

FACTORS INFLUENCING CART ABANDONMENT IN E-COMMERCE: A STUDY OF ONLINE PURCHASE BEHAVIOUR

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Abstract

Shopping cart abandonment is a frequently observed phenomenon in online retailing, yet it has received relatively limited scholarly attention within the marketing literature. In response to this gap, the present study undertakes theory-advancing research to examine digital cart abandonment as a form of online non-buyer behaviour. The specific objectives and contributions of the present study are to identify the factors that lead to digital cart cancellation, a form of online non-buyer behaviour, and to clarify the reasons underlying such abandonment. A total of 250 completed questionnaires were received from the study, which was conducted between August and October of 2025. All of the data were statistically tested through factor analysis and analysed using SPSS. The findings indicate that there are five primary factors responsible for shopping cart abandonment: inflated price, time compression, social considerations, security issues, and lack of accessibility. Among these factors, inflated price emerged as the most significant, whereas accessibility issues were found to be the least significant. This study contributes to the marketing literature by providing empirical evidence on the drivers of online cart abandonment and enhances understanding of digital consumer behaviour. The findings also offer practical implications for e-commerce firms seeking to reduce cart abandonment by improving pricing strategies, enhancing trust, and optimising the online shopping experience

Keywords: Online Shopping, Window Shopping, Shopping Carts, Consumer Behaviour etc

Introduction

In order to gain a deeper understanding of buyer behaviour in the technological age, it is necessary to understand consumer's "non-purchase" behaviour. Shopping online is a classic example of non-purchase behaviour, as many consumers often add products to virtual shopping carts but never complete their purchases. Eighty-eight percent of online buyers gave up their loaded electronic cart at some point, according to industry statistics. In order to comprehend the reasons behind this widespread desertion, it is essential to look at how customers view virtual carts and why they initially put things in them. Even with the growth of the field of e-commerce, online businesses continue to struggle with the issue of discarded shopping carts. An instance of this occurs when a prospective customer adds a product to their cart but leaves the website without completing a transaction. In 2022, the percentage of shopping this hit 69.99%, meaning that over 70% of consumers leave products in online carts

without making a purchase. Since 2014, the rate of cart abandonment has steadily climbed, emphasizing the persistent challenge for e-commerce businesses in transforming site visitors into paying customers. Since 2014, the rate of cart abandonment has steadily climbed, emphasizing the persistent challenge for e-commerce businesses in transforming site visitors into paying customers. Customer's online cart usage is believed to be different from how they use carts for purchases in physical stores as well as from how management and online retailers plan for them to be used. Online retailers will be better equipped to create more user-friendly websites if they can identify the factors that encourage consumers to use digital carts and those that discourage them from making purchases from the cart. Applying this knowledge could also result in greater rates of conversion from online shopping to buying goods online.

Literature Review

The term "shopping cart abandonment" has been in use since the 1990s, and Rewick (2000) defined it as the act of a customer leaving their shopping cart on the internet before making a purchase. Due to the impact of pandemic in 2020, customers were compelled to switch to a virtual payment method. As a result of this abrupt event, the number of shopping cart withdrawals has increased. Two variables—behaviour variables and technological variables—have been linked to abandonment of shopping baskets in previous research (Li and Chatterjee, 2006). Moore and Mathews (2008) state that anticipated risk—especially execution risk—is one of the variables that leads to abandoning shopping carts. It was mentioned that the possibility of risk when shopping online can cause customers to give up on their cart. In contrast, consumers depart their carts when they are not sufficiently motivated to buy the item, when there is an overwhelming comparison process, or when they see advertising impulses that direct them to other websites, according to research done on retail websites by Mi and Chatterjee (2013).

Yusuf et al. (2023), who discovered that the primary driver for shoppers adding items to their carts is amusement motive. The outcome is also in line with a study that found that in Malaysia, young adults' abandoning shopping carts was caused by three main factors: apparent cost, recreational value, and administrative tools (Mad et al., 2022). E-assessment. It is believed that consumers who purchase online assess the items in their decision-making set. The choice to see the checking basket and/or begin the checkout procedure is referred to as the stage of assessment by Li and Chatterjee (2006). Customers' propensity for impulsive purchases has decreased as a result of research. Price is thought to be a crucial component of

buying, so major modifications to it will affect platforms for purchasing and, indirectly, induce abandonment of carts (Kukar-Kinney and Close, 2010). However, we can't say that starting the online payment procedure is the review stage because not all products under discussion may actually be in the shopping basket at this time. For a variety of reasons, online customers may go through each phase of the purchasing process out of order. For starters, a buyer could decide to forego further product details and get straight to the buying decision. Second, a customer can decide to reconsider and go back to searching for information. Third, a buyer has the option to change their mind and back out at any time. You can also complete the buying procedure in a physical, brick-and-mortar store. The majority of these buyers just placed the things in the cart to satiate their desire; they weren't planning on buying them. Additionally, according to Close (2010), customers find that their experiences on the internet are more fulfilling because they may pass the time when they browse websites. Interestingly, the results reveal a contrast. Mad et al. (2021) noticed among young people, a fun pastime typically associated with adolescents. According to research, the majority of respondents—students—rarely utilise the shopping cart for amusement. Put another way, when customers decide to abandon the items in their shopping carts to pass the time, it will also lead to a higher percentage of purchasing cart abandonment, which will result in an economic loss for the sellers. According to Doob (1990), hesitancy is typically the result of someone having an unclear mental state. Furthermore, apprehensive individuals frequently do nothing to prevent something from occurring (Fee & Tangney, 2000). According to a study conducted in-store, having too many options can also lead to hesitancy, which causes customers to walk out without making a purchase (Jessup et al., 2009).

Despite the fact that abandoned shopping carts are common, remarkably few scholarly studies in the marketing literature address this problem. We therefore aim to close the gap by doing theory-advancing research on this issue. The current study's specific goals and contributions are to: identify the factors that contribute to digital cart cancellation, which is a type of online non-buyer behaviour; and elucidate why this type of leaving happens. We bolster our paradigm with two empirical studies using different consumer populations. We then address areas that require more scholarly investigation and offer recommendations for raising conversion rates.

Research Objectives

The current study's specific goals and contributions are: to identify the factors that contribute to digital cart cancellation, which is a type of online non-buyer behaviour; and elucidate why this type of leaving happens.

Research Methods and Database

The research design of the present study is descriptive in nature. In order to fulfil the study's goal, information was gathered using an online survey that was dispersed at random via social media sites such as "WhatsApp and Facebook Messenger". Purposive sampling was the form of sampling employed in this study because it enables researchers to obtain replies more quickly and effectively (Sekaran, 2000). No question was left out of the survey because all of the questions were required to be answered. A total of 250 completed questionnaires were received from the study, which was conducted between August and October of 2025. However, after a preliminary review of the data gathered, 10 responses were removed since they hadn't completed at least one online purchase in the preceding six months. This sample is sufficient because Israel (1992) said that at least for a population of more than 100,000, a minimum of 204 samples are needed to attain an accuracy level. So, the sample of the present study is 260 which is more than the yardstick. All of the data were statistically tested through factor analysis and analysed using SPSS.

The online survey was divided up into multiple sections with a total of twenty queries. The respondent's socioeconomic information is gathered in the first portion, and then additional necessary sections. The five-point Likert scale was used to assess the survey items. On a Likert scale ranging from 1 (SD) to 5 (SA), participants were asked to choose an answer. All of the inquiries used to access these domains came from earlier studies conducted by (Erdil, 2018; Yusuf et al., 2021).

Data Analysis

Factor analysis refers to the data reduction technique where a number of variable having correlation clubbed in to fewer uncorrelated factors. Factor analysis should only be applied once the key underlying assumptions have been confirmed.

1. The suitability of factor analysis depends on sufficient correlations among variables, assessed via the Bartlett test of sphericity. A significant test result confirms that the correlation matrix meets the requirements for factor analysis. In this study, Table 1 reports a Bartlett test significance of .000, indicating that factor analysis can be appropriately conducted.
2. The Kaiser-Meyer-Olkin (KMO) measure should exceed 0.5 to justify the use of factor analysis. In this study, Table 1 reports a KMO value of 0.860, indicating that factor analysis is appropriate (Chawla, 2011)

Table 1 -KMO and Bartlett's Test		
KMO		.870
Bartlett's Test of Sphericity	Approx. Chi-Square	2768.416
	Df	259
	Sig.	.000

(Source: Primary Data)

The table above indicates that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.870, exceeding the recommended threshold of 0.5. The chi-square value is 2768.416 with 231 degrees of freedom, and the significance value is 0.00, which is below 0.05. These results confirm that the dataset is suitable for factor analysis and the data reduction process.

Communalities of all statements are shown in Table-2

Table 2- Communalities		
Too expensive for the item(s)	<i>Initial</i>	Extraction
Too expensive for shipping	1.000	.909
Too expensive for handling	1.000	.851
Product is purchased at the time of purchase.	1.000	.850
shipment is too delayed	1.000	.739
the online purchasing process is too leisurely	1.000	.818
the web page loads too slowly	1.000	.958
Inability to use recognized forms of payment	1.000	.768
Limited amount of money available	1.000	.811
Inability to make purchases online.	1.000	.830
Reluctance to shop internet due to relatives or acquaintances	1.000	.809
Boredom or lack of amusement.	1.000	.937
With particular online shopping websites	1.000	.863
With confidentiality of individual purchases	1.000	.832
With the privacy of one's private data	1.000	.856
With the safekeeping of financial data	1.000	.829
Of the item (e.g., sold out)	1.000	.908
To the e-commerce website;	1.000	.782
To internet accessibility;	1.000	.817
Of delivery to the region	1.000	.823
Extraction Method: Principal Component Analysis.		

(Source: Primary Data)

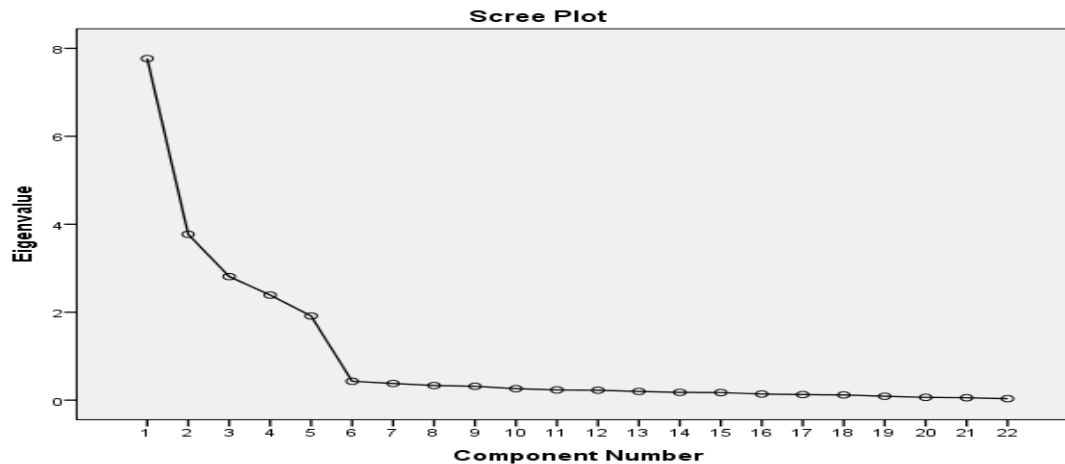
"Communality assesses the presence of variance in a particular variable that can be explained by all of the factors together and can be taken as the indicator's reliability". A high communality (equal to or more than 1) suggested that there was an issue with the results due to an insufficient sample or component. As shown in Table 2, all values exceed 0.70, indicating that no variables need to be removed from the study.

Table 4.12- Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.767	35.306	35.306	7.767	35.306	35.306	4.647	21.123	21.123
2	3.771	17.140	52.447	3.771	17.140	52.447	4.108	18.673	39.795
3	2.810	12.772	65.219	2.810	12.772	65.219	3.363	15.286	55.082
4	2.389	10.861	76.080	2.389	10.861	76.080	3.362	15.283	70.365
5	1.913	8.696	84.776	1.913	8.696	84.776	3.170	14.411	84.776
6	.430	1.953	86.730						
7	.379	1.724	88.454						
8	.333	1.511	89.965						
9	.315	1.432	91.397						
10	.262	1.189	92.586						
11	.233	1.058	93.644						
12	.226	1.026	94.670						
13	.199	.903	95.572						
14	.177	.804	96.377						
15	.173	.784	97.161						
16	.139	.633	97.794						
17	.127	.577	98.371						
18	.118	.538	98.909						
19	.089	.405	99.315						
20	.063	.287	99.601						
21	.054	.247	99.848						
22	.033	.152	100.000						
Extraction Method: Principal Component Analysis.									

(Source: Primary Data)

Eigenvalues indicate the amount of variance in the variables explained by each factor. Following Kaiser's (1958) criterion, only factors with eigenvalues greater than one were retained. Accordingly, out of 20 items, five factors were preserved, collectively accounting for 84.776% of the total variance.

Figure- 1 Scree Plot



(Source: Primary Data)

The scree plot provides a visual guide for identifying the number of factors to retain in the analysis. According to the preceding *figure 1*, there are a total of 5 factors extracted that are above the elbow bent.

Table- 3 Rotated Component Matrix^a					
	Component				
	1	2	3	4	5
Too expensive for the item(s)	.954				
Too expensive for shipping	.934				
Too expensive for handling	.922				
Inability to use recognized forms of payment	.918				
Limited amount of money available	.915				
Product is purchased at the time of purchase.		.909			
shipment is too delayed		.892			
the online purchasing process is too leisurely		.892			
the web page loads too slowly		.891			
Inability to make purchases online.			.900		
Reluctance to shop internet due to relatives or acquaintances			.908		
Boredom or lack of amusement.			.900		
With particular online shopping websites				.933	
With confidentiality of individual purchases				.886	
With the privacy of one's private data				.884	
With the safekeeping of financial data				.882	
Of the item (e.g., sold out)					.872
To the e-commerce website;					.834
To internet accessibility;					.831
Of delivery to the region					.821
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 5 iterations.					

(Source: Primary Data)

Table 3 presents the rotated factor matrix obtained using the Principal Component Method with varimax rotation. According to Malhotra and Sidhu (2007), a factor loading of at least 0.40 is required for an item to be considered part of a factor.

Summary of Factor naming and Statements

<i>Factor No-</i>	<i>Name of the Factor</i>	<i>Statements/ Variables</i>
1.	Inflated Price	Too expensive for the item(s)
		Too expensive for shipping
		Too expensive for handling
		Inability to use recognized forms of payment
		Limited amount of money available
2.	Time Compression	Product is purchased at the time of purchase.
		shipment is too delayed
		the online purchasing process is too leisurely
		the web page loads too slowly
3.	Social Considerations	Inability to make purchases online.
		Reluctance to shop internet due to relatives or acquaintances
		Boredom or lack of amusement.
4.	Security Issues	With particular online shopping websites
		With confidentiality of individual purchases
		With the privacy of one's private data
		With the safekeeping of financial data
5.	Dearth of Accessibility	Of the item (e.g., sold out)
		To the e-commerce website;
		To internet accessibility;
		Of delivery to the region

(Source: Primary Data)

Findings and Conclusion

The findings of this study provide a comprehensive understanding of the factors that drive consumers to engage in online window shopping, a form of non-purchase behaviour. The analysis identified five key determinants: perceived price inflation, time compression, social considerations, security concerns, and limited accessibility. Among these, perceived price inflation was found to be the most influential factor, highlighting that consumers often abandon their digital shopping carts when they perceive products as overpriced. Time constraints ranked as another significant factor, indicating that lengthy purchase processes discourage completion of online transactions. Social considerations, such as peer influence or social norms, and security concerns, including apprehensions about online payment safety, also contributed to cart abandonment. Accessibility issues, such as difficulties in navigating websites or limited availability of products, were comparatively less influential, though they

remain a relevant aspect of consumer experience.

These insights carry important implications for online retailers. By addressing the factors that lead to cart abandonment, businesses can implement targeted strategies to increase conversion rates and reduce online window shopping. Furthermore, the study lays a foundation for future research on digital consumer behaviour, offering both theoretical insights and practical strategies to improve online shopping engagement and conversion rates.

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