



Examining E-Commerce Practices among Students at the University of Rajshahi in Bangladesh

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ABSTRACT

The study aimed to examine the e-commerce usage patterns among students at the University of Rajshahi in Bangladesh. Data were collected from 205 respondents using a standardized questionnaire administered through in-person interviews. The results indicate a high level of e-commerce engagement among the participants. The majority of respondents (43.41%) utilize e-commerce services on a monthly basis, with 4.39% using it daily, 25.37% weekly, and 26.83% rarely. The primary motivations for e-commerce usage were discounts (35.61%), time savings (23.90%), and home delivery (18.05%). A smaller percentage of respondents preferred e-commerce due to its various payment methods (12.20%) or to avoid gatherings (10.24%). The most prevalent negative experiences reported by respondents were product quality issues (60.34%), followed by poor customer service (18.97%), delayed delivery (12.93%), and payment issues (7.76%). The study concludes with recommendations for e-commerce platforms to enhance user experience and address the specific challenges encountered by students.

Keywords: E-commerce, Internet, Purchase, Online, Advantage, Bangladesh

1. Introduction

The emergence of the Internet has transformed the world into a more interconnected space (Hasan & Huda, 2013). Globalization and the Internet offer substantial advantages to individuals and organizations across developed and developing countries (Hasan & Huda, 2013). Electronic commerce, sometimes known as e-commerce, is a business concept that allows parties to conduct transactions using digital networks, especially the internet (Rajasekar and Agarwal, 2016). In today's backdrop of rapid technology advancement and digital growth, e-commerce has become an essential component of modern business operations. Computer-mediated commercial contacts have been possible since the 1960s; the launch of Amazon and eBay in 1995 was a turning point, drastically changing the landscape of modern business operations (Ayob, 2021). E-commerce and internet usage are predominantly associated with developed countries, numerous enterprises now utilize online platforms to sell both physical and digital products (Hasan & Huda, 2013; Hossain et al., 2019). Electronic commerce, or e-commerce, represents a paradigm shift in business operations, encompassing a diverse array of online commercial activities (Hasan & Huda, 2013; Jain et al., 2021; Gupta, 2014). The convenience of online shopping allows consumers to make purchases from their homes and receive deliveries at their residences (Mohiuddin, 2014). In today's business environment, e-commerce has become a critical component (Islam, 2018).

The e-commerce sector in Bangladesh is experiencing rapid growth, impacting both domestic and international trade (Hoque et al., 2015). With a population of roughly 154.41 million, including 77 million internet users, Bangladesh is one of the world's most densely populated country (Islam, 2018). The economy of the country continues to expand, and online transactions are steadily increasing due to the changing business landscape. Improved living standards and a faster pace of life have significantly altered consumer purchasing patterns (Islam, 2018). The objective of this study is to analyze e-commerce usage patterns among university students. The remainder of this paper is organized as follows: Section 2 provides a review of the literature. A detailed description of the materials and methods used in this study is presented in section 3. Section 4 presents the findings of this study. Finally, section 5 presents the conclusions of the study.

2. Review of the Literature

Researchers have been interested in the growth of e-commerce and its impacts on consumer habits. Yasin et al. (2023) examined how consumers perceive and feel about the e-commerce industry. The research, which used primary data from 160 participants, primarily students, revealed that people generally view online shopping positively, despite occasional difficulties. The results indicate that online shopping may soon become more popular than traditional shopping methods. Hasan and Mardhani (2021) conducted a study on e-commerce adoption among Small and Medium Enterprises (SMEs) in Indonesia, using data from official e-commerce statistics publications. Their findings indicated a low rate of adoption, with numerous SMEs

continuing to employ traditional sales methods. The study emphasized the necessity of gaining a more comprehensive understanding of the challenges encountered by small businesses in their transition to digital platforms. Singh (2021) investigated the status of e-commerce adoption in Nepal, with a focus on the challenges associated with implementing e-commerce platforms. The research examined models of technology acceptance to elucidate consumer behavior towards technology and its adoption. The study explored the spectrum of e-commerce platforms available both locally and globally, identifying opportunities and challenges within Nepal's digital landscape.

Hasan and Huda (2013) examined the obstacles facing the e-commerce sector of Bangladesh and offered recommendations for enhancing its efficiency. Their research explored influence of e-commerce on the financial industry of Bangladesh and evaluated the country's e-commerce platforms through a survey of consumers, service providers, and banking stakeholders. The study emphasized the importance of assessing and improving existing infrastructure to support the sector's expansion. Islam (2018) examined the progress and hurdles of e-commerce in Bangladesh, providing a comprehensive overview of the industry's landscape. The research highlighted the advantages of adopting e-commerce for increasing business revenue and customer satisfaction. According to the study, wider adoption of e-commerce might help consumers reduce their living expenses while also improving their overall quality of life, hence supporting economic growth. Hossain et al. (2013) conducted an assessment of the impact of e-commerce growth on society and businesses through a comprehensive survey. The study investigated the potential implementation of e-commerce in Bangladesh and identified technical problems associated with the necessary software and hardware. The findings indicated that e-commerce could exert a substantial influence on societal and business processes. The research investigated the potential implementation of e-commerce in Bangladesh and identified technical problems associated with the necessary software and hardware.

Karim and Qi (2018) researched the historical and contemporary development of e-commerce in Bangladesh, utilizing secondary data and a survey to elucidate consumer perceptions and prior online shopping experiences. This study identified several challenges confronting the e-commerce market and provided recommendations for enhancing marketing strategies to facilitate the growth of online retailers in Bangladesh. Sultana and Akter (2021) examined women's involvement in the e-commerce sector in Bangladesh. The study aimed to evaluate the current state of women-led online businesses, analyzing key components, challenges, and potential solutions. The findings underscored the significance of cybersecurity in fostering trust among digital users and promoting the growth of women-led e-commerce ventures. Saha (2015) analyzed that micro, small, and medium-sized enterprises (MSMEs) in Bangladesh face some obstacles in the context of e-commerce. Studying more articles on e-commerce and digital banking and he provided some techniques for MSMEs to use e-commerce. The author stated that the adoption of e-commerce might have a big positive impact on the country's MSMEs' growth and development.

3. Materials and Methods

3.1 Study Design and Sampling

The study was conducted on the students of the University of Rajshahi in Bangladesh. There are about 32,756 students studying at the university. Cochran's formula has been applied in this study to calculate the optimal sample size. Cochran (1963) developed an equation to evaluate the sample size for large population. The equation is as follows:

$$n_0 = \frac{Z^2 pq}{e^2} \quad (1)$$

Where, n_0 = sample size, p = the probability of e-commerce users (84%), q = the probability of non-e-commerce users ($1 - p$), Z = the Z value (e.g., 1.96 for 95% confidence level), e = the preferred level of precision (5%). According to above formula the sample size is 206.

The corrected formula of Cochran's (1977) should be used to calculate final sample size, which is given below:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} \quad (2)$$

Where population size = 32,756, n_0 =206. So, the final sample size, n = 205.

3.2 Data Collection Method

The primary data is used specifically for the purposes of this study. All of the data has been collected through a structured questionnaire. In this case responders are reached through face-to-face interview.

3.3 Data Analysis

In this study, descriptive statistics such as frequency and percentage were used to describe and evaluate the distribution of the data. Furthermore, graphical representations were developed for presenting the results.

4. Key Findings and Discussions

4.1 Demographic Information of the Respondents

This study's demographic information is showed in the below data table. Of the group, 64.88% are male and 35.12% are female. Regarding age distribution, the majority of respondents (40.98%) were 25 years or older, followed by 38.04% aged 22-24 and 20.98% aged 18-21. With respect to the year of study, the largest proportion of respondents (31.22%) were in their fourth year, with master's students comprising 26.83%, third-year students 17.07%, second-year students 14.15%, and first-year students 10.73%. Concerning monthly family income, households earning between 20,001 and 30,000 constituted the largest group (44.88%), followed by 26.34% earning between 30,001 and 40,000, 13.66% earning between 40,001 and 50,000, and 8.78% earning between 10,000 and 20,000. The smallest category, with a monthly income exceeding 50,000, represented only 6.34% of the sample.

Table 1. Demographic Information

| Category | | No. of Respondents | Percentage |
|-----------------------|-----------------|--------------------|------------|
| Gender | Male | 133 | 64.88 |
| | Female | 72 | 35.12 |
| Age (in year) | 18-21 | 43 | 20.98 |
| | 22-24 | 78 | 38.04 |
| | 25 and above | 84 | 40.98 |
| Year of Study | 1 st | 22 | 10.73 |
| | 2 nd | 29 | 14.15 |
| | 3 rd | 35 | 17.07 |
| | 4 th | 64 | 31.22 |
| | Masters | 55 | 26.83 |
| Monthly Family Income | 10000-20000 | 18 | 8.78 |
| | 20001-30000 | 92 | 44.88 |
| | 30001-40000 | 54 | 26.34 |
| | 40001-50000 | 28 | 13.66 |
| | > 50000 | 13 | 6.34 |

Source: Field survey, 2024.

4.2 Usage Patterns

4.2.1 Types of Goods or Services Students Purchase Frequently

Table 2 describes the kind of goods respondents purchased the most online. 14.15% of respondents purchased books and educational materials. 22.93% of respondents purchase electronics and gadget items. 20.98% buy tickets online. 25.36% of respondents purchased food and groceries online, while 16.58% purchased clothing.

Table 2. Types of Goods or Services that Purchased Most

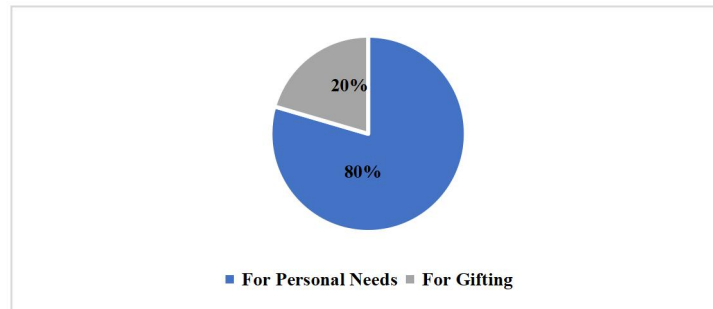
| Goods or Services | No. of Respondents | Percentage |
|---------------------------------|--------------------|------------|
| Books and Educational Materials | 29 | 14.15 |
| Electronics and Gadgets | 47 | 22.93 |
| Tickets for Travels | 43 | 20.98 |
| Food and Groceries | 52 | 25.36 |
| Clothing | 34 | 16.58 |

Source: Field survey, 2024.

4.2.2 Purpose of Shopping

Figure 1 shows the most frequent reasons for shopping among respondents. A large percentage of participants, 79.51%, reported that the respondents purchase primarily for personal needs and 20.49% for gifting.

Fig. 1. Purpose of Shopping



Source: Field survey, 2024. The figure is self-constructed by the authors.

4.2.3 E-commerce Usage Frequency

Table 3 describes the frequency of using e-commerce services. The highest proportion of respondents (43.41%) utilize e-commerce services on a monthly basis. 4.39% of respondents use it daily, 25.37% of respondents use it weekly, and 26.83% use e-commerce rarely.

Table 3. E-commerce Usage Frequency

| Frequency | No. of Respondents | Percentage |
|-----------|--------------------|------------|
| Daily | 9 | 4.39 |
| Weekly | 52 | 25.37 |
| Monthly | 89 | 43.41 |
| Rarely | 55 | 26.83 |

Source: Field survey, 2024.

4.3 Engagement Patterns

4.3.1 Popular E-commerce Platforms

Table 4 illustrates some of the most popular e-commerce platforms in Bangladesh, as reported by respondents. The majority of responders in this study (40.49%) use Daraz. 28.78% use Foodpanda, while 17.07% use Rokomari. 13.66% of respondents use other e-commerce sites, such as Rail Sheba, Sajgoj, Othoba, Evaly, and Bikroy. The findings are consistent with those of Yasin et al. (2023) and Sultana and Akter (2021), who found that daraz, rokomari, and foodpanda are the most popular e-commerce platforms in Bangladesh.

Table 4. Platforms that Respondents Use

| Platforms | No. of Respondents | Percentage |
|---|--------------------|------------|
| Daraz | 83 | 40.49 |
| Foodpanda | 59 | 28.78 |
| Rokomari | 35 | 17.07 |
| Others (Rail Sheba, Sajgoj, Othoba, Evaly, Bikroy etc.) | 28 | 13.66 |

Source: Field survey, 2024.

4.3.2 How Students Find New Products

Table 5 demonstrates several promotional channels through which students discover new products. Advertisements are the most popular source, with 40.97% of students reporting finding them through this method. Reviews are widely used, with 31.71% depending on them to discover new products. 18.05% use search engines, while 9.27% rely on referrals from others.

Table 5. Sources Through Which Students Find New Products

| Promotional Channels | No. of Respondents | Percentage |
|----------------------|--------------------|------------|
| Search Engines | 37 | 18.05 |
| Reviews | 65 | 31.71 |
| Advertisements | 84 | 40.97 |
| On Others' Referral | 19 | 9.27 |

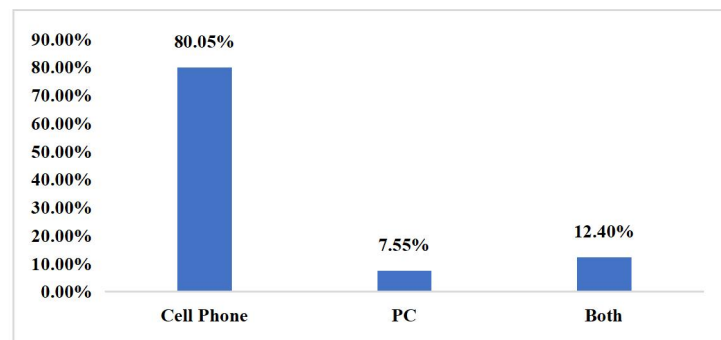
Source: Field survey, 2024.

4.4 Use of Technology

4.4.1 Devices Used for E-commerce

Figure 2 provides information about the devices used by individuals to access e-commerce sites. This indicates that the majority of individuals (80.05%) access e-commerce sites using their cell phones. A relatively smaller portion (7.55%) of users access e-commerce sites through personal computers. Some users (12.40%) use both cell phones and personal computers to access e-commerce sites.

Fig. 2. Devices for Accessing E-commerce Sites

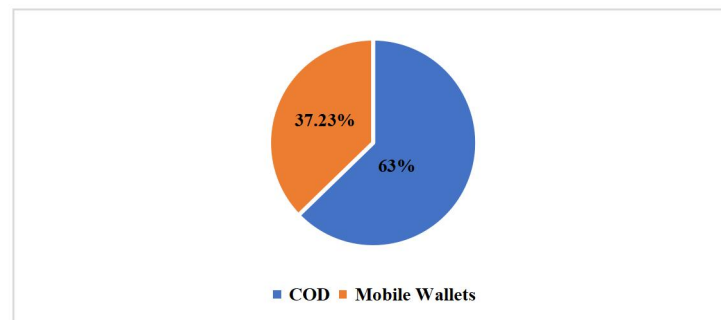


Source: Field survey, 2024. The figure is self-constructed by the authors.

4.4.2 Preferred Payment Methods

Figure 3 shows the preferable payment method by respondent. Most respondents (62.77%) of respondents prefer Cash on Delivery (COD), and 37.23% of respondents prefer mobile wallets. The results align with the findings of Karim & Qi (2018) and Sultana & Akter (2021), which reported that the maximum number of respondents have opted for cash on delivery for payment.

Fig. 3. Preferred Payment Methods



Source: Field survey, 2024. The figure is self-constructed by the authors.

4.5 Advantages and Negative Experiences

4.5.1 Main Reasons Students Choose E-commerce

Table 6 shows the reasons for choosing e-commerce. The majority of respondents (35.61%) chose e-commerce for discounts, followed by time savings (23.90%) and home delivery (18.05%). A lower percentage, 12.20%, choose e-commerce because of its different payment methods, while 10.24% prefer it for avoiding gatherings.

Table 6: Reasons for Choosing E-commerce

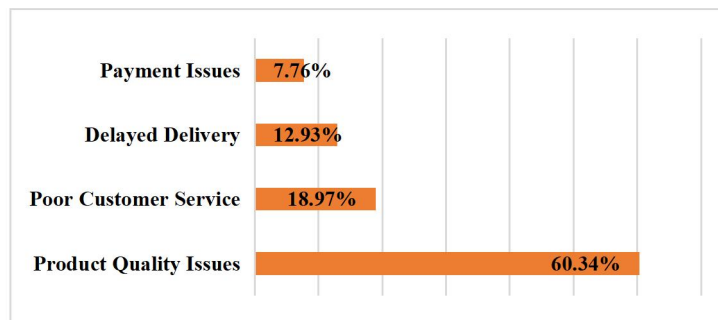
| Reasons | No. of Respondents | Percentage |
|-------------------------|--------------------|------------|
| For Avoiding Gatherings | 21 | 10.24 |
| Discounts | 73 | 35.61 |
| Time Saving | 49 | 23.90 |
| Home Delivery | 37 | 18.05 |
| Various Payment Options | 25 | 12.20 |

Source: Field Survey, 2024.

4.5.2 Negative Experiences

The figure below shows the most common negative experiences experienced by respondents, with product quality issues being the most frequently highlighted at 60.34%, followed by poor customer service at 18.97%, delayed delivery at 12.93%, and payment issues at 7.76%.

Fig. 4. Types of Negative Experiences



Source: Field survey, 2024. The figure is self-constructed by the authors.

5. Conclusion

Electronic commerce (e-commerce) is a widely recognized concept in contemporary markets. The use of e-commerce in Bangladesh is increasing day by day. Research indicates that a majority of students at the University of Rajshahi in Bangladesh use e-commerce services for diverse purposes. The students believe that e-commerce services offer a variety of benefits. They also report having negative experiences when using e-commerce. To meet student expectations, e-commerce platforms must prioritize the protection of students' personal information, enhancement of payment security, reduction of delivery charges, and assurance of high-quality product delivery.

References

- Ayob, A. H. (2021). E-commerce adoption in ASEAN: who and where? *Future business journal*, 7(1), 4. <https://doi.org/10.1186/s43093-020-00051-8>
- Gupta, A. (2014). E-Commerce: Role of E-Commerce in today's business. *International Journal of Computing and Corporate Research*, 4(1), 1-8.
- Hasan, A., & Mardhani, M. (2021). An overview of e-commerce adoption in Indonesian SMEs. *Journal of Physics: Conference Series*, 1811(1), 1-5. <https://doi.org/10.1088/1742-6596/1811/1/012104>
- Hasan, M., & Huda, M. N. (2013). E-commerce challenges, solutions and effectiveness perspective Bangladesh. *International Journal of Computer Applications*, 70(9), 9-17.
- Hoque, M. R., Ali, M. A., & Mahfuz, M. A. (2015). An Empirical Investigation on the adoption of e-Commerce in Bangladesh. *Asia Pacific Journal of Information Systems*, 25(1), 1-24. <http://dx.doi.org/10.14329/apjis.2015.25.1.001>

- Hossain, M. A., Ali, M. A., Kibria, M. G., & Bhuiyan, M. N. (2013). A survey of E-commerce of Bangladesh. *International Journal of Science and Research*, 2(2), 150-158.
- Hossain, M. U., Hassan, S. Z., Rahman, M. A., & Hasan, M. (2019). Evaluation of E-Commerce Problems in Bangladesh (Consumer's Perspective). *IST Journal on Business & Technology*, 9(1), 112-122.
- Islam, M. S. (2018). e-commerce in Bangladesh: Growth and challenges. *IOSR Journal of Business and Management (IOSR-JBM)*, 20(3), 10-15.
- Jain, V., Malviya, B., & Arya, S. (2021). An overview of electronic commerce (e-Commerce). *The journal of contemporary issues in business and government*, 27(3), 665-670.
- Karim, T., & Qi, X. (2018). E-commerce development in Bangladesh. *International Business Research*, 11(11), 201-211.
<https://doi.org/10.5539/ibr.v11n11p201>
- Mohiuddin, M. (2014). Overview the e-commerce in Bangladesh. *IOSR Journal of Business and Management*, 16(7), 1-6.
- Rajasekar, S., & Agarwal, S. (2016). A study on impact of e-commerce on India's commerce. *International Journal of Development Research*, 6(03), 7253-7256.
- Saha, B. (2015). E-Commerce Adoption by Micro Small and Medium Sized Enterprises of Bangladesh. *International Journal of Management (IJM)*, 6(3), 106-116.
- Singh, B. M. (2021). Challenges in adoption and implementation of E-Commerce platform: Case study of Nepal. *LBEF Research Journal of Science, Technology and Management*, 3(2), 56-68.
- Sultana, F., & Akter, A. (2021). Women e-commerce: Perspective in Bangladesh. *Journal of Management, Economics, and Industrial Organization*, 5(3), 1-13. <http://doi.org/10.31039/jomeino.2021.5.3.1>
- Yasin, M., Hossain, M., Hasan, A., Mustakin, M., & Emon, S. I. (2023). Customer Perception on E-Commerce Platform, Bangladesh.