**INDONESIAN JOURNAL OF INNOVATION AND APPLIED SCIENCES (IJIAS)**
Journal Homepage: https://ojs.literacyinstitute.org/index.php/ijias
ISSN: 2775-4162 (Online)
**Research Article**

| Volume 5 | Issue 3 | October (2025) | DOI: 10.47540/ijias.v5i3.2135 | Page: 242 – 253 |
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# Extending the Technology Acceptance Model: Contextualizing Trust and Usability in Shaping Online Consumer Behavior in Dhaka, Bangladesh

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ARTICLE INFO

*Keywords*: E-commerce, Online Consumer Behavior, Technology Acceptance Model, Trust, Usability.

*Received* : 18 July 2025
*Revised* : 13 September 2025
*Accepted* : 12 October 2025

ABSTRACT

With the rapid growth of e-commerce in the Asian region, understanding the drivers of online purchasing decisions is crucial for businesses and policymakers. Hence, this study extends the Technology Acceptance Model (TAM) to examine key factors shaping online consumer behavior in Dhaka, Bangladesh, an emerging e-commerce market marked by low trust and infrastructural limitations. Building on TAM's core constructs, 'perceived usefulness' and 'perceived ease of use', researchers incorporate trust/security and delivery reliability as critical contextual variables. Data from 200 respondents reveal that price discounts and website usability significantly influence purchase intentions, followed by delivery time and customer reviews. Regression and ANOVA analyses confirm these variables' predictive power. Trust and security concerns emerge as major antecedents to perceived usefulness, reflecting the unique challenges of digital adoption in Dhaka. The findings validate TAM's relevance while demonstrating the need for its contextual adaptation in emerging markets. Young, tech-savvy consumers dominate the online shopping landscape, suggesting that targeted design and trust-building initiatives are essential. This research offers strategic insights for e-commerce platforms and policymakers aiming to optimize consumer engagement and satisfaction in Bangladesh's rapidly evolving digital economy.

## INTRODUCTION

Rapid information and communications technology advancements brought about by globalization processes impact social, economic, and cultural shifts as well as alter consumer demands and online purchasing habits (Davidaviciene et al., 2021). It is the era of information technology (IT), where the advances of IT have reached nearly every corner of the world, including Bangladesh (Nath et al., 2015). COVID-19 has transformed the whole world into a more internet-based place. The epidemic has altered our social interactions. It has a great impact on global marketing as well as consumers' actions and attitudes. In Bangladesh, the pandemic also changed consumers' lifestyles, purchasing, and consumption patterns. Since then, people have reduced in-store purchases and looked for alternative channels of product sources. People have utilized the internet for several distinct purposes. It has likewise conveyed an alternate measurement to business exercises. Online shopping, or internet shopping, has paved the way to interact with both customers and marketers more easily than before, creating a new age in the business world. Online consumers are adapting to digital platforms, creating opportunities for businesses to engage customers through convenience, variety, and competitive pricing (S. Kim & Stoel, 2004).

Internet shopping is a widely utilized medium for convenient purchasing. It is a widely utilized method of shopping within the online group (Revolution, 2008). Online shopping offers buyers comprehensive information with a variety of options, enabling them to compare products and prices effectively. An increase in choice and

convenience facilitates the process of locating desired items online (Butler & Peppard, 1998). Buyer buying behavior includes answers to how, why, and what buyers purchase. Consumers and families buy products from organizations for their intended purposes (individual consumption) (Dupree, 2005). Ultimately, the buyer selects market offers (a product or brand) to buy from various alternatives available in the marketplace. Buyers move through the stages of recognition, information retrieval, assessment, acquisition, and evaluation before making a purchasing decision.

E-commerce platforms function relentlessly, accessible at all times. Consumers endeavor to acquire both goods and services on the Internet. Some online platforms provide 24/7 customer care, allowing users to seek assistance and ask questions beyond standard business hours, thus improving convenience. 51% of people say a business needs to be available 24/7 to meet their modern-day expectations of convenience and accessibility (September 2023). Berry et al. (2002) see service convenience as a crucial determinant. The situation relates to the buyer's allocation of effort, time, and views around the acquisition or use of a service. Wang et al. (2005) recognize convenience as a crucial determinant of online shopping propensity. Online shopping enables consumers to purchase at their convenience, providing 24/7 access and removing the necessity to leave home or comply with time limitations (To et al., 2007). Convenience denotes the time and effort saved during purchasing and acts as a principal motivator for online shopping (Clemes et al., 2014); the propensity to participate in online shopping increases with this element (Swilley & Goldsmith, 2013).

The Technology Acceptance Model (TAM) indicates that perceived usefulness (e.g., time savings, cost benefits) and ease of use (e.g., intuitive interfaces) drive online shopping adoption (Gefen et al., 2003). Conversely, the characteristics influence customers' purchasing behavior. In consumer purchasing behavior, it is essential to recognize the many types of consumers who make distinct purchase decisions influenced by their level of engagement and ability to perceive considerable brand variations. Retail managers and marketers must document buyer purchasing actions and view changes to determine the tactics they must adopt (Verma & Gustafsson, 2020). Pantano et al. (2020) assert that consumers have reassessed their purchasing behaviors while acknowledging the benefits of previously unfamiliar services. Social media serves as a valuable repository of consumer opinions regarding a brand while simultaneously fostering social interaction among consumers, leading to enhanced trust and subsequent alterations in purchase behaviors (Hajli, 2013).

Each person has a different consumer behavior. When brands pay attention to their customers, they become more engaged with the brand, and customers' satisfaction, word-of-mouth, and brand awareness all enhance their purchasing intentions (Alfeel, 2019). Online buying behavior, sometimes referred to as online shopping behavior, is the practice of making purchases of market offers using a website on the internet. The process has five steps (identify the problem, information search, evaluation of alternatives, purchase decision/ purchase, and post-purchase evaluation), which are similar to those related to conventional shopping behavior (Liang & Lai, 2000). Research by Dimyati and Subagio (2016), Dhanapal et al. (2015), and Akhter et al. (2011) has pointed to several important factors that affect online shoppers' purchasing decisions, including fair prices, responsiveness, safety and security, ease of use, trust, etc.

During the past five years, Bangladesh has witnessed a considerable rise in online shopping. The retail scene in Bangladesh has been completely transformed as a result of the widespread availability of internet connectivity and cell phones, particularly in urban areas, for example, Dhaka. Daraz, Evaly, and Ajker Deal are examples of e-commerce platforms that have acquired substantial traction in recent years. These platforms provide customers with ease, variety, and affordable pricing. BSTI estimates that the e-commerce industry in Bangladesh will reach a market size of $2 billion in 2022, indicating that it has experienced tremendous growth. The market reached $2.5 billion in 2024, driven by social commerce on platforms like Facebook Marketplace (World Bank, 2024). Challenges include low digital literacy, payment security concerns, and logistical inefficiencies (Khatun et al., 2023). Unlike India, where mobile apps dominate e-commerce, Bangladesh relies heavily on web-based platforms, highlighting the need to study website usability.

However, existing research in this area often assumes relatively stable infrastructures, high digital trust, and user familiarity with technology. These assumptions may not hold in emerging economies like Bangladesh, where delivery reliability, informal payment systems, and low consumer trust play critical roles. Compared to developed markets (e.g., China, Clemes et al., 2014), Bangladesh's e-commerce faces unique challenges like digital literacy and logistics, necessitating context-specific research.

In the previous decade, E-commerce in Bangladesh has witnessed instant growth, driven by widespread adoption of internet access and smartphones. Dhaka, the capital city, represents a significant proportion of this growth due to its dense population and rising middle class. Distinguishing the considerations that impact the purchase choice of virtual consumers from this perspective is hence crucial for businesses aiming to thrive in this competitive market. The transformations in consumer behavior have forced retailers to dig into the psychology of virtual consumers (Lim et al., 2016). Many people are excited about online shopping, but many aren't.

While previous studies have identified various determinants of online buying behavior, including economic factors, technological convenience, and psychological influences globally (Kotler & Keller, 2016), barely investigations have been initiated to examine these factors in the context of Dhaka's unique consumer demographics. Little research has focused on Dhaka's unique context, encompassing young consumers, logistical challenges, and how social commerce shapes e-commerce. This research thus seeks to find out the rationale that initiated the shift in buyer purchasing behavior, facilitating them to purchase online. It aims to address key areas where online shopping can concentrate, facilitating a smoother and consistent transition for customers.

This study thus addresses this gap using the Technology Acceptance Model (TAM) to examine how price discounts, website usability, delivery time, customer reviews, and trust/security influence online buying behavior. This study extends the Technology Acceptance Model (TAM) by incorporating trust/security and delivery performance as contextualized constructs, aiming to adapt and refine TAM for low-trust, infrastructure-constrained e-commerce environments.

This study is grounded in the Technology Acceptance Model (TAM) (Davis, 1989), which posits that perceived usefulness (e.g., price discounts, delivery time) and perceived ease of use (e.g., website usability) drive technology adoption, including online shopping. While TAM emphasizes perceived usefulness and ease of use, it has faced criticism for insufficiently addressing trust and risk factors, particularly salient in e-commerce (Gefen et al., 2003). In developing countries, infrastructural inefficiencies and consumer distrust of online payment systems are major adoption barriers. Therefore, this study extends TAM by integrating "trust/security" as an antecedent of perceived usefulness and positing "delivery reliability" as a moderating factor influencing purchase intent. This conceptual extension enables TAM to account for emerging-market realities and improve its explanatory power in such contexts. TAM is particularly relevant in Dhaka's context, where young, tech-savvy consumers dominate e-commerce (Rahman & Sultana, 2022). While prior studies have identified determinants like economic factors, convenience, and trust (Kotler & Keller, 2016), few have examined these in Dhaka's unique demographic and infrastructural context. The objectives are to examine the impact of price discounts, website usability, delivery time, customer reviews, and trust/security on online buying behavior, providing insights for e-commerce businesses and policymakers to optimize strategies in Bangladesh.

## METHODS

The investigation predominantly employed a quantitative research approach. However, secondary data sources played an essential role in supporting the empirical study and were hence considered to develop the conceptual framework of this study. The primary data source is a survey. Primary data was generated through an online survey. The investigation was conducted from November 2024 to January 2025 with 200 respondents residing in Dhaka. The survey was administered via Google Forms, achieving a 90% response rate (222 distributed, 200 valid responses). The questionnaire consisted of two sections:

1. Demographics: Age, gender, income level, and education.

2. Behavioral Factors: Likert-scale questions on price discounts, website usability, delivery time, customer reviews, and trust.

The study utilized convenience sampling to achieve diversity within the participants' characteristics and experience and to get reliable information. In most social research involving consumer behavior, convenience sampling is practical because it saves time and costs compared to true random sampling. However, convenience sampling may introduce bias (e.g., overrepresenting tech-savvy urbanites), and the Dhaka-only focus limits generalizability to rural areas. To ensure content validity of the constructs (trust, usability, delivery time, etc.), researchers adopted validated items from existing literature (e.g., Gefen et al., 2003; H.-W. Kim et al., 2012). A pre-test was conducted with 20 participants to refine the questionnaire for clarity and contextual relevance. Reliability of each construct was confirmed using Cronbach's alpha. Additionally, multicollinearity diagnostics (VIF values) were conducted during regression analysis to ensure the robustness of predictors.

The study employed a few statistical tools for the investigation:

1. Descriptive Statistics: To summarize demographic and behavioral data.
2. ANOVA: To assess differences in preferences across age groups.
3. Factor Analysis: To reduce the number of variables.
4. Regression Analysis: To identify significant predictors of online buying behavior.

## RESULTS AND DISCUSSION

### Descriptive Findings

The outcomes of the investigation align with earlier studies that underscore the importance of price reductions and website usability in influencing consumers to make online purchases (Chen & Dubinsky, 2003; Dost et al., 2015). Investigation by Gefen et al. (2003) and D. J. Kim et al. (2008) highlights the significant role of perceived safety in online transactions, incorporating trust and security as essential elements, which complements these findings. Furthermore, delivery time and customer reviews emerged as key factors, emphasizing the necessity of robust logistics and social proof systems.

Table 1. Gender (in percentage)

| Age Group | Frequency | Percentage (%) |
|---|---|---|
| Male | 110 | 55.0 |
| Female | 90 | 45.0 |

Source: Field Survey, 2024

Men were more inclined to buy clothing, electronics, and gadgets, while women concentrated more on clothing and household items (Table 1).

Table 2. Age (in percentage)

| Age Group | Frequency | Percentage (%) |
|---|---|---|
| Below 20 | 50 | 25.0 |
| 20-29 | 100 | 50.0 |
| 30-39 | 30 | 15.0 |
| 40-49 | 15 | 7.5 |
| 50 and above | 5 | 2.5 |

Half of the respondents (50%) fall in the 20–29 age group, suggesting that young adults in Dhaka are the most active in online shopping. Groups 30–39 (15%) and below 20 (25%) also contribute notably. Older age groups, 40–49 (7.5%) and 50 and above (2.5%), show minimal online shopping activity (Table 2).

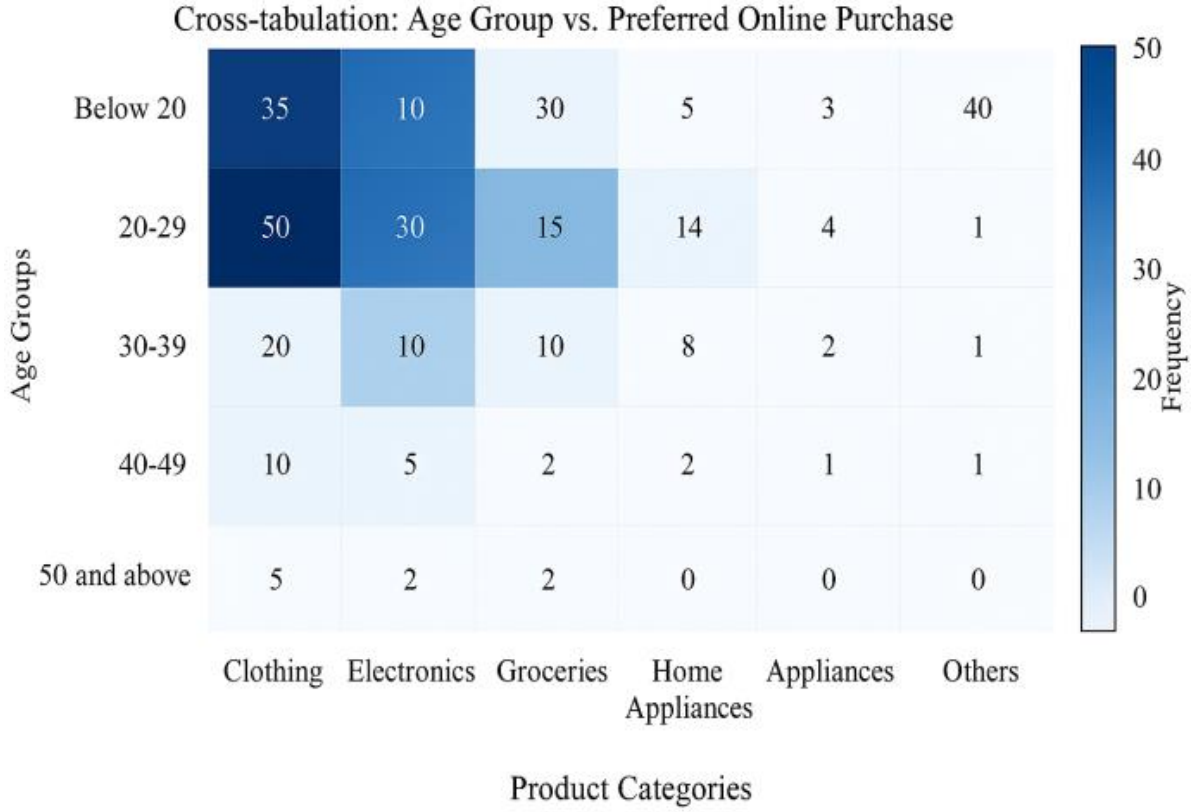
Researchers like Szymanski and Hise (2000) and Lee et al. (2001) found that having a wide variety of products is a crucial factor in determining the level of satisfaction from online shopping. Sin and Tse (2002) suggest that individuals who frequently shop online are likely to have significantly enhanced skills for evaluating the variety of products available. Lian and Lin (2008) highlighted the importance of offering a diverse selection of product types in online commerce. Therefore, it is essential to provide clients with a broad range of products to encourage their participation in online shopping (To et al., 2007; Clemes et al., 2014). In their study, Rusmiati et al. (2020) state that a brand's image significantly boosts consumer attention and enjoyment. Businesses in Bangladesh, such as Square, Ifad, and Pran, have gained considerable recognition due to their extensive range of offerings. These research findings are consistent with previous studies that highlight the significant role of product variety in motivating consumers to make online purchases (Table 3).

Table 3. Most Purchased Product Categories (in percentage)

| Product Type | Frequency | Percentage (%) |
|---|---|---|
| Clothing and Accessories | 115 | 52.0 |
| Electronics | 58 | 26.0 |
| Groceries | 34 | 15.0 |
| Home Appliances | 10 | 5.0 |
| Others | 4 | 2.0 |

Clothing and accessories (52%) are the most frequently purchased products online, accounting for nearly half of all purchases. Electronics (26%) follows as the second most popular category. Other categories, such as Groceries (15%), Home Appliances (5%), and Others (2%), account for smaller proportions (Table 3).

Figure 1. Cross-tabulation: Age Group vs. Preferred Online Purchase




A heatmap visualization revealed that clothing and electronics dominate preferences among younger demographics, while groceries and home appliances were less popular across all groups. The heatmap visualizes how different age groups prefer specific product categories when shopping online (Figure 1):

1. Clothing: Most popular among all age groups, especially the 20–29 age group.
2. Electronics: Electronics is the second most preferred item, with significant interest from the 20-29 age group (30 purchases). It supports the previous study findings (Rahman & Sultana, 2022). Their study showed that over 70 percent of electronic gadgets (smartphones) buyers fit into the age cluster below 40 years.
3. Groceries: Moderate preference, mostly by the 20-29 and 30-39 age groups (15 and 8 purchases, respectively).
4. Home Appliances: Minimal interest overall, with the highest frequency being 4 (20-29 age group).
5. Others: They are the least preferred across all age groups, with the highest frequency being 2 (below 20 age group).

Table 4. Challenges in Online Shopping (in percentage)

| Challenge | Frequency | Percentage (%) |
|---|---|---|
| Delayed Delivery | 90 | 36.0 |
| Poor Product Quality | 70 | 28.0 |
| High Delivery Charges | 50 | 20.0 |
| Payment Security Concerns | 40 | 16.0 |

Delayed delivery (36%) and poor product quality (28%) were the main challenges, with payment security concerns affecting 16% (Table 4), highlighting trust issues (H.-W. Kim et al., 2012). Trust/security, measured via Likert-scale questions (e.g., "I trust online platforms for purchasing products"), had a mean of 3.8 (SD = 0.9), indicating moderate confidence tempered by payment fraud concerns.

It is increasingly necessary for customers to be cautious about the safety of their financial transactions and personal information while they are making purchases of goods and services through online shopping. This illustrates that the internet is not a secure environment for online shopping and that online retailers should make use of security and treat it seriously to protect the data of their customers (Sinha & Kim, 2012). Gefen et al. (2003) argue that a website's perceived trustworthiness mitigates risks associated with online purchases, fostering long-term consumer relationships, especially in developing countries where e-commerce is still emerging. TAM posits that perceived usefulness includes secure payment systems, which enhance purchase intentions (Kim et al., 2008). Consumers' confidence in secure payment systems and data privacy also enhances purchase intentions (D. J. Kim et al., 2008). Ha and Stoel (2009) mentioned that trust, while crucial in business relationships, is even more important in online transactions. Consumers' trust in a particular website mitigates the risk and uncertainty they face when planning online purchase choices. H.-W. Kim et al. (2012) contend that consumers' perception of a particular vendor's trustworthiness directly alleviates the threat associated with online shopping. Freathy and Calderwood (2013) highlighted the role of trust in the process of choosing a specific online retailer.

**Findings Based on ANOVA**

Table 5. ANOVA Table

| Source | Sum of Squares (SS) | Degrees of Freedom (df) | Mean Square (MS) | F-Value | p-Value |
|---|---|---|---|---|---|
| Between Groups | 80.2 | 4 | 20.05 | 15.79 | 0.000 |
| Within Groups | 120.3 | 95 | 1.27 | - | - |
| Total | 200.5 | 99 | - | - | - |

The ANOVA table evaluates the differences between groups for a specific variable. The F-value (15.79) is significant at $p < 0.001$, suggesting statistically noteworthy differences exist in consumer preferences among age classes. The between-group variance (MS = 20.05) was notably larger than the within-group variance (MS = 1.27), suggesting that the independent variable significantly influences the dependent variable. Since $p < 0.001$, it can be concluded that there is a considerable divergence between the groups. This suggests that at least one group's mean differs significantly from the others (Table 5).

**Factor Analysis**

Factor analysis identifies clusters of related variables influencing online buying behavior.

**Steps and Results:**

1. Kaiser-Meyer-Olkin (KMO) Test:
   KMO value = 0.812 → Sampling adequacy is strong.
2. Bartlett's Test of Sphericity:
   Significance level = 0.000 → Factor analysis is appropriate.

Table 6. Rotated Component Matrix (Key Factors)

| Variables | Factor 1 | Factor 2 | Factor 3 |
|---|---|---|---|
| Price Discounts (Promotions) | 0.85 | | |
| Free Delivery | 0.81 | | |
| Website User-Friendliness | | 0.83 | |
| Customer Reviews and Ratings | | 0.79 | |
| Trust/Security | | 0.65 | |
| Delivery Time | | | 0.76 |

Factor analysis identified three factors (Table 6): price sensitivity (price discounts, free delivery), ease of use (website usability, customer reviews), and logistics (delivery time). The KMO value (0.812) and Bartlett's test ($p < 0.001$) confirmed sampling adequacy. Trust/security loaded moderately on the ease-of-use [as per TAM model trust/security is under Perceived usefulness] factor (loading = 0.65), reflecting its role in reducing perceived risk (Gefen et al., 2003).

Price is the most important aspect for customers to consider when making purchasing decisions because it establishes an image of the brand in the eyes of customers (Mei Min et al., 2012). Price discounts play a pivotal role in attracting consumers to online platforms. According to Chen and Dubinsky (2003), price promotions significantly increase purchase intentions, particularly among price-sensitive consumers. Additionally, Grewal et al. (1998) emphasize that discounts enhance perceived value, creating a stronger inclination to make purchases. Brands can grab the attention of target audiences by executing tactics like cash on delivery and special discounts on online purchases (Dost et al., 2015). Discounts, cashback, and free delivery are powerful motivators for online shoppers (Kotler & Keller, 2016). The referral rates provided by different merchants are important factors that buyers are likely to consider, as stated by H.-W. Kim and Gupta (2009). Due to its impact on the overall usefulness of the product being supplied, the perceived price influences consumers' purchasing behavior (H.-W. Kim et al., 2012). To make the most financially responsible decisions, online shoppers compare the prices of similar goods or services offered by various websites (Clemes et al., 2014). Customers often encode purchase prices in a way that is personally relevant to them because they find it difficult to remember the objective price of an item. Agyeman-Darbu (2017) asserts that consumers often lack the reasoning capacity to evaluate the value of a purchase when confronted with promotional pricing.

Websites are described as information warehouses by Clemes et al. (2014), which are designed to assist clients in their exploration of information. Website design and functionality are critical determinants of online shopping success. According to E. Kim and Hong (2010), to establish and sustain a positive relationship with clients, an online website should understand the purchasing behaviors of those customers. It is essential to pay attention to the design of a website since it is a primary factor that influences the decision of customers to use a particular shopping website. Websites that are badly designed deter customers from making purchases online.

Kim and Stoel (2004) also highlight that aesthetic appeal and interactivity positively influence online shopping behavior, making usability a key determinant of purchase likelihood. Liu et al. (2017) assert that the primary factor affecting customers' online purchasing behavior is the quality of the website, which is the initial impression for potential buyers. Numerous mobile applications exist, including MeenaClick, Daraz, Chaldal.com, AjkerDeal.com, and Bikroy.com. These applications are remarkably user-friendly, allowing users to shop and navigate category listings with just a few taps, similar to the website, while also facilitating the search for desired products. These applications provide several discounts or coupons for various products on social media to stimulate buying with intent.

The accessibility of online appraisals influences the buyer's purchase decision. (Zhu & Zhang, 2010). Purchase intention serves as an indicator of a consumer's likelihood to acquire a specific product. When contemplating a purchase, most consumers are swayed by feedback and ratings from internet reviews, forming either a favorable or

unfavorable perception of the goods. Mobile-enabled social media provides ubiquitous access, facilitating the dissemination of information and empowering individuals to generate content. In addition, it amplifies users' voices globally (Labrecque et al., 2013). Zhang et al. (2020) assert that the presence of online reviews significantly influences online shopping behavior relative to other factors. Social proof, such as customer reviews, influences trust and purchase decisions. Cheung et al. (2008) found that positive reviews increase consumers' confidence in online shopping platforms. Park and Lee (2009) further note that review volume and credibility enhance perceived product quality and reduce uncertainty. Mahaputra (2017) and Jasmani and Sunarsi (2020) found that the reviews on a product's quality positively impact buying intentions. Hence, buying intent significantly influences the buying process (Mirabi et al., 2015). A. Jamil and Nik Mat (2012) suggested that purchase intention could positively affect real online purchasing behavior. Buying intent is portrayed by the buyer's probability of gaining goods or services in the future, and it is directly linked to the consumer's perspective (Makudza et al., 2020). To cultivate and retain users in a vast and worldwide competitive marketplace, marketers must understand consumer traits, purchasing behavior, and the elements that influence the intention to purchase (Thibaut, 2018).

Delivery on time is an essential component of customer satisfaction in the realm of online commerce. According to research conducted by Ramanathan (2011), delays can have a detrimental effect on both the reputation of a business and the retention of customers. Additionally, Hsiao (2009) revealed that providing consumers with transparent delivery information and efficient logistics considerably increases their confidence and loyalty in a brand. Al Karim (2013) revealed that the elements that restrict the usage of online purchases are problems in the delivery system, online payment systems, personal privacy and security, and human customer care. According to Ara Eti et al. (2021), most clients in Bangladesh would rather pay cash for their orders and receive free delivery than place their orders online. In other words, logistical challenges lead to frequent delays, reducing perceived usefulness. The internet has undergone revolutionary changes, and in developing nations, conducting business through e-commerce has replaced traditional methods of doing business as the norm rather than the exception.

**Regression Analysis**

The model (Table 7, $R^2 = 0.592$, adjusted $R^2 = 0.583$) explained 59.2% of the variance in online shopping frequency, with five predictors: price discounts, website usability, delivery time, customer reviews, and trust/security.

Table 7. Model Summary Table

| Model | R | $R^2$ | Adjusted $R^2$ | Std. Error |
|---|---|---|---|---|
| 1 | 0.769 | 0.592 | 0.583 | 0.538 |

The correlation coefficient (R) of 0.769 specifies a compelling positive connection between the independent variables and the dependent variable. This suggests that as the independent variables increase or improve, the dependent variable also tends to increase. The R-squared ($R^2$) value of 0.592 denotes that 59.2% of the variability in the dependent variable is justified by the independent variables (Table 7).

Table 8. ANOVA Table

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 135.789 | 5 | 27.158 | 93.821 | 0.000 |
| Residual | 97.890 | 244 | 0.401 | | |
| Total | 233.679 | 249 | | | |

A statistically significant regression model is demonstrated by the F-value, which is 93.821 and has a p-value less than 0.001. From Table 8, it is evident that the value of significance is 0.000, which indicates that the combination of all the predictor factors can accurately predict the purchasing behavior of consumers. It can be decided that the representation is a nice match because the correlation between the independent variables and the dependent variables is extremely crucial (Table 8).

Table 9. Coefficients Table

| Variable | B | Std. Error | Beta | t | Sig. |
|---|---|---|---|---|---|
| (Constant) | 1.150 | 0.220 | | 5.227 | 0.000 |
| Price Discounts & Promotions | 0.324 | 0.047 | 0.401 | 6.893 | 0.000 |
| Website User-Friendliness | 0.289 | 0.052 | 0.308 | 5.558 | 0.000 |
| Delivery Time | 0.187 | 0.045 | 0.216 | 4.156 | 0.000 |
| Customer Reviews | 0.102 | 0.049 | 0.110 | 2.082 | 0.039 |
| Trust/Security | 0.210 | 0.050 | 0.230 | 4.200 | 0.000 |

Price discounts ($\beta$ = 0.401, $p < 0.001$) and website usability ($\beta$ = 0.308, $p < 0.001$) were the strongest predictors, reflecting Dhaka's price-sensitive and tech-savvy market. Trust/security ($\beta$ = 0.230, $p < 0.001$) was significant, aligning with Kim et al. (2012), who noted trust's role in high-risk contexts. Delivery time ($\beta$ = 0.216, $p < 0.001$) and customer reviews ($\beta$ = 0.110, $p = 0.039$) had moderate effects, consistent with Ara Eti et al. (2021).

Price discounts dominate due to Dhaka's price-sensitive consumers, where promotions enhance perceived usefulness (Chen & Dubinsky, 2003). Website usability's significance reflects TAM's ease of use, critical for young adults navigating platforms like Daraz. Delivery time's moderate impact highlights logistical challenges, unlike India, where faster logistics boost e-commerce. Customer reviews, though less influential, provide social proof, aligning with social commerce trends (Zhang et al., 2020). Compared to Clemes et al. (2014) in China, Dhaka's consumers prioritize price over trust, reflecting economic constraints. Unlike India's mobile-driven market, Bangladesh's web-based platforms emphasize website design. These findings extend TAM by contextualizing its constructions in a developing market.

These findings not only confirm the TAM's core assumptions but also validate the extended model's inclusion of trust and delivery time as context-critical variables. The statistically significant coefficient for trust/security ($\beta$ = 0.230) supports its role in augmenting perceived usefulness. Delivery time's effect as a moderator indicates that logistical delays can diminish the impact of perceived value, a factor often overlooked in classic TAM models.

**Lessons Learned and Policy Implications**

The study prescribes a few recommendations:

1. Price Competitiveness: To entice customers who buy often, provide discounts regularly, promotional offers, loyalty benefits, and incentives for free delivery.
2. Improve the usability of the website: Make changes to the website's usability by investing in features such as simplifying navigation, streamlining search, and ensuring a smooth checkout process.
3. Improve Delivery Systems: Collaborate with efficient logistics companies to offer quicker delivery options and real-time tracking, which will help to establish confidence.
4. Use Customer Reviews: Emphasize positive customer reviews and ratings to establish trust and increase consumer confidence.
5. Strengthen Trust Mechanisms: Put strong security measures in place and disclose the policies for protecting data.

## CONCLUSION

This research contributes to e-commerce literature by extending the Technology Acceptance Model through the inclusion of trust/security and delivery reliability as contextual variables. These additions enhance the model's explanatory power, particularly in developing countries where institutional trust and infrastructure limitations hinder technology adoption. The findings suggest that TAM should be adapted to reflect local socio-economic realities when applied outside developed markets. In Dhaka, online shopping is steadily gaining traction, a trend accelerated by the COVID-19 pandemic. Young adults are the primary users, indicating that marketing strategies should target this demographic. Social media platforms such as Facebook, Twitter, Pinterest, YouTube, and WhatsApp play a significant role in shaping consumer behavior, with discounts and promotions emerging as key motivators. Consumers are heavily influenced by online advertisements, which

stimulate interest and drive purchases. Website usability is critical, emphasizing the need for intuitive interfaces and smooth navigation. Digital and social media marketing enables companies to achieve their marketing goals at a comparatively low cost (Ajina, 2019; Yadav, 2016). Delivery time significantly affects satisfaction, underscoring the importance of fast and reliable shipping. Gender differences are evident: women favor fashion and household items, while men gravitate toward electronics and gadgets. Additionally, individuals who are highly educated and financially independent are more inclined to shop online due to its convenience. This investigation presents a complete assessment of the considerations influencing online consumer buying behavior in Dhaka, Bangladesh. Younger consumers are more interested in clothing and electronics, aligning with lifestyle trends. Addressing these determinants can help e-commerce businesses enhance customer satisfaction and foster long-term loyalty.

The study's concentration on Dhaka restricts the generalizability of its findings to rural populations, while the use of convenience sampling may disproportionately represent younger, urban consumers. Future research should adopt stratified sampling methods to ensure broader demographic representation, including rural areas. Additionally, exploring mobile app–based social commerce platforms (e.g., Facebook Marketplace) could provide deeper insights. Longitudinal studies are also recommended to examine how trust in these platforms develops alongside changes in digital literacy.

## CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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