In particular, the population and number of internet users in Bangladesh and China. But Chinese e-commerce business is growing rapidly. According to discussions the study recommended few informative suggestions which will boost e-commerce industry in Bangladesh and China that contribute to the policy implication for both countries. In addition, to assess the difference of e-commerce between Bangladesh and China as well as figure out the current challenges are facing in Bangladesh. Furthermore, these few recommendations for helping policymakers and develop e-commerce industry in Bangladesh and China are as follow as;

Firstly, Government or administration has to install a secured and reliable payment system that financial institutions in Bangladesh may facilitate an easy payment system for e-commerce transactions.

Secondly, telecommunication authorities should provide high-speed internet service in suburban areas as well as have to increase the scope of e-commerce business in remote areas.

Thirdly, trading companies might be building a consistent express delivery or logistic system, and engage trained manpower for online business. Besides, needs to keep an option or way for customer opinion and complaint in every e-commerce site, the chances of being deceived will be reduced.

Fourthly, e-commerce stakeholders have to arrange the website using local and English as an international language. Moreover, Bangladesh e-commerce organizations have to build potential mobile applications besides websites like china's e-commerce companies. Finally, that can operate and install ESCROW and Gateway services with secured mobile payment transactions similar to Ali-pay, WeChat-pay.

Fifthly, Government should modify the law policy for fraudsters' punishment, and necessary to implement the ordinance formulated by the national administration.

Therefore, e-commerce can be one of the most prosperous business sectors in Bangladesh and China in the future if the government and private sectors play an important role and take it seriously. In addition, it will create job opportunities and decline the unemployed ratio. Finally, as populous country China and Bangladesh do not have to bear the burden of the unemployment problem in upcoming years, e-commerce trading opportunities make easy online shopping for all categories of customers that can be reached through dynamic services in Bangladesh and the Chinese e-commerce industry.

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