



"Prospect and Problems of E-commerce Operations in Bangladesh"

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Letter of Transmittal

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Professor Dr. Mohammed Masum Iqbal,
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Subject: Submission of Internship Report Titled “Prospect and Problems of E-commerce Operations in Bangladesh.”

Dear Sir,

With due respect, I would like to take this opportunity to thank you for the guidance and support you have provided us in preparing this Internship report. I have completed my internship report on " Prospect and Problems of E-commerce Operations in Bangladesh. ".

Though I am at the end of the learning curve, this report has enabled me to gain insight into the cement industry in Bangladesh. I sincerely tried to follow all the instructions and tried my very best to compile all the relevant facts and figures to make this paper as educational and informative as possible. I humbly hope you will excuse any undeliberate error present in this paper.

Lastly, I would be thankful if you kindly give me your judicious advice on our effort.

Yours Sincerely



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Supervisor's Certification

This is to certify that the report entitled **Prospect and Problems of E-commerce Operations in Bangladesh** prepared by Mr. Ferdous Ahmed, ID: 201-14-213, as a requirement of the MBA program under the Department of Business Administration and the Faculty of Business and Entrepreneurship at Daffodil International University.

The report is recommended for submission.



Signature of the Supervisor

Professor Mohammed Masum Iqbal
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Acknowledgement

First, I want to thank the almighty Allah who gave me these skills and knowledge along with abilities by which I could finish this report. After that, I would like to thank my respected faculty 'teacher's name' for helping me finish this report by giving me the proper and easier guidance. I am overwhelmed after getting this opportunity of working with 'teachers name'. Finally, I want to thank everyone who helps me finish this internship report, and with the help of others, I won't be able to finish this report.

For the preparation of this study, I also enlisted the help of several people. There is currently some work to express our heartfelt gratitude to that gracious guy. Please convey our sincere gratitude to our course name, lecturer, department, and University. This inquiry would have been a little accomplishment if it hadn't been for his thoughtful leadership and legitimate direction.

Executive Summary

E-commerce is nowadays creating a new era for the whole world, and after the covid-19 pandemic, the e-commerce industry is getting bigger and better in Bangladesh. The e-commerce operations are creating huge opportunities for both consumers and merchants. Also, it has some flaws too. In the first part of this report, an illustration of the history of e-commerce and an evaluation of e-commerce operations will be described. Also, the objective of this report, along with methodology and limitations, will be described.

E-commerce has several advantages, including overcoming geographic barriers, gaining new customers through search engine visibility, lowering costs, eliminating travel time and cost, allowing comparison shopping, enabling Deals, Bargains, Coupons, and Group Buying, providing Abundant Information, and quickly locating products. For developers to improve e-commerce systems, enough security systems and networks recommendations are available (Reynolds, 2014). Nonetheless, various virus programs are used, and hackers are spreading new viruses to access most e-commerce network authentication and approval systems. Various security threats and issues faced by e-commerce businesses have been examined in this paper, along with viable solutions.

Security and trust are the basics to make an environment favourable to the e-commerce business. The e-commerce sector cannot fulfil and pull potential customers before ensuring customer projection, customer data protection and countering cybercrime (E-Commerce Policy Framework for Bangladesh, 2020). Inadequate ICT infrastructure and utilisation, unstable and expensive power supplies, increased bandwidth prices, and a lack of access to mobile phones and PCs can all hinder e-commerce growth. Thankfully, Bangladesh's current situation is improving swiftly

E-commerce is a secure, convenient, and affordable payment method (E-COMMERCE Policy Framework for Bangladesh, 2020). Customers must trust you, so secure economic transaction technology is essential (E-Commerce Policy Framework for Bangladesh, 2021).

This report is based on some secondary data, and the secondary data will help to know the correct condition and prospects of the e-commerce operations. This report will also identify threats, technical issues, and legal and regulatory aspects. The final part is the recommendation, which will help improve Bangladesh's e-commerce operations.

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Chapter 1: Introduction

1.1 Introduction

The e-commerce business in Bangladesh has grown fast since the early 2000s, when the country required widespread internet access and secure online transaction infrastructure. Online commercial transactions are referred to as e-commerce platforms. Consumers can easily purchase goods or services via the Internet using e-commerce. Several companies presently use e-commerce to trade both tangible and intangible items. Bangladesh is rapidly moving towards digitalisation. The country has yet to realise its e-commerce potential. E-commerce business has been categorised into six types. C2C and B2B are the most popular platforms in Bangladesh. The global move to the digital economy is expected to continue, according to emarketer.com. Global e-commerce retail sales are expected to reach 3.2 trillion dollars by 2020.

The Bangladesh e-commerce Association is the country's business core for e-commerce. According to the organisation, Facebook alone has 8,000 eCommerce pages. Low credit and debit card usage and the Lack of PayPal have hampered the industry's expansion, though it has been announced that PayPal will be available soon. In 2016, Bangladesh's first-ever and now largest authentic e-commerce platform GHOORI from a local company called Chorki Limited. The central bank of Bangladesh ' The Bangladesh Bank' first permitted online transactions in 2019. The bank then allowed international credit cards to buy and sell products and services online in 2013. Bangladesh is ranked 146th out of 186 countries regarding information and communication technology development. However, the number of internet users grows year after year, which is a good indicator. While only 2% of the population has access to fixed broadband, 30% has mobile broadband. To develop e-commerce and enable the improvement of this sector, the government imposed the Information and Communication Technology (ICT) Act, 2016, and numerous types of training has been initiated. Facebook is the most widely used platform for customer engagement and the main e-commerce platform in Bangladesh. The benefits and complications of e-commerce and its roadblocks will be discussed in this paper.

1.2 Literature Review

More than three thousand internet firms have been founded in Bangladesh, according to BASIS (Bangladesh Association of Software and Information Services) (ICT and e-commerce booming in Bangladesh, 2020). According to business professionals, web systems administration and cell phone scope impact meeting consumers on the Web and

communicating a smooth and uncomplicated shopping experience (ICT and e-commerce booming in Bangladesh, 2020). The market trades approximately Taka 70 billion per year, including ticket deals and Facebook deals. This sector rises at a bright pace with a month-to-month improvement of 30-40 per cent, according to information from BASIS excavated by Financial Express (ICT and e-commerce booming in Bangladesh, 2020).

In June of this year, the total number of internet users in Bangladesh was 120.95 million. It reached 117.31 million people in May, approximately the same as the whole population of the United Kingdom. According to the BRTC, 25% of the country's population accessed the Internet in 2015, rising to 56% by 2019. Compared to developed countries, the European Union has a 76 per cent internet penetration rate. In terms of mobile phone usage, Bangladesh provides an example for the rest of the world. According to the BTRC poll, 131.37 million people, or about 80% of the population, use mobile phones, compared to 78 per cent in India and 66 per cent in Pakistan. The country's e-commerce activities are quickly expanding day by day. Every month, new companies and websites emerge. Bangladesh's e-commerce market is expected to grow to over \$3 billion by 2023, which is a very promising sign. Bangladesh is also a country in South Asia.

1.3 Origin of the report

Submitting an internship report is a must for a student after finishing the internship, and an internship helps a person align the theoretical knowledge that the person got at the undergrad level to a practical environment. This paper is based on the 'Prospect and Problems of E-commerce operations in Bangladesh', and in this report, opportunities of the e-commerce operations along with the obstacles of the topic were found. Based on observation, this internship report is made.

1.4 Scope of the Study

The scopes of this project are-

- An idea about the services provided by a consultancy firm.
- How a simple accounting system can be applied to any small firm.
- Product and customer service process.
- Intranet and extranet access.
- Customer collaboration.

- Approaches to e-commerce are both qualitative and quantitative.
- The core problems of e-commerce operations and prospects of the business method.

1.5 Significance of the study

Electronic commerce (e-commerce) is a business approach that allows companies and individuals to buy and sell goods and services through the Internet. E-commerce can be done on computers, tablets, smartphones, and other smart devices. Because it is possible to place orders for products and complete transactions at any time, the E-commerce sector has a significant impact on the business sector.

This sector generates more dynamic and adaptable economic operations. According to research, overall e-commerce revenues would exceed \$4.28 trillion in 2020. Furthermore, it is estimated that Bangladesh's e-commerce industry is worth more than Tk 70 billion and is growing at a rapid pace. In this research, both are included in the broader category of e-commerce.

1.6 Objectives of the Study

The objectives of the study are following.

1. To Illustrate the prospects of the E-commerce operations in Bangladesh;
2. To identify the problems related to the E-commerce Operations of Bangladesh;
3. To make some recommendations to improve the E-commerce Operations of Bangladesh;

1.7 Methodology of the Study

A report needs a lot of information, and so to prepare a report, gathering data is very important. The target population of this study was e-commerce operations and its prospect and problems in Bangladesh. It serves a variety of research objectives associated with different variables.

1.8 Sources of data

- 2 Previous Journal, Articles and Papers
- 3 Company website
- 4 SEC website
- 5 Research reports
- 6 Online sources

1.9 Methods of Data Collection

Data used in the study are collected from secondary e-commerce operations sources.

1.10 Limitations of the Study

Every report can have some limitations, and the limitations of this report are:

- Every organisation has some barriers, and for disclosing the internal information of a business, those barriers influence while providing information. So, the respected personnel could not provide all the information that I needed.
- The report is based on academic learning and experiences gathered externally.

Chapter 2: Overview of E-commerce Operations in Bangladesh

2.1 Concise History & Evaluation of E-Commerce

E-commerce implies any type of business trade performed over the Internet. So, e-commerce is defined as the sale or purchase of products or actions using the Internet, such as mobile phones and computers, specifically designed to obtain or place ordinances. The two most prominent terms in the current e-business industry are M-commerce (Mobile Commerce) and F-Commerce (Facebook Commerce). Marketing, finance, manufacturing, selling, and negotiation are examples of intercompany and intercompany tasks involving e-mail, EDI, file transfer, fax, video conferencing, workflow, or contact with a distant computer or mobile device to connect facilitate e-commerce.

For a defined term, we can choose between various definitions. According to the WTO, e-commerce means using electronic measures for producing, distributing, marketing, selling and exporting goods and services. Among thousands of blessings of this " World Wide Web" or " WWW", e-commerce has brought a fair chance to get the best out of it.

Bangladesh is a developing country. Btw still e-commerce is underrated in Bangladesh. However, the number of users increases daily, which is a good thing. In e-commerce, the country has yet to realise its full potential. E-commerce offers numerous advantages. Some of the advantages of e-commerce include expanded participation in international value chains, increased market access and reach, increased internal and market efficiency, and decreased transaction costs. Online procurement and sales may result in more competitive firms and employment growth in the ICT sector.

In 2020, global retail e-commerce sales totalled 4.28 trillion dollars, with e-commerce revenues predicted to reach 5.4 trillion dollars in 2022. Shopping is one of the most famous internet pastimes. E-commerce is regarded as an early adopter and beneficiary between the United States, Europe, and China; e-commerce is regarded as an early adopter and beneficiary. India's outlook has also shifted dramatically. According to a recent estimate, Asia and Oceania will account for 56 per cent of worldwide internet shoppers in 2018, up from 42 per cent in 2013 and 15 per cent in 2013. Internet business has been established since the 1990s, and its growth is straightforwardly related to the advancement of data innovation. The early web-based business started with the straightforward spread of merchandise and ventures by advanced methods, from issuing requests to conveying items to attaining connection among merchants and customers using the Web.

Michael Aldrich was a man who developed web-based shopping to provide online exchange handling among purchasers and organisations or between one business and another, a

procedure referred to later as a web-based business. He was an English creator, pioneer and business person. Online business history goes back to developing the incredibly ancient impression of sell and bargain, power, links, PCs, modems, and the Web. Sister/Tesco is the first B2C internet shopping framework, and 72 years of age woman Mrs Snowball turned out to be most likely the world's first online home customer. After the appearance of Tim Berners Lee's Internet in 1990 and the beginning of its business use in 1991, the utilisation of online business saw a blast. Along these lines, online business got conceived in 1991 when the Web was opened for business use.

In the context of Bangladesh, web-based businesses get recognition close to 2013. Day by day, the number of users is increasing. Many internet business organisations have begun their journey, and many began as online shops. There is a positive environment for internet businesses in Bangladesh even though the government is taking necessary steps to develop this sector. There is a vast potential market for web-based business improvement along these lines. Male clients usually search for dresses and footwear on the Web, and female clients look for jewellery and Watches. Bringing down web cost is leading web-based business development. Requirements for solid transportation administration to help internet business growth, money down choices, expansion of Skype, Viber, what's up, Facebook in client support and examples of overcoming adversity of Facebook stores have been discovered for the thought of the current and future market participants.

2.2 E-commerce operations in Bangladesh

Many businesses are using e-commerce to sell both tangible and intangible products. Some e-commerce technologies allow consumers to do transactions without leaving their homes, ranging from shopping to paying bills. Consumers' rising usage of internet commerce is mostly due to their need for convenience and, in some cases, privacy. It has resulted in radical transformations in Bangladesh. The main reasons for the increased use of electronic commerce by customers are the demand for convenience and privacy. This sector has brought rebellious changes in Bangladesh. The Internet was established in Bangladesh in 1993, although users could only connect via e-mail. Before 1996, there were few internet services available in Bangladesh. At the start of 2020, there were 60 thousand internet networks available. Bangladesh joined the worldwide undersea fibre optical network on November 22, 2005. When the Global Information Superhighway (SEA-ME-WE-4) was linked in 2016, it signalled the

beginning of a new age in Bangladesh's internet sector. The state of 2005-2016 of Bangladeshi internet users is stated below.

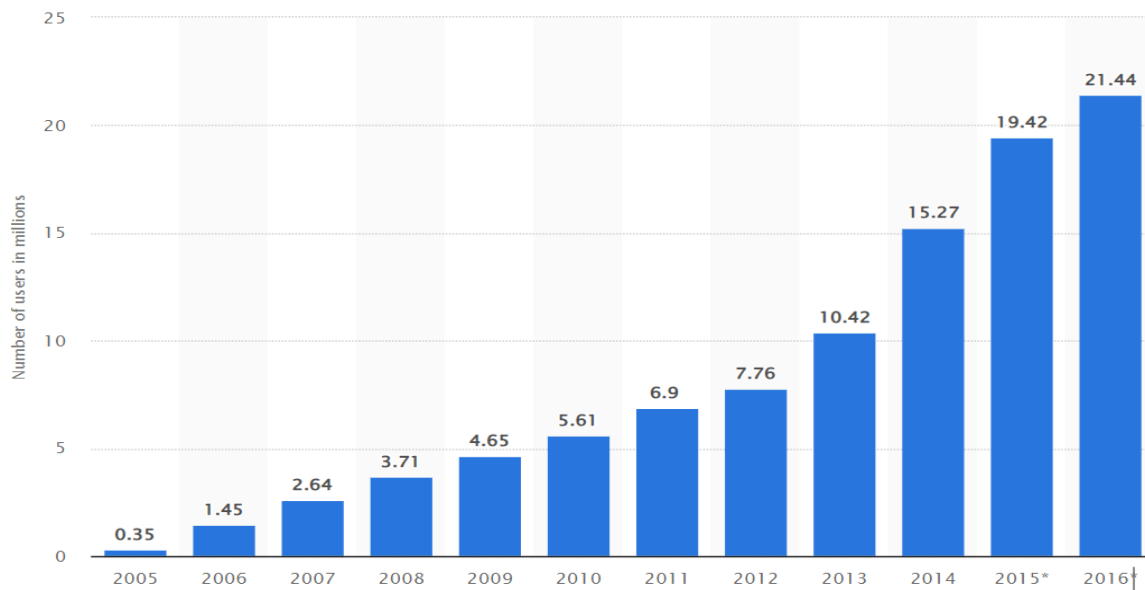


Figure 1: Internet users of Bangladesh from 2005-2016

After 2017 I could not find any data, but internet users increased uncomfortably. From 2020 to 2021, the number of Internet users in Bangladesh increased by 28%.

In 2005, internet users were 0.35 million, an insignificant number based on the country's total population. Within 2016, the number of internet users increased and became 21.44 million. In 2021 this user increased to 120 million. Here is information provided by the BTRC.

OPERATOR	SUBSCRIBER (MILLION)
Mobile Internet	103.191
ISP + PSTN	9.522
Total	112.713

Figure 2: Present internet users of Bangladesh

According to the data mentioned above from the Bangladesh Telecommunication Regulatory Commission (BTRC), more than 110 million people currently have access to the Internet.

Currently, the Web is being used for electronic commerce in various commercial sectors. In Bangladesh, there are currently a large number of e-commerce businesses operating. The following are some of the market leaders:

1. Daraz
2. Rokomari
3. Ajkerdeal
4. Othoba
5. Chaldal
6. Bikroy.com

We were introduced to the 4G network in 2018, which allows us to receive quicker internet connections. This technological development will increase the involvement of both groups (traders and customers) in online transactions via digital equipment.

2.3 Kind of E-Business in Bangladesh

Currently, three types of E-Commerce are popular in Bangladesh. They are as follows

- Business-to-Business (B-2-B)
- Business-to-Consumer (B-2-C)
- Consumer-to-Consumer (C-2-C)
- Business to Government(B-2-G)

Business-to-Business (B-2-B)

In this business, model businesses use the Internet to perform their trading and other economic activities, and the customer is the company itself. The Internet is employed as a medium for commercial interaction between businesses in this case. B2B e-commerce (21%) is furthermore predicted to rise at a bigger ratio year-over-year related to B2C e-commerce (19%). (Ishiguro, 2014) Business-to-business (B2B) mainly works between organisations exchanging electronic products. Marketers and conventional business wholesalers mainly do these trades. For example, Sindabad.com is a B2B platform. For the B2B sector to flourish, it is critical to manage change from the past. For a proper B2B marketplace, secure payment methods, auction and bidding facilities must be implemented. The government should take important initiatives to improve this platform, such as organising seminars and workshops for firms like MSMEs

and SMEs to help them convert their existing systems to digital ones. This effort will also aid in creating organisational accountability and transparency and develop a sound taxation monitoring policy. Furthermore, the government must concentrate on increasing B2B transactions by reducing some of the disputes in the brick-and-mortar system.

Business-to-Consumer (B-2-C)

Businesses sell goods or services directly to customers in this business strategy. Retail sales, often known as e-commerce, are included (or -tail). Consumers increasingly use the Internet to shop for and buy things, arrange to finance, plan shipments, receive digital products such as software, and access post-sale services. Electronic exchanges of products or services between businesses and customers are called B2C e-commerce. Reduced operating expenses, a wider reach, globalisation, consumer convenience, knowledge management, and so on are all advantages of e-commerce. The B2C platform is the most popular in Bangladesh. It's similar to the retail part of the Internet, where traditional retail exchanges are usually found. The B2C business model is used by Rokomari.com and Kiksha.com, for example.

Consumer-to-Consumer (C-2-C)

Customer to customer (C2C) is a business concept in which customers trade with one another, usually over the Internet. With the advent of the Internet and firms like eBay, Etsy, and Craigslist, C2C marketing has become increasingly popular. The electronic exchange of products or services between two customers is called C2C commerce. In this context, a communication platform is a website that allows two people to communicate and trade goods and services. Bikroy.com, for example, is a C2C e-commerce platform.

Business to Government (B-2-G)

G2B is a platform where a company offers its products or services to governments over computer networks (Government to Business). It is a means of establishing e-government. Bangladesh began its journey toward a digital governance system implementing e-Tendering and digital information services.

2.4 The Business model Canvas

Based on his previous book, *Business Model Ontology*, Alexander Osterwalder introduced the Business Model Canvas. It includes many prescriptions that serve as the foundation for the activities. It helps new and existing firms focus on operational and strategic management and marketing initiatives.

I was tasked with creating a business model canvas for e-commerce firms in Bangladesh. A business model canvas comprises numerous pieces that answer several questions.

Partners

- Who are your most important partners/suppliers?
- What are the motives for the collaborations?

Key activities

- What are the essential tasks that your value proposition necessitates?
- What activities are most significant in distribution channels, client connections, income streams, and so on?

Value Proposition

- What key value do you provide to your customers?
- Which consumer needs do you meet?

Customer Relationship

- What relationship does the target customer expect you to establish?
- In terms of pricing and format, how can you incorporate it into your business?

Customer Segment

- For which classes are you developing values?
- Who is your most valuable customer?

Key Resource

- What critical resources does your value proposition necessitate?
- What resources are most significant in distribution channels, client connections, income streams, and so on?

Distribution Channel

- How would you like to reach out to your customers?
- Which channels are most effective? How much do they set you back? How can you incorporate them into your and your customers' routines?

Cost Structure

- What are the highest costs in your company?
- What are the most expensive critical resources/activities?

Revenue Stream

- What are your consumers prepared to pay for?
- How and what did they pay lately?
- What method of payment do they prefer?

Partners	Government agencies Accelerators Co-working spaces Venue sponsors	Law firms Investors Universities VC'S
Key activities	University club maintained Consulting Support (legal & investment) Sponsor	Management Event management Workshop Team management
Value Proposition	Creating an Entrepreneurial Ecosystem Establishment of successful businesses International business Relationship	Utilizing Funds Involving Young Entrepreneurs One-stop business solution Promoting new ideas Research
Customer Relationship	Incubation Investment Legal support	Consultancy Training Research facilities
Customer Segment	Start-ups Existing Business Ventures YouTube & social media Mergers	Mentors Investors Co-Working Spaces VCs Club Members
Key Resource	Information Office space	Staffs Contracts
Distribution Channel	Universities Mentors Students Investors Media	Communication Advertisements Office Expenses Club Maintenance Licenses
Cost Structure	Staffs Utilities Convince Marketing Events	Communication Advertisements Office Expenses Club Maintenance Licenses
Revenue Stream	Investments Consultancy	Social Media (YouTube) Events (Registration Fees & Sponsors)

Figure 3: The Business model Canvas (Ballard, 2017).

2.5 Organisation Hierarchy

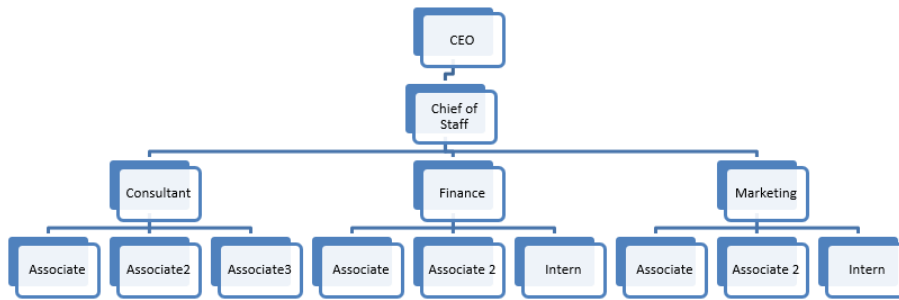


Figure 4: Organisation Hierarchy

2.6 Basic Requirements for E-Commerce Platform

This column delivers a relatively summary of the provisions for generating an e-commerce business platform. In any event, keep in mind that these are not fundamentally essential for all stages of an online company. In general, necessities differ with distinct forms of commercial internet workouts. However, the essential requirements for starting an e-commerce business website are as follows:

Domain:

A domain name is required for any website and can be purchased from any domain registration service. GoDaddy is the top domain registration and hosting service provider in terms of price and service among all other domain registration and hosting service providers.

Server Software:

When a user visits a website, the hosting server is notified that the visitor wants specific information. Based on the visitor's request, the webserver displays the accessible data inside the viewport of the client's device (PC, Smartphone, iPad, etc.) The various web server software is available. The most common software in this category is Apache and Windows IIS. Furthermore, the most common Linux-based control panels include cPanel, WHM, Plesk, AWS, Google Cloud, Alibaba Cloud, and Microsoft Azure.

Web Server:

To get online, you'll need a web server, which stores all of the website's files (e.g., HTML, CSS, PHP, Database, and media files). Windows or Linux are the most common operating systems the webserver runs. Web-development companies that maintain a website may host it on their server or pay for it to be hosted on another. Because e-commerce is web-based, a web server is a prior requirement for an E-commerce platform.

Web Tools:

Many programming languages construct e-commerce websites (PHP, JavaScript, jQuery, MySQL, HTML, CSS). On the other hand, custom coding a website takes a long time. Many web technologies and content management systems are being used to develop an e-commerce website platform to save time and become more efficient (Singleton, 2013). Woo-Commerce is one of the greatest e-commerce management systems available. It offers a comprehensive e-commerce business solution that is both less expensive and more effective. Many more e-commerce content management systems are available, such as Magento, Shopify, etc.

Secure Socket Layer (SSL):

The industry standard for performing safe and secure online financial transactions is SSL (Secure Socket Layer). Thanks to SSL, all information supplied by the buyer to the selling website, such as payment card information, is secure and private. Many companies offer SSL (Plant et al., 2020). If SSL is installed, the URL changes to HTTPS (Hypertext Transfer Protocol with Secure Socket Layer), and a green padlock appears before HTTPS.

Chapter 3: Discussion & Cost Evaluation of the Study

3.1 Basic Requirements for E-Commerce Platform

This column provides a relatively quick summary of the ordinances for creating an e-commerce company platform. In any event, keep in mind that these are not fundamentally essential for all stages of an online company. In general, necessities differ with distinct forms of commercial internet workouts. Over time, this industry has to adapt to innovation. However, the following are essential conditions for starting an e-commerce company website:

Domain: The first condition for starting an e-commerce business is to create an online platform. For this, e-commerce service providers have to create a website. Different sizes, such as GoDaddy and Network Solutions, provide various registered domains. They can create an IP address by selecting the domain name. There are many types of top-level domains like .org, .com and .net. A short and simple domain name needs to be selected. And it must be unique.

Web Server: A web server saves website files and broadcasts them to site visitors by using the Internet. It is called both software and hardware. The server uses Hypertext Transfer Protocol (HTTP), JavaScript, PHP, media files and database to communicate with the browser. Basically, on e-commerce, everything one needs to create a website is stored on a web server.

Server Software: Server software is a program used to interact with the server's internal infrastructure such as memory, processor, storage and input and output communications. When a user visits a website, the hosting server is notified that the visitor wants to purchase certain data. The web server displays the available data within the display area of the visitor's device in response to the visitor's request. These applications can be implemented using a variety of server software. In 2021, the most prevalent web servers will be Apache, Nginx, and Microsoft-IIS. Aside from that, popular software includes Google Cloud, Linux-based cPanel, WHM, Plesk, AWS, Alibaba Cloud, and Microsoft.

Web Resources: Files and documents are used in various ways through resource locations known as URLs. Only those who have a licensed data server can use the web source.

Database Management System: A database system is a computer programming system that stores data electronically. E-commerce organisations store various business information such as their product price statement, picture, product details, etc. Through the database management system. It is an integral part of e-commerce. Here Customers' various information, their order payment, contacts, shipping etc., are stored. Database management systems communicate with different websites through languages like SQL and DDL.

SSL (Secure Socket Layer): Secure Socket Layer is a technology used to secure and share data over the Internet. The original data is decrypted and sent between the sender and the receiver to protect data security. This is used for username and password security when logging in to the website. SSL is used to maintain the confidentiality of information between websites and visitors, which also can encrypt the data.

Gateway for payments: A payment gateway is essential for in-commerce organisations. E-commerce service providers take online payments from their buyers. E-commerce service providers take payment from the customer through direct payment methods or credit. Bangladesh's 2021's most used payment gateways are brash, rocket, sure cash, DBBL, Mastercard etc. They are in a leading position. Moreover, Ali pay, Amazon pay etc., are also used.

3.2 Challenges of E-commerce operations in Bangladesh

While there are several prospects for e-commerce in Bangladesh, certain constraints exist. Bangladesh is a developing country with a rural population that makes up most of the population. We have yet to provide cutting-edge internet technology to every part of our country. However, because the platform is virtual, most consumers in our country are unfamiliar with the concept of e-commerce and are hesitant to input their credit/debit card information for online purchases. The following are the key e-commerce platform business difficulties that governments and businesses may overcome for immediate and long-term success.

A lack of government policy:

Several forums and management organisations mislead traders about company concepts, strategy, and marketing. Due to a lack of legislation, there is a significant comprehension gap between businesses and customers. Although many e-commerce companies are good initiatives, they cannot grow without the government's intervention. They cannot win customers' trust because they do not have a government license. Also, due to the lack of government supervision, e-commerce companies sometimes unfairly set high prices for goods. Also, not all government agencies can ensure legal advertisements due to which their product standard and delivery quality are running low. In addition, many companies do not follow the guidelines given by the government while under government supervision, due to which the company loses its fame. E-commerce companies also faced huge losses due to frequent

government policy changes for ICT and e-commerce companies in 2021. Though the government has authorised the e-commerce law, it must be implemented quickly as feasible. This will cleanse the air and create a more conducive environment for everyone.

Product delivery time has taken longer:

One of the most critical challenges in the online company is item delivery time. Aside from the food delivery internet service, any online purchase of anything takes at least 2-3 days to reach the client's destination, which is inconvenient. If the Product is delivered later than the specified time promised to deliver to the consumer, customer dissatisfaction occurs. They earn bad reviews from online customers due to their delivery failure. Due to this, many e-commerce business organisations in Bangladesh have already shut down.

Recent Covid-19 pandemic:

Due to the Covid-19 situation, many e-commerce service providers have given up or stopped their activities due to a lack of money and capital.

Rigid payment method:

E-commerce companies use gateway payment methods for their payments. That's why they take the help of various online banking services. About 7.7% of Bangladeshi people use mobile banking services for their digital payment methods. The development of e-commerce is subordinate, among other variables, to the presence of secure, user-friendly and cost-effective instalment frameworks.

The significance of instalment work lies within the reality that it might energise meetings between divisions with different goals since instalment frameworks are the common parts of all e-commerce exchanges. They often do not have the transaction method with some banks and charge high delivery charges. bKash, DBBL, credit card payment is known here. However, the digital payment method has not yet been introduced in the PayPal system in Bangladesh, which is a major barrier to foreign trade.

Consumer dissatisfaction: Client disappointment could be a terrible sign for your e-commerce trade. Following are the reasons.

- Incomplete product detail on websites.
- Slow service and online replies on queries.
- Slow delivery.
- Difficulties in contact.

- Poor accessibility on websites.
- Not giving the required Product.
- Bad quality of products and services.
- Being profit-oriented, rather than the customer.
- Rude and unfriendly customer support.

Poor ICT infrastructure and internet facility: As a developing country, the internet facility has not reached every level of citizens. Bangladesh's online clients increased by 7.7% (+19%) from 2020 to 2021. In January 2021, Bangladesh had a web penetration rate of 28.8%. The Internet became somewhat more expensive following the government's internet rationing. In the past few months, the prices for flexible data bundles somewhat increased. Customer fees and acquiring costs, especially for 4G-enabled gadgets, continue to contribute to the digital divide. Users complain of a lack of reasonableness and low quality of internet service. Bangladesh is ranked 85th out of 120 nations in the Comprehensive Web List 2021 based on reasonableness, characterised by the allowance for getting relative pay and competition in the commercial web market.

Understanding gap: The understanding between e-commerce entrepreneurs and customers is a must. By neglecting to prioritise each touchpoint, business visionaries are likely losing out on opportunities to charm through a customised client experience. Marketers have a unique chance to up-level their brands from an excellent to an exceptional one by grasping this shift in buyer behaviour.

Reduced item delivery time: One of the most critical challenges in an online company is item delivery time. Aside from the food delivery service, any online purchase takes at least 2-3 days to reach the customer's destination, which is inconvenient.

3.3 Opportunities of E-commerce operations in Bangladesh

In any event, Bangladesh is a developing and overpopulated country with a high likelihood of successful e-business implementation. It supplies a vital amount of food, non-nutrition, and apparel products overseas. It can expect an appealing interruption of e-commerce business innovation. Having performed sensibly well in practically all driving organisations and the mechanical part in the present decade, Bangladesh, lamentably, has not yet performed sufficiently in the field of e-commerce exchanging and e-commerce business. Many

organisations have created websites, but there is a significant difference between promoting a website and collaborating online over the Web. Many of our country's business people do not use the Internet, particularly for commercial purposes.

Capital Markets:

Bangladesh's capital is SEC. Compared to the beginning of December 2020, both Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) ended the month of January 2021 with positive trends in both index and turnover. The combined turnover esteem of exchanged offers of DSE and CSE was BDT 339.59 billion and BDT 17.28 billion respectively on January 20, 2021, which were both 57.30 per cent and 88.18 per cent higher than on December 20, 2020. This means capital. As the people are promoted or orchestrated, introducing a modern and unmistakable web-based business method may back up our economy through e-business.

E-Tourism:

The travel industry has always focused on employing updated frameworks (e.g., CRS, GDS) to efficiently process internal data and oversee distribution. E-travel reflects the digitisation of all operations and value chains in the travel business, including travel, lodging, and food initiatives. The strategic level includes internet business and employs ICTs to increase the travel industry association's productivity and adequacy. Online booking, online tour guides, online prepayments, online traveller spot visiting with videos and pictures made the demand for e-tourism recently to a great extent.

Export Sector:

Electronics trading and inventive programming both contribute to our economy. As a result, it is critical to establish an e-business Park to ensure financial development. Though the pandemic caused huge losses, Bangladesh didn't face much difficulty as she continued exporting products throughout the world through e-commerce. In 2018 the previous trade was 163.5, but it increased to 183.80 in August 2021.

Expatriate Employment and Remittances:

The stalemate in settlement development paralleled the impact of the global slump, particularly on land shows in the Middle East and contemporary job requirements in some South-East Asian nations, such as Malaysia. Regardless of the recovery, the continuous political uncertainty in North Africa and the Middle East hurts the stigmatised work. Outside of commercial sectors, there is a constant search for The Ostracization of ICT. Individuals with knowledge of

innovation and the Internet can regularly participate in the economy via cerebrum draining to another country.

Banking Industry:

Even though every business bank has begun to follow the mechanisation framework, a web-based financial framework accessible by ATM, nearby charge cards, online support, computerisation instalments, and EFT is available in the selected location, as it were. As a result, an e-business may make a greater commitment in the banking sector.

To date, no Internet-based stimulation company is available in Bangladesh. In 2021, the banking sector developed to a great extent. Now it is composed of commercial banks (6 state-owned), specialised banks (3 state-owned), 42 commercial banks and commercial banks (9 foreign). By December 2021, 48 per cent of the youth of Bangladesh will remain under formal financial services through the expanding opportunities of mobile banking. Butch Bangla Banking is one of Bangladesh's top mobile banking operators. Web radio and television may provide an additional channel for communicating administrations to clients. Recently, Internet radio has been available; nevertheless, they are not natural to the majority, and as a result, they miss out on the opportunity to collaborate.

Publications Sector:

With time, the education system in Bangladesh is progressing. If books are digitised, students can purchase them via the Internet at the lowest feasible price using a credit card. Because of the advent of e-business, it is now easier for publishers to publish various books and articles.

Agriculture Sector:

Agriculture is considered the lifeline of the Bangladesh economy and plays an essential part in the country's overall economic growth. It is also a significant social sector concerned with food and nutritional security, income production, and poverty alleviation. The GDP rate was 10799.10 in 2020, which increased to about 11023.20 in 2021. The agriculture industry must grow by creating websites rich in various processes, systems, and details about agricultural goods. Ordering agro-products by e-mail expedites the procedure, and the importer may quickly transmit the order to the intermediaries. As a result, ensuring e-commerce throughout the country is critical for our economic progress.

Telecommunications Sector

In Bangladesh, the telecommunications business is quite appealing. This country has around four corners of people who use mobile phones. As a result, there will be tremendous growth if e-commerce services are widely used.

3.4 Costs Related to Implement an E-commerce operations Platform

Domain registration: It is less expensive than purchasing an already registered domain. Registration fees, renewal fees, buying old domain fees increases cost related to starting this business. The below chart is the new registration prices of some domains in 2021.

Hosting Cost: The cost of hosting varies based on the technology and business methods used by hosting companies. Exon host, however, Web Host BD. Hurst might. Are they the top hosts in Bangladesh?

SSL Cost: Different SSL costs charge different amounts. For example, Alpha charges 5000/- BDT for their installation charge.

Web designing and development Cost: There is no settled cost for planning and creating an e-commerce site. The taken toll advertised by different sellers profoundly goes astray based on distinctive components like a measure of the commerce, quality of the design client requests etc. Be that as it may, agreeing to the supposition of a distinctive web create company's consultant at list 40,000 BDT is the minimum necessary for planning and creating an e-commerce website.

Chapter 4: Findings of the Study

4.1 Advantages of E-Commerce in the Perspective of Bangladesh

E-commerce has opened up a new vista for trade and business. Currently, the e-commerce industry is assisting in decreasing the cost of things so that less affluent folks may also bear the cost of the item. The primary advantages of internet business revolve around the fact that it eliminates time and geographical separation.

The multifaceted activity of E-commerce from which Bangladesh might gain in the business sector, namely-

- Lower operating costs and higher service quality.
- Reduce travel time and expense.
- Offer comparative shopping.
- Provide enough information.
- Establish markets for speciality items.
- Develop targeted communication.
- Allows for a highly specialised niche market.
- Greater profit margins.
- Convenience and control over information sharing.

One discernible alter amid this Covid-19 widespread has been the move of buyer conduct. Presently, our guardians and grandparents have bKash wallets and request through Facebook shops or ChalDal.com. In reality, the retail e-commerce division could be a critical source of remote speculation, raising roughly USD 41 million and is presently the third most noteworthy financed segment in Bangladesh. During the pandemic, people depended on online shopping as they were quarantined and made social distances. For this, the internet and mobile data service demand also increased. Many women entrepreneurs have started their e-business during that time.

The exponential growth of the Internet population and its potential in various sectors cause Bangladesh to be connected to the information superhighway, making it easier to do business and transactions over the Internet, especially for the B2B sector. Chaldal.com, Shohoz.com, food Panda, Ghorebazar.com, Bdticket.com, and Sheba are examples of online

shopping platforms. Bangladesh's popular shopping and e-commerce sites include XYZ, bdshops.com, daraz.com, patio, bikroy.com, ajkerdeal.com, bagdoom.com.B2B, and B2C online sales have increased. Much traditional business has turned into e-commerce for the customer's demand which increased the GDP rate on ICT by 7.2 per cent.

Lacking ICT framework and utilisation, questionable and exorbitant control supply, higher cost of transmission capacity, lack of access to versatile phones and computer devices can prevent the expansion of e-commerce. Fortunately, Bangladesh's current position is rapidly developing. Internet everywhere, for everyone, is rapidly becoming a reality. Bangladesh will surpass India and Pakistan in terms of tele density by 2021, with 90 per cent coverage. Bangladesh will overtake its neighbours, India and Pakistan, with an 80 per cent mobile density. Bangladesh now has 100 per cent mobile coverage across the country, and the transition from 2G to 3G service was completed on schedule. New technologies, such as 4G, are expected to emerge in the future. Bangladesh needs to adopt updated mobile technologies to stay competitive in today's society. Food Panda, for example, is one of many Bangladeshi e-commerce companies that has developed its delivery networks.

However, in Bangladesh, the e-commerce business is dominated by large websites and a slew of dynamic Facebook pages run by a small number of brilliant individuals. It's impossible. Several domestic courier agencies operate mainly within the city limits of Dhaka. They serve as the link between buyers and sellers in terms of e-commerce. Power is the centre part of a computerised economy. The current government has taken power age as an essential concern. By 2016 July, 12725 MW power ages become conceivable; furthermore, as per vision 2021, power creations will cross no less than 20,000 MW by 2021. While power value continues to ascend in the new past, important advances should be taken as far as plant redesigning, proficient creation, conveyance, and upkeep to keep the expense of power utilisation at an entirely reasonable rate to get provincial individuals the internet business world.

4.2 Constraints to E-Commerce in Bangladesh

Internet Administrations

Internet administrations are accessible in only six major region base camps out of 64 places. BTTB intends to expose IP organisations to the 64 local base camps gradually. The online offices were expanded to 12 areas in January 2019. The project is moving quickly, and around

40 or more places are now receiving Internet services; within a short period, 64 regions will be protected with Internet services. Internet limitations can be described below:

The websites must have a minimum number of clients. In Bangladesh, there is a shaky basis for media transmission. PC and equipment are Expensive. There is Inadequately skilled personnel. Bangladesh's lack of enthusiasm for equipment and programming between people can be seen. The online financial network, along with the digital legislation, is inadequate. Internet administrations that are both low-cost and high-priced. There is A lack of activity in launching a web-based business. The bureaucratic procedures are Complicated. A lack of awareness of internet business challenges at the government level is the lack of internet administration.

Labour Deficiencies:

Labour deficiencies and failure to preserve their supply chain processes are also concerns. Due to innovation, an e-commerce venture must advance each time. After the pandemic, e-commerce service providers faced difficulty in resource ownership. For most start-ups, assessing a venture budget that changes over time is tough. Getting access to finance is extremely important for a business to stay afloat. Most of the time, the saving money segment is unwilling to lend to businesses with less than 3 to 5 years of experience backed up by real assets.

Lacking of Long-Term Orientation in The Companies:

E-commerce companies are one of a kind in this nature, and they require back, in the beginning, a long time of the initiatives and almost all the resources are consistent or mental. Administration can detect e-commerce as a pushed approach to issuing subsidised credit for start-up e-commerce companies. During covid-19, consumers have enjoyed having the convenience of ordering consumables, conventional and non-conventional goods, and services from the comfort of their homes, while companies have gained market share by being innovative and catering to consumers' needs. There are occasions when the entire refund process can take as much as 45 days because consumers utilise various payment methods other than cash on delivery on various platforms and occasions, including MFS and payments made with a credit card. Seeing the success of e-commerce, many entrepreneurs have started new business strategies. This has embraced entrepreneurship in Bangladesh. In 2021, the entrepreneurship number rose about 30% compared to previous years. These are the primary conclusions for a starting e-commerce business to enhance the firm's processes.

Moreover, e-commerce service providers also face some constraints such as,

- Non-Appearance of a solid free administrative body for the media transmission sector.
- Non-Appearance of encryption law that blocks acknowledgement of computerised signature.
- Solid reliance on Letter of Credit (L/C) to conduct universal transactions.
- Non-issuance of universal credit cards for cross border transactions.

Chapter 05: Problems, Recommendations & Conclusion

5.1 Problems Identified

The following problems related to the E-commerce operations of Bangladesh have been addressed.

- The inadequate delivery mechanism of Bangladesh is a barrier to good e-commerce operations.
- Also, the country is not good enough for providing the consumers with the best possible internet service, which is a very significant problem.
- The online transaction system of Bangladesh is still upgrading.

5.2 Recommendations

- E-commerce service providers can encourage people on online shopping by offering attractive packages & lowering prices over their traditional outlets.
- EFT, ATM, POS, and many gateways should be used to speed up money transactions.
- Reliable sources of information must be provided to attract customers. Cyber and data security breach is a major problem in Bangladesh nowadays. So, using more than one database for collecting consumers' information will help the industry decrease cyber and data security breaches. Using online identity verification is a good way of avoiding the breach. Some applications can be used like SolarWinds, Malwarebytes, Mimecast etc.
- Modernise the state postal service and local courier providers, create service benchmarking, and promote real-time shipment hunting, RFID, and more technologies. Any payment system should be compatible. And can work together to transfer funds steadily. PayPal service should be inaugurated immediately.
- To build a secure payment system, they must ensure customers trust and maintain customers' trust through constructing secure transaction system with all the necessary regulations taken to enforce the system.
- E-wallets, smart cards, and other technologies must be created. FinTech solutions and digital financial services (DFS) innovations are gaining traction in Bangladesh, boosting financial inclusion.
- To expand the reach of e-commerce, more emphasis should be placed on Bangla content. Bengali versions of educational courses are possible. Many of today's e-commerce sites have English versions, but they may also have Bengali counterparts.

E-commerce refers to the buying and selling products or services through the Internet and the transfer of money through data to complete the procedure. E-commerce businesses have brought several conventional ways of trade and advanced change in the economy. Bangladeshi are currently developing their standard of living utilising the Web. E-commerce is a promising sector for the development of a country. This is an era of the Internet; we all are very reliable. Offline trades are risky, lengthy and less profitable.

E-commerce will be very beneficial for us as it will save our time, be more profitable and have a digital system. One of the most major advantages of e-commerce is the lower cost. It's no longer about manoeuvring a shopping cart down the correct aisle or scouring the shelves for the correct item. Customers can easily narrow their product search using suitable navigation or an e-commerce website's search field. Certain websites remember user preferences and shopping lists to make repeat transactions easier. E-commerce websites can also function 24 hours, seven days a week.

5.3 Conclusion

Providers would now be able to get the request by a web-based requesting framework, and shoppers would spare quite a bit of their time on the web exchange. Huge numbers of business exercises of enormous companies, just as grocery stores utilise the site to get orders from purchasers and send specific merchandise to them. The most recent measurements say that this part has a great development rate. So, to make it practical, both government and business visionaries should be progressively cognizant. What's more, make appropriate strides. This report shows current web-based business stage business issues, challenges, and ideal arrangements quickly.

To pick up consumer loyalty and trust, e-trade stage businesses should be more help orientated. Online business organisations ought to guarantee security and give the best support to their clients; generally, this area can't develop more. Regular meetings and focus group talks are required to identify and bridge gaps to uncover new e-commerce openings and suggest development solutions. E-commerce can be used as a platform for inclusive lessons by merchants, customers, government officials, technological professionals, researchers, ad agencies, supply chain agents, payment gateway organisations, and finance corporations. As a result, policymakers will quickly identify opportunities and obstacles by readily documenting and sharing practitioners' thoughts, ideas, experiences, barriers, and forecasting.

Despite having numerous opportunities in Bangladesh, e-commerce enterprises face numerous challenges. Technology and the flow of information within and between businesses and customers are important challenges for e-commerce. Because thousands of hackers are ready to steal information, especially credit cards and personal information, security obstacles and challenges must be handled before the organisation's start. As there are numerous opponents, customer satisfaction must be highly prioritised. Accordingly, in order, reliably and securely, to satisfy customers' demands, e-commerce businesses can react to consumers' needs to accomplish actions. So, e-commerce industries should maintain security laws and punishments to attain and maintain customer trust and belief to strengthen the market.

The 'Vision 2021' aims to digitise Bangladesh through effective information and communication technology and develop a resourceful and modern economy. The digital vision of Bangladesh has reached a long way with surprising Internet adoption and a tech-savvy young generation; the leaders' agreement is the most encouraging sign for a thriving e-commerce economy.

According to polls, many market elements make e-commerce a productive success. According to UNCTAD, the eight pillars of a profitable e-commerce policy framework are ICT Infrastructure, E-Payment, E-Commerce Platform, Skill Development, Awareness Raising Program, E-Security, E-Procurement, and Trade and Logistics Facilitation. According to UNCTAD's Information Economy Report 2019, titled "Unlocking the Potential of E-commerce for Developing Countries," a country's readiness for B2C e-commerce may be assessed using four criteria: i) Internet use, ii) Internet access, iii) Internet access, iv) Internet access, Examples include secure servers, credit card penetration, and postal delivery systems.

The e-commerce market is worth 300 crores each year (E-Commerce Policy Framework for Bangladesh, 2020). (2020, Blackman) Despite this, cash-on-delivery is currently Bangladesh's most popular payment option. Cash-on-delivery accounts for around 90% of all internet purchases (E-Commerce Policy Framework for Bangladesh, 2020). If we adopt anything like the PayPal payment system, this industry will grow much faster. (Bangladesh's E-Commerce Policy Framework, 2020) At present, the e-commerce market net income is almost 700 crores per year. However, cash on delivery method payment is used vastly among customers currently in Bangladesh. Recently PayPal payment method has been introduced in the market of Bangladesh, and it will be very beneficial for this sector.

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