Digital Retail Trends: Analyzing Online Shopping Behaviour among College Level - Students in Nepal

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Abstract

Background: Online shopping is a pivotal component of electronic commerce, allowing consumers to purchase products or services directly from sellers over the Internet. It typically involves using a web browser to access digital storefronts hosted by retailers. Its significance continues to grow as technology evolves and consumer preferences adapt to the digital age.

Objective: The main objective of this study is to examine the effect of price, convenience, and security on the online shopping behaviour of college-level students in Kathmandu Valley.

Design/methodology/Approach: The study employed an analytical research design and targeted college-level students from the different colleges of the Kathmandu Valley involving online shopping. We selected 400 respondents using a convenience sampling technique. Primary data has been collected by adopting a well-structured questionnaire mainly containing a five-point Likert scale. We applied correlation and regression approaches to analyze and interpret the data to obtain the outputs of the study.

Findings: The study reveals an association between price, convenience, and security with online shopping behaviour. The result also showed that online shopping behaviour is significantly influenced by two main factors, namely convenience and price. Nevertheless, security is a relatively insignificant determinant of online shopping behaviour. However, gender does not affect all the variables.

Conclusion: In summary, for college students, online shopping behaviour is significantly influenced by price and convenience, with security playing a minor role. Online shopping companies should focus on user-friendly website design and stable pricing to attract and retain customers. A well-designed marketing mix aligned with customer expectations is crucial for effective online business. Government support for network infrastructure and online business policies is also essential.

Keywords: Online shopping behaviour, price, convenience, security, and students

Paper type: Research paper
Introduction

Online shopping is a major component of electronic commerce, allowing consumers to purchase products or services directly from sellers over the Internet. Online shopping has become popular among Internet users (Bourlakis et al., 2008). Online shopping has been growing rapidly. Nowadays, it has become easier to find any goods by simply typing the name of an item or product using the Internet. Online shopping gives contentment to modern-day consumers looking for ease and speed (Yu & Wu, 2007). The number of online shoppers has been increasing. Throughout the world, a clear and growing trust of customers is developing towards online shopping (Aad, 2012). Though the advancement of the Internet has raised a large number of e-shoppers, several people are still reluctant because of personal safety and privacy concerns. Online shopping will continue to mark its presence in the market as online stores and franchises become more advanced (Lian & Lin, 2008).

Online shopping is the easy solution for a busy life in today’s world. In the past decade, there has been a massive change in how customers shop. Despite consumers continuing to buy from a physical store, the users or buyers feel very convenient to online shopping. Online shopping saves crucial time for modern people because they get so busy that they are unwilling to spend much time shopping (Rahman et al., 2018). In the twenty-first century, trade and commerce have been so diversified that multichannel and online shopping has increased significantly worldwide (Johnson, Gustafsson, Andreassen, Lervik, & Cha, 2001). Globally, e-commerce constitutes about 2.29 trillion-dollar market (John, 2018) and is expected to reach four trillion dollars by 2020 (eMarketer, 2016) due to the double-digit worldwide growth in sales (15%) and orders (13%) (eMarketer, 2018) in all sorts of e-commerce such as business-to-business (B2B), business-to-consumer (B2C) (Zuroni & Goh, 2012).

Most Pakistani online shoppers purchase just clothes and hardware online (Nielson, 2010). The Internet serves as a global transaction platform for consumers, impacting the relationship between marketers and buyers (Koo, Kim, & Lee, 2008). Online shopping is a significant internet service, contributing to the global village concept. Consumers have more choices and may order products and services at reasonable cost in online shopping (Cooper & Schindler, 2009). It also reduces inventory management costs (Dahiya, 2012). Online shopping environments, therefore, play an increasing role in the overall relationship between marketers and their consumers (Koo et al., 2008). However, they only view product images on the retailer’s website (Gong, Stump, & Maddox, 2013). Online shopping is becoming as popular as fashion due to easy comparison and price advantage (Hau, 2013). Students seek convenient shopping options to save time and money. Marketing strategies attract young people to online shopping sites (Chin, Chang, Cheng & Fang, 2009).

In Nepal, the Internet has transformed business activities, expanded geographical boundaries, and brought buyers and sellers together. Online shopping is popular among Nepalese, especially students. According to the data published by (Kemp, 2020), the Internet users in Nepal are 10.21 million. Increased internet access through various devices (tablets, PCs, etc.) fueled the growth of e-commerce. Because of the rapid rise of e-commerce and digital technologies, online purchase behaviour has emerged as a significant area of study. The main objective of this study is to examine the effect of price, convenience, and security on the online shopping behaviour of students in the Kathmandu Valley.

This paper has the following sections: introduction, literature review, research methodology, data analysis and results, discussions, conclusion, implications, limitations, and scope of future research.

Literature Review

According to Hausman and Siekpe (2008), human factors, entertainment, information, irritation, usefulness, attitude towards the website, and revisit intention are the crucial aspects of a good website that affect consumers’ online shopping buying behaviour. According to Lakshmanan (2016), product preferences, customer problems, a greater number of products with discounts, risk perception, and
after-sales services are the factors that affect customer satisfaction with online shopping. According to Dang (2016), customers in the Mohali region are motivated to buy online for time-saving and convenience and less effort is required compared to store purchases. Sudhakar and Kumari (2016) investigated customer satisfaction with online shopping in the Indian market. The study found that young customers are most recreational in online shopping. Vaghela (2019) found that most customers perceived online shopping as a better option than manual shopping, and most customers were satisfied with their online shopping transactions. The study found that young customers are most recreational in their online shopping. Sultan and Uddin (2011) revealed that elderly people were not so keen to shop online, higher education made online shopping less attractive, and security concerns were critical while shopping online.

Timalsina (2022) found that convenience, quality products, reasonable prices, and time-saving are the factors that attract online shopping. Similarly, the freshness and delivery timing were more important than the payment system and pricing while shopping for groceries online. Živilė and Gintarė (2019) showed that the main factors such as convenience, simplicity, and better price influenced consumers for online shopping. Hsu (2012) found that price, trust, and perceived risk are essential determining factors influencing online shopping. Delafrooz et al. (2010) highlighted utilitarian orientations, convenience, price, and wider selection as significant determinants shaping students’ online shopping behaviour in Malaysia. Babar et al. (2014) discovered a weak yet positive correlation between consumers’ beliefs regarding financial risk and the online shopping behaviour of Pakistani consumers. They also established a robust positive link between ease of use, usefulness, and consumers’ online shopping behaviour. Khalil (2014) identified factors such as price, confidence, security, convenience, time, sales service, and discounts that impact consumers’ attitudes toward online shopping in Saudi Arabia.

Uzun and Poutrak (2014) underlined the influence of price, safety, previous experience, customer satisfaction, convenience, and quality in shaping consumers’ online shopping behaviour. Ganapathi (2015) underscored the strong influence of convenience, security, website features, and time-saving on consumers’ online shopping behaviour. Rahman (2015) demonstrated the significance of convenience and time-saving in driving the online shopping behaviour of the youth generation in Malacca. Diao (2015) highlighted how students prioritize price in their online shopping decisions, while other consumers prioritize product quality, service, and security, with price remaining a concern. Daud et al. (2016) emphasized the importance of commodity pricing, product and service quality, and security as pivotal factors influencing students’ online shopping behaviour in Malaysia. Choudhary and Dey (2015) revealed the substantial impact of gender on students’ online shopping behaviour, indicating a noteworthy gender-based divergence in preferences. Jayakumar and Kumar (2018) argued that internet shopping was positively and significantly related to age, gender, and monthly income. However, it was negatively related to educational qualification, the size of the family, and the nature of the family.

Theoretical Support

Technology Acceptance Model

The Technology Acceptance Model (TAM), introduced by Davis in 1986, is a pivotal theoretical construct in understanding individuals’ adoption of emerging technologies. The Technology Acceptance Model (TAM) is a widely recognized framework developed by Fred Davis in the late 1980s that explains and predicts users’ technology adoption behaviour. TAM focuses on two key factors: perceived usefulness and ease of use. It posits that users are more likely to embrace technology if they believe it will enhance their job performance and if they find it easy to use. TAM is invaluable for understanding and improving technology acceptance, serving
as a foundation for user-friendly interface design, and a vital tool for businesses and researchers in assessing user behaviour towards various technologies.

**Conceptual Framework**

According to the literature review, various factors affect students’ academic performance. The dependent variable was online shopping behaviour, and its independent variables were price, convenience, and security. The relationship between these variables can be summed up as follows:

**Research Hypotheses**

The following are some alternative hypotheses:

H1: There is an effect of price on online shopping behaviour.

H2: There is an effect of convenience on online shopping behaviour.

H3: There is an effect of security on online shopping behaviour.

H4: There is an effect of gender on price, convenience, security, and online shopping behaviour.

**Definition of operational variables**

**Price:** Price is the payment exchanged for goods and services (Schindler & Robert, 2012). In online shopping, product variety and prices are often more appealing to consumers than in traditional retail stores. Globally, consumers prioritize price, reliability, and choice when purchasing online. Price involves shoppers’ inclination to save money while shopping online.

**Convenience:** Convenience signifies easy, effortless action. Online shoppers enjoy advantages like time savings, flexibility, and reduced physical effort (Darian, 1987). Convenience is a crucial driver of online shopping, allowing consumers to shop anytime and receive doorstep deliveries of various items (Robinson, Riley, Rettie, & Rolls, 2007).

**Security:** Security entails protection from harm. It significantly influences online shopping behaviour. Many consumers refrain from online purchases due to concerns about sensitive information security (Bhatnagar & Ghose, 2004). Enhanced technology and frequent online shopping have bolstered trust in the Internet as a secure shopping channel (Cuneyt & Gautam, 2004).

**Online shopping behaviour:** Online shopping behaviour refers to how people use internet platforms to assess, decide, and purchase products or services. It involves searches, comparisons, and transactions influenced by convenience, value, trust, and website usability. This behaviour encompasses practical solutions and emotional satisfaction during the online shopping experience.

**Research Methodology**

The study employed descriptive and analytical research designs to examine the relationship between dependent (online shopping behaviour) and independent variables (price, convenience, and security)
and assess the effect of price, convenience, and security on online shopping behaviour. The study targeted college-level students from different colleges in the Kathmandu Valley who regularly shop online. To obtain the data, we surveyed 500 respondents from five constituent campuses, two public colleges, and two private colleges under Tribhuvan University. We selected them by using a convenience sampling technique. Primary data were collected by adopting a well-structured questionnaire. The questionnaire was developed on a five-point Likert scale, ranging from strongly disagree to strongly agree. As part of this survey, we distributed 500 questionnaires, but only 427 respondents returned the questionnaires, i.e., 81.33,4% and 400 were valid, translating to a response rate of 76.19%. We entered the data into an SPSS 26 spreadsheet. The study adopted descriptive statistics like mean, standard deviation, covariance, independent t-test, and inferential statistics such as correlation and regression to analyze and interpret the data to have research outputs.

Reliability Analysis

According to Gliem and Gliem (2003), Cronbach’s Alpha was used to assess the reliability and validity of each question in the presented dataset. The reliability of the items is shown below.

Table 1. Reliability results of study variables

<table>
<thead>
<tr>
<th>SN</th>
<th>Variables</th>
<th>Cronbach's Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Price</td>
<td>.764</td>
</tr>
<tr>
<td>2</td>
<td>Convenience</td>
<td>.745</td>
</tr>
<tr>
<td>3</td>
<td>Security</td>
<td>.821</td>
</tr>
<tr>
<td>4</td>
<td>Online shopping behaviour</td>
<td>.769</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2023

Table 1 shows that the price variable exhibits a Cronbach’s Alpha of 0.764, indicating good internal consistency. The convenience has a Cronbach’s Alpha of 0.745, slightly below the desired threshold of 0.75. On the other hand, the security variable demonstrates a high Cronbach’s Alpha value of 0.821, suggesting strong internal consistency. Similarly, the online shopping behaviour variable shows a Cronbach’s Alpha of 0.769, indicating good reliability. All variables, except for convenience, exhibit satisfactory levels of internal consistency, ensuring the reliability of the items used in the study.

Data Analysis and Results

Table 2. Respondents’ profile

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>332</td>
<td>83</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>68</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>168</td>
<td>42</td>
</tr>
<tr>
<td>Female</td>
<td>232</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
From Table 2, the majority, 83 per cent of the respondents, were graduates. Similarly, 17 per cent had post-graduate degrees. The highest percentage of participants in terms of gender were female, representing 58% of the respondents, whereas males represented 42% of the respondents. There was a participation of 75% of the students from the constituent campuses, such as Public Youth, Shankar Dev, Saraswati, Padmamanya, and Nepal Commerce Campus, represented the highest participation, followed by the participants from the private campuses, such as Golden Gate and Prime College representing 7.5 per cent, whereas 17.5 per cent of the respondents belonged to the community colleges such as Pashupati and Baneshwar Campus.

Table 3. Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S. D</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>3.79</td>
<td>0.71</td>
<td>0.5</td>
</tr>
<tr>
<td>Convenience</td>
<td>3.73</td>
<td>0.7</td>
<td>0.49</td>
</tr>
<tr>
<td>Security</td>
<td>4.04</td>
<td>0.73</td>
<td>0.53</td>
</tr>
<tr>
<td>Online shopping Behaviour</td>
<td>3.6</td>
<td>0.68</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Source: Questionnaire Survey (2023)

Table 3 shows that the mean of all is greater than 3, which indicates that respondents’ views have tended to agree. The mean value for the independent variable security is the highest among other variables, with a mean value of 4.04, followed by price, convenience, and online shopping behaviour. Standard deviation and variance are highest for the independent variable: the security with a value of 0.73 in standard deviation and 0.53 in variance, followed by price, convenience, and online shopping behaviour.

Table 4. Independent sample t-test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No</th>
<th>Mean</th>
<th>SD</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>Male</td>
<td>168</td>
<td>3.82</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>232</td>
<td>3.75</td>
<td>0.82</td>
<td>0.28</td>
</tr>
<tr>
<td>Convenience</td>
<td>Male</td>
<td>168</td>
<td>3.82</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>232</td>
<td>3.66</td>
<td>0.8</td>
<td>0.26</td>
</tr>
<tr>
<td>Security</td>
<td>Male</td>
<td>168</td>
<td>4.06</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>232</td>
<td>4.02</td>
<td>0.84</td>
<td>0.29</td>
</tr>
<tr>
<td>Online shopping Behaviour</td>
<td>Male</td>
<td>168</td>
<td>3.69</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>232</td>
<td>3.52</td>
<td>0.77</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Source: Questionnaire Survey (2023)

Table 4 shows no difference in price across males and females as the p-value is 0.28, greater than 0.05. Likewise, it shows no difference in convenience across males and females because the p-value is greater than 0.05, i.e., 0.26. Table 1 reveals no difference in security across male and female online
shoppers as the p-value is 0.29, greater than 0.05. In our study, there is no difference in online shopping behaviour across males and females as the p-value is 0.25, greater than 0.05.

**Correlation analysis**

In this study, the dependent variable is online shopping behaviour, while the independent variables are price, convenience, and security. Karl Pearson’s correlation coefficient was used to illustrate the relationship between online shopping behaviour for price, convenience, and security.

**Table 5. Relation between variables**

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Convenience</th>
<th>Security</th>
<th>OSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td>.131*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>.176*</td>
<td>.191*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OSB</td>
<td>.493**</td>
<td>.637**</td>
<td>.316*</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2023*

Table 5 demonstrates that the correlation coefficient between price and online shopping behaviour is 0.493, reflecting a favourable correlation between the two variables. Similarly, a positive association between online shopping behaviour and convenience \((r = .637)\) and taste \((r = .316)\) shows that flavour is likewise favourably correlated with online shopping behaviour. According to the findings, there is a strong correlation between security and consumer preference.

**Regression Model**

The regression equation presented herein is employed to ascertain the effect of price, convenience, and security on online shopping behaviour.

**Table 6. Model Summary of Regression**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.273</td>
</tr>
<tr>
<td>Price</td>
<td>0.498</td>
</tr>
<tr>
<td>Convenience</td>
<td>0.412</td>
</tr>
<tr>
<td>Security</td>
<td>0.436</td>
</tr>
<tr>
<td>R2</td>
<td>0.472</td>
</tr>
<tr>
<td>F value</td>
<td>54.25</td>
</tr>
<tr>
<td>p-value</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2023*

\[ Y = 1.273 + 0.398X1 + 0.412X2 + 0.436X3 + er \]

Where \( Y \) = Online shopping behaviour (OSB), \( X1 \) = Price (P), \( X2 \) = Convenience (C), \( X3 \) = Security and \( er \) = error terms

The R2 value of 0.412, the F statistic value of 54.25, and the p-value of 0.000 are reported in Table 6. Based on the statistical analysis conducted at a significance level of 5%, the findings suggest that the model exhibits a significant level of effectiveness. The result shows that price and convenience exhibit statistical significance, as indicated by their p-values of 0.013 and 0.001. In contrast, the p-value
for flavour is 0.072, which indicates insignificant. Hence, the effect of security on online shopping
behaviour is minimal, whereas price and convenience play a significant role.

**Table 7. Summary of Hypothesis Testing**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Price - Online shopping behaviour</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Convenience - Online shopping behaviour</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Security - Online shopping behaviour</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Gender - Price, Convenience, Security, and Online shopping behaviour</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

From Table 6, the result of H1 shows that there is an effect of price and online shopping behaviour. Similarly, H2 also presents an effect of convenience on online shopping behaviour. Likewise, H3 demonstrates no effect of security on online shopping behaviour. Finally, H4 demonstrates that gender does not impact online shopping behaviour, price, convenience, and security.

**Discussion**

The result found that price affects the online shopping behaviour of college-level students in the Kathmandu Valley. This result is consistent with the findings of Delafrooz et al. (2010), Khalil (2014), Uzun & Poutrak (2014), and Daud et al. (2016), which proved that price is an essential factor in determining online shopping behaviour among Malaysian students. The finding is also in line with Hsu (2012) that price is an important factor influencing online shopping. Khalil (2014) revealed that price influenced consumer online shopping tendencies. The price strongly influences the online shopping behaviour of consumers (Uzun & Poutrak, 2014; Choudhary & Dey (2014). Similarly, the findings are congruent with Diao (2015) and Daud et al. (2016), who evaluated price as a major influencing factor for online shopping. Živilė and Gintarė (2019 showed that better prices influenced consumers for online shopping. Timalsina (2022) found that reasonable prices attract online shoppers.

The result found that convenience affects the online shopping behaviour of college-level students in the Kathmandu Valley. The study is consistent with the findings of Delafrooz et al. (2010), Khalil (2014), Uzun & Poutrak (2014), Ganapathi (2015), Rahman (2015), and Daudet. al. (2016) showed that convenience is an important factor influencing consumers’ online shopping behaviour. The result is almost in line with the earlier study by Babar et al. (2014), which showed that ease of use has a strong positive association with the online shopping behaviour of Pakistani consumers. The findings are also similar to Živilė and Gintarė (2019), which showed that convenience influenced online shopping consumers. Timalsina (2022) found that convenience influenced online shopping.

Security on the online shopping behaviour of college-level students in Kathmandu Valley affects their online shopping behaviours. This study supports the findings of Sultan and Uddin (2011), Uzun and Poutrak (2014) and Khalil (2014).

The study also found no impact of gender on online shopping behaviour. The result is not congruent with Choudhary and Dey (2015) and Jayakumar and Kumar (2018), who found that gender significantly impacts students’ online shopping behaviour.

**Conclusion**

The findings could be useful for online businesses looking to tailor their strategies to meet the preferences of college-level students, as well as for policymakers and academics interested in understanding the changing dynamics of retail consumption in the digital age. According to the findings, online shopping behaviour is significantly influenced by two main factors: convenience and price. Nevertheless,
security is a relatively insignificant determinant of online shopping behaviour. In conclusion, price and convenience play crucial roles in determining the online shopping behaviour of college-level students in Kathmandu Valley. The significance of convenience, as highlighted here, underscores its universal importance. Similarly, security does not affect online shopping conduct. Additionally, gender has no impact on online shopping behaviour.

**Implications**

Online shopping companies need to consider well-organized websites designed for convenience use to attract potential customers and focus on stabilizing the price of the product for online shopping to retain existing customers. They need to maintain the security of personal information to ensure their privacy and security. Similarly, they must design the marketing mix to fulfill customers’ expectations for effectively enhancing their online shopping business. Likewise, the Government needs to support the private and public sectors, such as network infrastructure provision and appropriate online business policy.

**Limitations and Scope for Future Research**

This study surveyed college-level students within the Kathmandu Valley, focusing on quantitative data and applying mainly correlation analysis and regression models to address the research problem focusing on the effect of price, convenience, and security on online shopping behaviour. Future researchers can use quantitative and qualitative data by applying advanced analytical tools to study other factors affecting the online shopping behaviour of the general public with a larger sample size in different geographic concentrations and cross-cultural insights.

**References**


