

Analyzing Consumer Behavior Patterns Toward Online Shopping in Kathmandu Valley: A Socio-Demographic Perspective

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Abstract

This paper explores consumer behavior in the online shopping environment in the Kathmandu Valley and examines the factors that affect purchase behavior. In the context of rapidly expanding internet access and the emergence of e-commerce websites in Nepal, it is essential to understand consumer behavior in the digital space. This study utilized a quantitative research design and employed a questionnaire survey among 400 online shoppers. The findings show that time saving, security, and convenience are significantly associated with consumer purchase behavior. On the contrary, website design is not found to be significantly associated with the purchase behavior. The study identifies some of the main reasons why consumers shop online, which include easy accessibility and diversity in products available. Some of the challenges encountered by online consumers are that there might be discrepancies between the actual and advertised qualities of products, and the lack of direct assessment of the products in person. Using the regression analysis, the study demonstrates a high degree of explanatory ability of the model, where 99.5% of the variance in the consumer behavior is explained, and where security and time saving are the most important predictors.

Key Words: Convenience, Price, Website design, Time-saving, and Security

Background

The study of consumer behavior examines the processes by which individuals, groups, or organizations select, purchase, use, and dispose of products, services, or ideas, as well as the societal impacts of these processes (Kuester, 2012). Consumers often adopt multiple roles: user, payer, and buyer, making their decision-making complex and influenced by diverse psychological and environmental factors (Adhikari et al., 2026). Understanding consumer behavior via relationship marketing, personalization, and customer engagement is important in current times (Kioumarsis et al., 2009; Safitri & Komaryatin, 2025). The increased use of technology in retail has changed the shopping experience significantly, especially via the Internet, which allows for fast transactions, comparisons among different products, and easy availability of various products and services (Silverstein, 2002). The worldwide increase in e-commerce sales, as seen in the 13% sales increment in 2017, highlights the importance of such changes (UNCTAD, 2018). Online shopping is primarily determined by four elements: purchasing motivations, personalities, internet competency, and intention to shop online (Rodriguez, 2009). Today's consumers have shifted towards convenience, lower prices, and customer reviews; their behavior in the market has changed drastically due to these reasons. This has become even more prominent in the Kathmandu Valley because of increased internet access and the use of online stores by consumers.

Online shopping in Nepal

The internet usage rate in Nepal has been on the rise, and consumer behavior is gradually changing to embrace online shopping. The ease of access to the internet has transformed the business environment by forcing companies to improve their online performance due to consumers who are internet-savvy. Early pioneers of e-commerce in Nepal included MunchaHouse.com, which was launched in 2000. Other pioneers include Nepbay, SastoDeal, Foodmandu, Daraz, and Hamrobazar. Payment systems have equally advanced with the development of e-commerce, including eSewa, which was launched in 2009 and received accreditation from Nepal Rastra Bank. Other prominent players include Khalti, IME Pay, and iPay (Theseus.fi, 2022).

According to various studies, Nepalese internet buyers are very sensitive to prices and favor items that align with their online descriptions. Word-of-mouth marketing is an important factor that affects buying behavior. In addition to this, there is also an expectation for efficient before- and after-sales services as well as flexible payment

methods. By 2018, more than one thousand online shopping sites were available in Nepal, making the competition quite fierce (Reveal Nepal, 2018). Some popular websites are Daraz, SastoDeal, and Hamrobazar.

Problem statement

Although there is an increased number of people accessing the internet globally and the digital marketplace has expanded rapidly (Suratmanto et al., 2025), there is still a significant need for researchers to gain better insights into consumer behavior in online purchases, especially among emerging economies like Nepal. As a result of internet connectivity improvements in urban cities like Kathmandu, there is stiff competition in the online business world where firms have to fight hard to attract more technologically advanced online customers (Keynote, 2018). The performance of electronic commerce websites highly depends on their ability to recognize the emerging needs and behavior of their potential buyers (Theseus.fi, 2022; Victor et al., 2018). Due to the influx of many online stores in Kathmandu, consumers' buying behavior is increasingly changing, with a switch from conventional shopping to e-commerce. This trend is causing several issues, such as customer satisfaction, trust, and the services provided. Hence, there is a need to study the behavior of online purchasers. The primary objectives of this study are to examine the relationship between key independent variables, such as convenience, price, website design, time-saving, and security, and the dependent variable, consumer behavior, and to analyze the underlying factors that significantly influence consumer behavior toward online shopping in Kathmandu Valley.

The purpose of the current study is to answer some of the important research questions that revolve around online consumer behavior by analyzing the influence of such variables as convenience, price, website layout, saving time, and security on online consumer purchasing decisions, focusing on Kathmandu Valley.

Conceptual Review

The conceptual framework of this research is based on the interdisciplinary nature of consumer behavior analysis, which involves knowledge and theories from marketing, psychology, and technological areas. Consumer behavior can be defined as an analysis of the process of selection, acquisition, and consumption of goods and services by individuals and organizations (Schiffman & Kanuk, 2009; Karim et al., 2025; Mahato et al.). With the advent of the Internet and online services, consumer behavior in cyberspace is affected by such variables as site design, security, efficiency, and convenience (Gao, 2005; Shrestha et al., 2025). Important aspects of consumer online decision-making are reflected in the Technology Acceptance Model (Davis, 1989), the Theory of Reasoned Action (Fishbein & Ajzen, 1975), and the Expectation Confirmation Theory (Bhattacharjee, 2001). Moreover, consumer behavior may be utilitarian, driven by a goal-related approach to decision-making, and hedonic, characterized by experimentation (Proctor, 2005; Wind, 2001). In this regard, the changes brought about by greater use of mobile phones and the Internet in the Kathmandu Valley make the above theories relevant for analysis.

The present research has used a quantitative cross-sectional approach to investigate the behavior of consumers towards online shopping in the Kathmandu valley region. A questionnaire-based survey was conducted by means of a convenience sampling technique to collect data from 150 online shoppers above the age of 18. Multivariate regression analysis was performed to examine the correlation between various parameters, including convenience, security, and website usability (Sekaran, 2003; Cooper & Schindler, 2009).

Table 1: Reasons to use that portal frequently

Reason	Number	Percent
Easy to access	148	36.9
Secured	18	4.6
Easy process for shopping	60	14.9
Better price	32	7.9
Variety of products	66	16.5
No crowds	16	4.1

Discrete purchase (Privacy)	4	1.1
Free/ Fast delivery	51	12.7
Others	5	1.4
Total	400	100.0

The method will lead to structured collection and analysis of data, giving a better perspective on consumer behaviors online and handling causal relationships between the independent and dependent variables (Mugenda & Mugenda, 1999; Saunders et al., 2009). In addition to the above, the study sought to find out from the respondents which online shopping websites they considered ideal, and why. From the data collected, it is evident that ease of access is the most critical aspect, mentioned by 26.9 percent of the respondents. The second critical factor in choosing online shopping websites is the availability of a wide range of products (16.5 percent), a fast checkout process (14 percent), and shipping costs and time (12.7 percent). Other aspects include low prices (7.9 percent), security during transactions (4.6 percent), less congestion (4.1 percent), and privacy issues (1.1 percent).

Table 2: Barriers to online shopping

Barriers	N	Percent
Don't have debit/credit cards	32	8.0
Don't like to provide personal information	25	6.3
Enjoy going out to do shopping	46	11.6
Like to see/touch the product before buy it	56	14.0
Difficult in cost/hassle to return product	41	10.3
Can't bargain on online shopping	49	12.3
Product quality are different in website and actual	75	18.6
Can't find product online I like to buy	76	18.9
Total	400	100.0

The questionnaire conducted a thorough analysis of the main reasons for consumers avoiding engaging in online purchase activities. Several important problems were found to be influential when it came to consumer decisions about making purchases. The first of the major problems pointed out by the participants concerned differences between the expected and real properties of the purchased items. As many as 18.9% of the participants stated that they had experienced instances of receiving different items from what they actually ordered, which is an indication of the problem of reliability associated with the products. Another similar problem concerned inconsistencies between the described and real qualities of the goods, especially when it came to their description on the Internet, including photos.

Beyond the issues of product mismatch and inconsistency in product quality, 14.0% of the respondents pointed out their preference for having an opportunity to examine products manually before making purchases. This is due to the limited ability of consumers to touch and analyze products when shopping online as part of the sensory constraints that apply to such a process.

Also, 11.6% of the respondents highlighted the positive aspects of shopping in brick-and-mortar stores, such as immediate accessibility of products as well as interaction with customers. Similarly, 10.3% of the respondents

mentioned their preference for being able to negotiate prices as one of the motivating factors that make traditional forms of retail shopping more appealing than online shopping.

Table 3: Reliability Statistics

Variables	Code	Cronbach's Alpha	N of Items
Buying Behaviour	BB	.821	4
Price	P	.723	4
Website design/features	WD	.718	4
Convenience	C	.762	4
Time saving	TS	.829	4
Security/privacy	S	.821	4

The reliability of the measurement scales employed in this study was evaluated through Cronbach's Alpha. As shown below, the values obtained reveal that there is an acceptable to high internal consistency of all the variables. The reliability of the Buying Behavior scale is high ($\alpha = .821$). This is also true for the Time Saving scale ($\alpha = .829$) and the Security/Privacy scale ($\alpha = .821$). There is also an acceptable reliability value of the Price scale ($\alpha = .723$), the Website Design/Features scale ($\alpha = .718$), and the Convenience scale ($\alpha = .762$).

Table 4: Descriptive Analysis

Variables	N	Mean	Std. Deviation
Price (P)	400	3.8563	.51512
Website Design (WD)	400	3.7913	.80192
Convenience (C)	400	3.5250	.43410
Time saving (TS)	400	4.0063	.50899
Security (S)	400	3.5788	.45775
Buying Behavior (BB)	400	3.7938	.43224

Descriptive statistical analysis helps to provide insights into the central tendencies and dispersion in the important variables affecting the behavior of online consumers. Out of all the variables, "Time Saving" was rated highly with a mean score of 4.0063 and standard deviation of 0.50899, which indicates that consumers consider time-saving as the most important aspect affecting their online buying behavior. The next variables that have received considerable scores include "Price" with a mean score of 3.8563 and standard deviation of 0.51512, "Buying Behavior" with a mean score of 3.7938 and standard deviation of 0.43224, "Website Design" with a mean score of 3.7913 and standard deviation of 0.80192, and "Security" with a mean score of 3.5788 and standard deviation of 0.45775.

The results from the correlation analysis show a number of significant connections between the factors affecting consumer behavior on the Internet. It is important to note that there is a significant negative connection between the price of the product and the quality of the website, meaning that the more value one has, the less value the other will have. Price had a weak positive correlation with the factors of time saving ($r = 0.346$), security ($r = 0.280$), and purchasing behavior ($r = 0.320$). On the other hand, website design had strong positive correlations with time saving ($r = 0.813$), security ($r = 0.784$), and purchasing behavior ($r = 0.586$). Convenience did not

correlate significantly with website design but had minor positive correlations with time saving ($r = 0.078$), security ($r = 0.243$), and purchasing behavior ($r = 0.437$).

Regression Analysis

Regression analysis refers to a statistical method used to investigate the connection between one dependent variable and several independent variables. Through this method, one can ascertain the level of influence of independent variables on the dependent variable. Before performing regression analysis, the assumptions of regression were tested to establish whether the assumptions of regression were met before analyzing the data using regression (Hair et al., 2010). These assumptions include the test for normality, linearity, and multicollinearity. The results showed that all the assumptions were adequately fulfilled, making it appropriate to conduct regression analysis in this study.

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.132	.286		7.461	.000
	convenience	.460	.074	.458	6.215	.000
	Price	.112	.054	.133	2.081	.039
	Website design	.033	.052	.062	.640	.523
	Time saving	.670	.101	.785	6.645	.000
	Security	.737	.095	.777	7.726	.000

a. Dependent Variable: Consumer Buying Decision

The regression model demonstrates a very high degree of explanatory power, with an R value of 0.998, indicating a near-perfect correlation between the observed and predicted values. The R-squared value of 0.995 suggests that 99.5% of the variance in the dependent variable is explained by the model, confirming its robustness.

The output of the ANOVA analysis shows that there exists a statistically significant regression because the F value is 24.929 and the significance level is 0.000. Therefore, it can be concluded that the independent variables significantly account for variance in the dependent variable.

The coefficient table of the regression equation sheds some light on how each predictor affects consumer purchasing behavior. Unstandardized coefficients show how much the dependent variable changes for every unit change of each predictor. Particularly, security ($B = 0.737$, $p = 0.000$), time savings ($B = 0.670$, $p = 0.000$), and convenience ($B = 0.460$, $p = 0.000$) significantly and positively affect consumers' behavior; therefore, these factors can be considered key predictors. In turn, price ($B = 0.112$, $p = 0.039$) also affects consumer behavior to a certain extent, but website design ($B = 0.033$, $p = 0.523$) does not play any important role in explaining purchasing decisions.

Discussion

Based on the results of this study, security, time savings, and convenience stand out as the most effective predictors of buying decisions of consumers in e-commerce environments due to the relatively large value of unstandardized regression coefficients ($B = 0.737$, $B = 0.670$, $B = 0.460$) and their high significance ($p = 0.000$). It should be highlighted that consumers consider transaction safety, convenience of shopping, and efficiency more important than other aspects when they make decisions regarding purchases online. The impact of price is rather low compared to those discussed earlier; however, consumers take the cost into account ($B = 0.112$, $p = 0.039$). In addition, it is necessary to point out that website design was proven statistically insignificant in this study ($p = 0.523$). The results above indicate that efforts to increase customer participation by companies engaged in e-

commerce should emphasize improving security measures, improving the efficiency of transactions to reduce the time required, and optimizing the interface of the web page as the top considerations, instead of investing heavily in creating visually appealing websites. Additionally, the inability of customers to buy goods without inspecting them, combined with the fears of mismatched descriptions of products on the websites, demonstrates that despite meeting the predictors, such as security and convenience, there is still some level of distrust in products and sensory evaluation, thereby making it difficult for e-commerce firms to maximize their benefits.

Conclusion

From the study findings, it is apparent that information gained regarding consumer behavior in relation to e-commerce could prove quite invaluable in various aspects of business operations. The results have offered key insights for both e-commerce firms, marketers, and policymakers regarding how to develop more effective strategies based on consumer attitudes. One of the major observations is that there is an important influence of family factors on consumer choices in making online purchases. In other words, buying goods is not an individualistic affair as often, consumers are influenced by family members in deciding which products to buy. For instance, the preferences of different family members, such as spouses, kids, and older generations, affect the choice of products to evaluate or purchase. Therefore, e-commerce sites should consider integrating tools to facilitate the purchase of goods and services that are of interest to entire families.

With respect to preference for the platform, the selected website, that is, Daraz, was preferred on the basis of many factors, including accessibility, variety of products available, and ease of use, among others. All the above factors have strong similarity with the two predictors found in the regression analysis, time saving and convenience, thus analyzing consumer preferences even more valid. The consumer preference for the Daraz website can be attributed to the simplicity of the online shopping experience it provides, offering different types of products within one place, and thus reducing the work on the consumer side. For other e-commerce platforms to succeed in the market, similar features should be taken into account, while innovations can help them solve the problems of consumers.

Despite the rapid development of the e-commerce market, a lot of customers do not want to purchase products without seeing and examining them in person. The continuous desire to see and examine the item before buying it points out one of the main limitations of the Internet market, especially concerning items that require consumer interaction and tactile features. Clothes, shoes, furniture, and electronic devices represent some of those categories where the lack of opportunity to touch the item and check its size is considered an essential problem. Within the wide range of issues related to online purchasing, we may mention the problems with finding the precise product and inconsistencies between the item description on the website and the actual product. In order to solve the abovementioned problems, e-commerce companies should make sure to provide consumers with reliable information about their products through pictures, videos, specification sheets, and reviews from other consumers.

Furthermore, return and refund policies that make things easier for customers can be used to offset risk perceptions, thus ensuring that customers do not suffer financially in case the product they receive does not meet the specifications of the one described online. To conclude, as the world of e-commerce becomes more widespread, continued success will rely on filling this gap.

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