

Exploring Product Return Behavior in E-Commerce : Insights from an Emerging Market Context

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Abstract

Purpose : In contrast to return behavior, consumer purchasing behavior is thoroughly investigated. Returns have increased in tandem with the growth of online shopping through e-commerce sites, particularly in emerging nations like India. The present study aimed to determine whether there are any prevailing behavioral features associated with customer returns, given the disproportionate number of returns that India receives in comparison to other nations. The body of existing studies has not sufficiently examined product returns resulting from internet sales. Investigating the expanding e-commerce sector and the unprofitability of these businesses in the context of emerging markets requires research.

Methodology : A systematic online questionnaire survey was used to gather information on a variety of topics related to returns after purchases, including delivery experiences, product dissonance, information search, product attributes and categories, and demographics. Outcome factors included the size of the returns and the frequency of returns.

Findings : This research concluded that the following elements can be used to explain product return behavior in online purchases: situational circumstances, impulse, experimenting with new products, volition, unethical behavior, seasonal purchases, purchases prompted by promotions, and enforced options. In addition to these, dissonance, delivery encounters, information behavior, and product-specific factors — all played a big role in online purchase returns. The frequency, variety, and mechanism of reimbursement of returns for internet purchases varied greatly.

Originality : To have a better understanding of the return behavior, this research took into account factors such as income, monthly expenses, and spending on online goods.

Managerial Implications : Understanding the return behavior could help influence customer purchases, returns, and retention. Managers could control and manage the factors influencing returns at a desired level.

Keywords : online purchase, return, behavior, product, delivery, information search, dissonance

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The act of purchasing initiates the forward flow of goods, whereas the act of returning items reverses this movement. Returning goods is a “moment of truth.” The option to return an item can be made at several points during the purchasing process, especially when making an online purchase from an e-commerce website. A product return is a lost sale, reduced profit, and margins. It involves reverse logistics, additional

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inspection, re-stocking, product damage, markdowns, and stock-out expenses. The working capital requirement increases to manage returns. The return of used (wardrobing) items and receipts, duplicate reimbursements, order processing, and inaccurate return codes are examples of operational problems (Jack et al., 2019). Bracketing is the process of placing bulk orders, keeping what you need, and returning the rest (Narvar, 2018). The industry has started to implement rental models in reaction to these practices, where customers only rent things rather than buy them (Buhler, 2018). An effective reverse supply chain is required to facilitate product returns (Salema et al., 2010). Reverse logistics design is problematic due to the unpredictable nature of the return decision (Barker & Zabinsky, 2008). Furthermore, more expensive than forward logistics is reverse logistics (Ganguly, 2016).

Customer retention and trust are impacted by the experience of returning a product (Jaiswal et al., 2018). The return procedure increases customer risks with transaction charges (Griffis et al., 2012); as a result, initial purchase decisions are influenced by free return shipping or a no-frills return (Kumar & Gupta, 2017). Return is conceptualized as a service that improves the process quality and can improve overall satisfaction (Martin, 2016). This satisfaction increases the likelihood of giving favorable recommendations and the desire to repurchase (Pham & Ahammad, 2017). Exchange regulations have an impact on returns (Kar & Sahoo, 2009). Companies modify their return policies in an effort to maximize return levels. The growth of e-commerce in developing countries such as India is associated with higher returns compared to others. The country context and the continuous financial losses are the driving forces for this investigation into consumer return behavior (CRB).

There is a glaring study deficit regarding the complex aspects influencing customer return behavior in emerging market contexts, even if the literature that is currently in publication recognizes the importance of reverse logistics and the expenses related to product returns. The objective of our research is to close this gap by exploring the nuances of product return behavior in Indian e-commerce. Also, for Indian e-commerce companies, comprehending and efficiently handling product returns has become crucial due to the growth of omnichannel retailing and the growing focus on the customer experience. Through an analysis of the distinct obstacles, consumer attitudes, and operational dynamics related to returns in developing economies such as India, our goal is to offer practical guidance to companies looking to streamline their return procedures, build client confidence, and boost overall revenue.

Literature Review

Returns can also be considered a component of consumer behavior, just like purchases. There is a behavioral viewpoint to the return as a result. Kincade et al. (1998) defined it as a “redress-seeking behavior” intended to make up for unhappiness. It is an “abusive behavior” when a customer abuses the return policy (Samorani et al., 2019). Moreover, Harris (2008) characterized it as “common, deliberate, fraudulent, and dysfunctional behavior.” Some attribute it to materialism and consumer anomie, which breed cynicism, an unethical attitude, and a desire to harm the seller (Rosenbaum & Kuntze, 2003). The process of returning a product involves making the option to “keep” or “no-keep” the item; returning the item is prompted by the “no-keep” decision (Samorani et al., 2019). Therefore, the decision to return anything is a thoughtful, drawn-out, progressive, and iterative process; an “impulse return” is not the same as an “impulse purchase.”

Rao et al. (2014) stated that product returns are a sign of supply chain agents' operational inefficiencies. According to Martin (2016), inefficiencies in the product lead to the need for repair and return as essential service procedures to enhance customer satisfaction. A buy-back contract, which requires the return of products, is another type of contractual duty (Xu et al., 2015).

Product Characteristics

There is no question that a mismatch between expectations and product attributes affects returns. Defective

products are returned (Cui et al., 2020). The color, pattern, shape, and other intangibles, in addition to the fundamental product features, also have an impact on clothing item returns (Dzyabura et al., 2023). Returns may result from disconfirmation caused by product specifications that differ from those that were requested (Saarijärvi et al., 2017). The percentage of product returns varies across different product categories as well (Misra & Arivazhagan, 2017). In the case of clothing, product returns are influenced by price and category (Kincade et al., 1998). There will be more results with additional types. Higher average prices and more diversity within a subcategory were likely to enhance return likelihood (Samorani et al., 2019).

Returns are linked to emotional dissonance and the product. In consumer products (convenience, preference, shopping, or specialist goods), emotional dissonance was high, whereas product dissonance was low. Powers and Lord (2018) looked into return reasons such as “found a better product,” “time,” “found a better price,” “customer opportunism,” and “awareness of return policy.” For returns, the primary product that was specifically purchased, as well as related categories, are important. As a result of their control over product qualities, product producers are in charge of handling returns. By increasing task specialization, product quality can be enhanced, and returns can be decreased, but customization options are restricted as well, increasing the likelihood of product returns (Cui et al., 2020). Customers might not like the goods for reasons other than those listed below and return them (Saarijärvi et al., 2017).

Return Policy and Return Behavior

The goal of the return policy is to influence purchasers to behave desirably. The capacity of a product to meet expectations is made less uncertain by the product return policy (Altug & Aydinliyim, 2016). Both lax and rigorous return policies are possible. Rosenbaum and Kuntze (2003) found that a generous return policy enhances both returns and subsequent sales. Customers may return products if there are prompts (Altug & Aydinliyim, 2016), easy return procedures, and return policies that do not require an explanation (Pham & Ahammad, 2017). Although the authenticity of the guarantee can lower returns, the retailer's reputation can boost sales (Zhou & Hinz, 2016). Altug and Aydinliyim (2016) asserted that returns and refunds have an impact on future purchases. Some sellers have a “keep reward” incentive to counter return intention, and the reward can be used for future purchases. The choice to retain the product is moderated by online shopping frequency and mediated by repurchase intention (Gelbrich et al., 2017). Return policies have an impact on consumer behavior due to external effects, moral hazard, and inertia returns (Xu et al., 2015). Buyer loyalty and transaction patterns are taken into account when creating a custom return policy (Abbey et al., 2018). According to Altug and Aydinliyim (2016), a lax return policy could result in more full-price purchases.

According to Saarijärvi et al. (2017), customers may order an item with the intention of trying it but not purchasing it. A case of wardrobing could be this one. An intention to return a new good is more likely. Purchase intentions are driven by hedonic satisfaction (Jain et al., 2018). Seasonal or holiday purchases leading to higher purchase returns are also known (Petersen & Kumar, 2009). The literature records the pleasure of shopping as a reason for purchasing (Koufaris et al., 2001), while there is also a chance that it will be enjoyable to return. Online retailers frequently give their customers loyalty points that can be applied to future purchases (Xu & Jackson, 2019). These transactions might not take refunds into account and let users benefit from the policy. The literature has proven that there are unethical returns (Jack et al., 2019; Rosenbaum & Kuntze, 2003). Consumers who wish to return a product may do so abusively (Samorani et al., 2019) or fraudulently (Harris, 2008).

Unplanned or impulsive purchases may result in higher returns (Cook & Yurchisin, 2017; Koufaris et al., 2001; Pei & Paswan, 2018; Seo et al., 2016). Similarly, buyers must pay for the goods and might not have enough money when it is delivered, which could result in a return; a lack of funds is a recognized reason (Saarijärvi et al., 2017). When something is given as a gift, the recipients have the option to return it if they change their mind (Lee & Yi, 2017; Petersen & Kumar, 2009).

Role of Information

E-commerce websites provide adequate information to reduce uncertainty. A lack of adequate information can influence customers to purchase or return (Li et al., 2013). Consumers react differently to a combination of verbal and visual information because they have a preference for either verbal or visual cognitive styles of information processing (Das et al., 2022). Positive online customer reviews (OCR), specifically for high-involvement products and weaker brands, have an impact on sales and returns on the website (Lohse et al., 2017). Positive effects on customer purchases and negative effects on return decisions are attributed to an increased number of objective and impartial OCRs. Customers who return merchandise, on the other hand, tend to leave unfavorable reviews (Sahoo et al., 2018).

Information Search

The information search behavior is particularly relevant in e-commerce situations. The information needed has individual variations. Some customers may enjoy the information search process, and others may like just adequate information for purchasing. Information is provided on the website to help with such decisions (Pham & Ahammad, 2017). A quality-conscious shopping style includes service-seeking and information behavior, which reduce apprehension about online services among Indian customers (Khare et al., 2016). High-involvement products require more information for purchase decisions (Lohse et al., 2017). Customers also look for online reviews to evaluate veracity (Lohse et al., 2017; Sahoo et al., 2018) — even the inventory availability or scarcity of information influences returns (Rao et al., 2014). Price differences across channels influence customer returns (Radhi & Zhang, 2018).

Information Correction

Information search and decision-making is a recursive process. Revising the initial search and decision can lead to a cancellation or return. Order mistakes and mistakes during fulfillment can cause returns (Saarijärvi et al., 2017). Customers can continue their information search and find a better product or substitute, subsequently causing a cancellation or product return. Such behavior indicates customer opportunism (Powers & Lord, 2018).

Delivery Encounters

Delivery encounters include initial product track information, contact, and confirmation about the delivery time; finding, agreeing, and delivering at the customer location; payment transaction (equipment for money transfer, failure to transfer, refund for excess payment). Unpleasant or unethical practices can also include wrong delivery (package or person), asking for a tip, marking the order delivered even if not delivered, or the packaging is damaged, among other possibilities (Gupta et al., 2021).

Refunds can be initiated by unreliability of order delivery or by an inconsistency between promised and actual delivery; interestingly, expedited orders have a higher likelihood of being returned (Rao et al., 2014). The purchase price and product returns are increased by shipping costs for a minimum order (Lepthien & Clement, 2019). Customer loyalty and the product return channel are related since familiarity lowers perceived risk (Xu & Jackson, 2019).

The “keep reward” scheme elicits a discount-seeking behavior to retain the product. Discount seeking has various forms, such as an offer of a complementary product (Han et al., 2017). When a product is returned along with a complementary one, the return rate is lower. These are sometimes referred to as customers' redress-seeking conduct (Kincade et al., 1998). Prior to making a second purchase, customers may consult with others, indicating

the importance of influencers. The literature also acknowledges the role of social impact (Pei & Paswan, 2018) and the package opening experience (Zhou et al., 2018).

The delivery experience and post-purchase dissonance can be due to bad delivery experience, post-purchase emotion or reaction (Cook & Yurchisin, 2017), and generally, the experience during order fulfillment (Saarijärvi et al., 2017). Even the package opening experience is a critical moment where pleasure as a cognitive-affective reaction is vital in reducing returns (Zhou et al., 2018).

Return Behavior

When making an online purchase, one must look up information, evaluate reviews, consult influencers, compare pricing, place an order, pay for the item, receive it, and see the results. One or more variables may influence the return choice at any time, but not in a certain order. The amount of product information available on the Internet affects consumers' decision-making process while making purchases and their intentions to return goods (Hellemann & Brettel, 2016). The initial shopping motive, spending pattern, purchasing experience, perceived risk, and group-specific reasons of the heavy, medium, light, and infrequent returners vary (Foscht et al., 2013). Return behavior differs for new and returning consumers; for a new client, the sense of control and enjoyment they get from their purchase may make them more likely to return (Koufaris et al., 2001). Seo et al. (2016) proposed that product returns vary across two dimensions: hedonic/utilitarian versus planned/unplanned purchases. Hedonic-unplanned purchases increase self-estimated returns, but if utilitarian intentions drive purchases, the returns may not vary (Seo et al., 2016).

Customers are drawn to products because they are scarce and perishable, but when they buy on the spur of the moment because they are cheaply priced, they experience negative aftereffects that lead to returns of the merchandise (Cook & Yurchisin, 2017). According to Saarijärvi et al. (2017), the following factors influence online purchase returns: disconfirmation, customer sentiment, lack of funds, waning need, and intention to try the goods. A return and repurchase procedure is called an exchange. If the initial purchase includes complimentary products, there will be more exchanges (Han et al., 2017). Due to a larger perceived loss in returning, there is a lower intention to return if the initial purchase is present that the client chooses (Lee & Yi, 2017).

Return behavior can be legitimate or opportunistic. Impulsiveness, desire for uniqueness, product compatibility, perceived risk, and social influence lead to legitimate return behaviors, but immorality, self-monitoring, and social influence lead to opportunistic return behavior (Pei & Paswan, 2018). It is possible to prevent these return-encounter conflicts by raising knowledge. When a return is refused, it sets off a negative attitude against the shop, prompting requests for exceptions and further fraudulent return practices (Dailey & Ülkü, 2018).

Dissatisfaction/Dissonance

Consumer dissonance is typically linked to the product's failure to live up to expectations and post-purchase appraisal. In a similar vein, a buyer's regret signals regret about a purchase. These elements may prompt a decision to return. But we contend that regret or dissonance don't always happen after a product is purchased or possessed. These feelings could plausibly arise at every stage of the purchasing process, causing the decision to be reversed. The customer can change his/her mind. The fading need is one of the reasons (Saarijärvi et al., 2017). A dissonance can trigger an additional search for information even after placing the order. An order placed can be canceled before the delivery to indicate dissonance. Measures including order fulfillment, return easiness, and customer responsiveness are shown by the online post-purchase customer experience (OPPCE) scale (Pham & Ahammad, 2017). Some recommend that OPPCE include delivery, product-in-hand, advantages, customer service, return and exchange, and feel-good elements (Kumar & Anjaly, 2017).

Theoretical Bases of Product Return

Non-consumption behavior has been explained by the theory of reasoned action and the theory of striving to consume (Stammerjohan & Webster, 2002). Consumer decisions are influenced by antecedent attitudes, according to the notion of reasoned action. Customers behave logically in accordance with their beliefs in order to attain a desired goal; yet, based on the desired consequence, they may decide to change their thoughts or choose a new course of action. According to the theory of trying, the intention to try is formed by one's attitude toward the process, one's expectations for success and failure, and one's subjective norms.

Additionally, prior trying and conduct have an impact on current trying (Bagozzi et al., 2002). Non-consumption behaviors include saving money, ignoring, delaying, and exercising self-control (Stammerjohan & Webster, 2002). The self-referencing level and dispositional personality have been linked to complaining behavior; these findings have been explained by the idea of trying (Hansen et al., 2011).

The notion of planned conduct serves as a foundation for goal-directed behavior. The success or failure of the consumer's purpose is hypothesized to depend on their actions as well as on environmental, social, and physical factors. Consumer action starts with thought processes that evaluate expected desired outcomes. The desired results are felt as feelings. Hence, the choice to act or not is influenced by social, emotional, and cognitive processes; this process is known as “trying to consume” (Bagozzi, 2000). The notion of “failing to try to consume” suggests a minimalist or avoidance perspective, where consumers (a) “just not try” and (b) “try not to try” (Gould et al., 1997). The e-commerce scenario reduces search costs and increases the variety of products available to customers. Customers learn in real time, and social influence and causal attributions are coping strategies for managing complexities (Ziamou et al., 2012).

Research Gap

Different levels of product return in online purchases across other countries indicate a country-specific context (Variyar, 2018). Consumers' buying and return behavior are evolving rapidly in an e-commerce scenario in emerging markets. Understanding the comprehensive interaction, especially the return behavior (Kar, Tripathy, & Pathak, 2022), is essential. Product return as consumer behavior is an “evolving phenomenon” (Saarijärvi et al., 2017). The individual product return behavior (Petersen & Kumar, 2009) and overall product return behavior (Seo et al., 2016) need further investigation. The information interplay between the retailer and consumer during the purchase process and its impact on returns need further research (Sahoo et al., 2018). Understanding product returns helps different supply chain agents (Yan & Cao, 2017). It can improve the overall service quality (Martin, 2016). The information availability on the website influences customers' cognition and behavior, affecting product returns (Khare et al., 2016). We have also suggested that the fast-changing environment is ideal for understanding emotional responses and return behavior (Cook & Yurchisin, 2017).

Research Objectives

The research mainly investigates the influence of return behavior, information search, information correction, product-related reasons, dissonance, and delivery experience on product return behavior in the context of online purchases. A few examples of outcome variables that indicate returns are return frequency, return quantity, accept and return, and non-availability at the delivery address. An analysis was conducted on the impact of demographic factors, such as spending, income, and monthly expenses.

Methodology

The research adopted a quantitative approach to investigate product return behavior in e-commerce. A web-based structured questionnaire was employed to solicit responses from participants. The questionnaire included validated scales to capture insights into return behavior, information search, information correction, product-related reasons, dissonance, delivery experience, and demographic variables. The web-based questionnaire allowed for efficient data collection from a geographically diverse sample, ensuring a comprehensive analysis of product return behavior.

The respondents were individuals with online shopping experience, providing valuable insights into their return behavior, information search habits, satisfaction levels, and demographic characteristics. A list of 975 contacts, including mobile and email IDs, was generated from researchers and extended contacts. The sample frame focused on individuals with online shopping experience around the Eastern part of India, representing an emerging market context.

A total of 630 responses were received from September 2020 to January 2021, with a response rate of 64.6%. The collected data were analyzed using statistical software (e.g., SPSS) to examine the relationships between variables, test hypothesis statements, and derive meaningful insights into product return behavior in online shopping. The broad hypotheses include that returns are equally influenced by purchase factors such as return behavior, product, delivery-related reasons, issues due to the information search and correction, and dissonance.

Instruments

The instrument consisted of different sections on demography, purchase information, and the following broad aspects: (a) information search, (b) product dissonance, (c) return attitude/behavior, and (d) delivery encounters. These things came from the review of the literature and current theories regarding online shopping and the related return procedure. A comparison between purchasing and returning behavior has occasionally been made. Table 1 provides a list of all the references.

Table 1. Items and Sources of the Instrument

Category Name	Description of Items	Explanation and Source
Return Frequency	(1) Return Frequency – Probability of return, the extent to which products are returned in online purchase.	Keep intention (Gelbrich et al., 2017).
Return Style	(2) Order Return – Number or percent of returns. (3) Accept & Return – Customers usually accept the product and return it within the time. (4) Not available – If the customer is not available at the delivery address at the time of delivery.	Heavy, medium, light, and occasional returners (Foscht et al., 2013).
Return Behavior	(1) Customer intends to try the product but not buy it. (2) Customer intends to try a new product. (3) Seasonal or holiday purchase. (4) Enjoy to Return (Customers find it fun to return the product). (5) Loyalty Points in Buying (Customer buys to get loyalty points but returns later). (6) No Reason Required (Customer returns the product as there is scope to return without explaining).	Just try (Saarijärvi et al., 2017). Hedonic gratification (Jain et al., 2018). Seasonal purchases (Petersen & Kumar, 2009). Shopping enjoyment (Koufaris et al., 2001). Loyalty (Xu & Jackson, 2019). Lenient return policy (Altug & Aydinliyim, 2016) and ease of return (Pham & Ahammad, 2017).

	(7) Protest & penalize the seller (Customers want to protest and penalize by returning their product).	Abusive (Samorani et al., 2019), fraudulent (Harris, 2008), and unethical (Jack et al., 2019; Rosenbaum & Kuntze, 2003).
	(8) No money at delivery (Adequate money not available to accept the delivery).	Money shortage (Saarijärvi et al., 2017).
	(9) Impulse purchase (Customer returns the product if they purchased it on impulse).	Impulse buying (Cook & Yurchisin, 2017; Pei & Paswan, 2018), unplanned purchases (Seo et al., 2016), and unplanned online purchases (Koufaris et al., 2001).
	(10) Do not like the gift (Customers return the product if it was a gift that they do not like).	Gift (Lee & Yi, 2017; Petersen & Kumar, 2009).
Product Reasons	(1) The product is defective.	Product attributes (Cui et al., 2020).
	(2) The product is different than ordered.	Color-pattern-shape (Dzyabura et al., 2023).
	(3) Product specifications different than ordered.	Disconfirmation and mismatch (Saarijärvi et al., 2017).
	(4) Return if the customer does not like the product.	Disconfirmation and mismatch (Saarijärvi et al., 2017).
Delivery Experience	(1) Customer seeking redress or discount for product or process-related unpleasant experience during delivery.	Package opening experience (Zhou et al., 2018), Complementary product (Han et al., 2017), Redress-seeking (Kincade et al., 1998), and Keep reward (Gelbrich et al., 2017).
	(2) Delivery delays.	Reliability of order delivery (Rao et al., 2014)
	(3) Ask others before returning (seeking conformance from an influencer).	Social influence (Pei & Paswan, 2018) and post-purchase dissonance.
	(4) Bad delivery encounter (e.g., conflict with the delivery person).	Post-purchase emotion/ reaction (Cook & Yurchisin, 2017) and order fulfillment (Saarijärvi et al., 2017).
Information Search	(1) Search for online customer review information.	OCR (Lohse et al., 2017; Sahoo et al., 2018).
	(2) Consider information search as a time waste (Attitudinal or due to extensive information availability).	Website (Pham & Ahammad, 2017) and high-involvement products (Lohse et al., 2017).
	(3) Enjoy information search (Attitude of the customer).	Quality-conscious shopping style (Khare et al., 2016).
Information Correction	(1) Order mistake (Mistakes in the order identified by the customer subsequently).	Order fulfillment (Saarijärvi et al., 2017).
	(2) Found better product (Returns or cancel order if the client finds a better option).	Customer opportunism - found a better product (Powers & Lord, 2018).
Dissonance	(1) Customers change their minds at any stage of fulfillment.	Fading need (Saarijärvi et al., 2017).
	(2) Keep searching for information after placing the order.	Not satisfied with the information search.
	(3) Cancel the order before delivery.	Not satisfied with the information search.

Sample Characteristics

Nearly 60% of the respondents bought at least twice a month, 84% researched about products thoroughly before

Table 2. Sample Characteristics

		<i>N</i>	%		<i>N</i>	%
Gender	<i>M</i>	377	60.9	<i>F</i>	242	39.1
Age (years)	≤25	405	65.4	>25	214	34.6
Annual family income (INR)	≤500,000	198	32.0	>500,000	421	67.0
Monthly expense (INR)	≤10,000	418	67.5	> 10,000	201	32.5
Monthly expense (online) (INR)	≤1,000	279	45.1	>1,000	340	54.9
Buy for	Self	410	66.2	Family/others	209	33.8
Pay through	COD	244	39.4	Others	375	61.5
Monthly buying frequency	≤1	241	38.9	>1	378	61.1
Search Intensity	Adequate	102	16.5	Extensive	517	83.5
Item categories purchased	≤3	397	64.1	>3	222	35.9

making a purchase, 66% bought for themselves, and 55% spent more than ₹ 1,000 per month, according to Table 2, which lists the sample characteristics.

Analysis and Results

A regression analysis, as per the model shown in Figure 1, was conducted with purchase return as the independent variable and return behavior, product factors, delivery experience, information search and correction behavior, and dissonance as the independent variable. Further, the regression analysis used different categories to understand the influence of independent variables by various types.

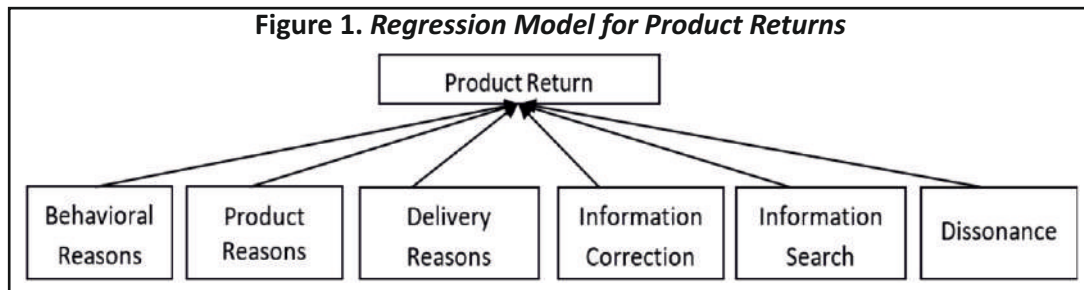


Table 3. Regression Model Coefficients of the Product Return Model

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	Correlations			Collinearity Statistics	
	<i>B</i>	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	0.818	0.175		4.676	.000					
Behavioral reasons	0.210	0.036	0.263	5.765	.000	0.396	0.227	0.206	0.612	1.633
Product reasons	0.098	0.026	0.139	3.791	.000	0.198	0.151	0.136	0.947	1.056
Delivery reasons	0.095	0.029	0.140	3.289	.001	0.334	0.132	0.118	0.704	1.420
Information correction	0.035	0.024	0.060	1.447	.148	0.269	0.058	0.052	0.743	1.345
Information search	0.087	0.042	0.076	2.077	.038	0.128	0.084	0.074	0.962	1.040
Dissonance	0.041	0.032	0.053	1.295	.196	0.253	0.052	0.046	0.752	1.331

Multiple regression analysis was used to test if predictors predict returns. The results suggest the model to be significant ($R^2 = 0.21$, $F(6,612) = 28.419$, $p = 0.000$). The overall model was significant and could explain 21% (Adjusted R square: 0.21) variance in the dependent variable (product return behavior). The significance of the variables is shown in Table 3.

Table 3 indicates that the behavioral reasons, product factors, delivery experiences, and information behavior are significant in predicting customer return in descending order. Thus, behavioral reasons are the most critical factor in return for online purchases.

Comparison of Regression Model Based on Grouping Variables

To better understand the causes of the return, additional analysis was done using different grouping variables to correct behavior, product, delivery, dissonance, and information search (Table 4). This table lists the unstandardized coefficients and their significance values when the regression was carried out for specific categories.

Table 4. Predicting Product Return Factors by Different Categories

Variables	Category	Behavioral Reasons	Product Reasons	Delivery Reasons	Information Correction	Information Search	Dissonance
Age	≤ 25	0.149**	0.106**	0.099**	0.053	0.095	0.041
	> 25	0.317**	0.081*	0.088	-0.003	0.059	0.028
Gender	Male	0.181**	0.107**	0.118**	0.044	0.092	0.028
	Female	0.244**	0.073	0.059	0.021	0.072	0.056
Annual Family Income	≤ 500,000	0.221**	0.074	0.076	0.041	0.209**	0.063
	> 500,000	0.198**	0.112**	0.099**	0.035	0.02	0.027
Monthly Expense	≤ 10,000	0.161**	0.097**	0.11**	0.032	0.138**	0.023
	> 10,000	0.31**	0.104*	0.06	0.049	-0.011	0.05
Monthly Online Spending	≤ 1,000	0.213**	0.068	0.073	0.057	0.133*	0.03
	> 1,000	0.211**	0.118**	0.111**	0.016	0.049	0.052
Monthly Buying Frequency	≤ 1	0.262**	0.11*	0.062	0.024	0.159*	-0.016
	> 1	0.171**	0.088**	0.121**	0.035	0.034	0.077
Buy for	Self	0.161**	0.079*	0.06	0.04	0.043	0.053
	Others	0.286**	0.137**	0.153**	0.031	0.154*	-0.008
Pay through	COD	0.301**	0.108**	0.054	0.018	0.123*	0.007
	Others	0.143**	0.093**	0.123**	0.044	0.055	0.056
Total item category	≤ 3	0.243**	0.091**	0.109**	0.017	0.069	0.018
	> 3	0.159**	0.115 *	0.073	0.055	0.114	0.077
Search Intensity	As required	0.027	0.063	0.257**	0.028	-0.099	0.191*
	Detailed	0.221**	0.105**	0.072*	0.038	0.144**	0.003
Accept & Return	Yes	0.176**	0.03	0.086**	0.054*	0.013	0.054
	No	0.264**	0.064*	0.055	0.021	0.087	-0.012
Cancel Order	Yes	0.429**	0.076	0.036	0.06	0.001	-0.102
	No	0.164**	0.113**	0.108**	0.03	0.105*	0.033

Note. * $p \leq 0.05$; ** $p \leq 0.01$

Returns by Demography

Returns due to delivery issues are significant for young respondents (<25 years). In all age groups, returns for product and behavior-related reasons are significant. There are also disparities in gender. Returns are significantly predicted by customer behavior for female respondents, but behavioral, product, and delivery factors significantly predict returns for male respondents.

Returns by Different Expenses

The information search behavior predicts returns for lower-income respondents, whereas delivery and product reasons are more critical for higher-income groups. Behavior-related reasons are important across income groups. The return behavior of individuals who spent less (<₹ 10,000) per month is significantly predicted by the product delivery issues and their information search behavior. In addition, return patterns and product-related factors continue to be prevalent among all monthly spending categories. The online purchase spent amount also distinguishes returns. Return for low spenders (<₹ 1,000 per month) is significantly predicted by return behavior and information search behavior. Still, return behavior and product and delivery reasons mainly affect the return by high spenders.

Returns by Frequency of Buying

For infrequent purchasers, refunds were significantly predicted by information search behavior in addition to behavioral and product reasons; however, for frequent customers, delivery reasons were major predictors rather than information searches.

Buying for Self or Others

When people buy things for themselves, returns are determined by the items and conduct of the consumer, but when someone buys something for someone else, returns are determined by the product, delivery, and information-seeking behavior of the buyer.

Mode of Payment

Beyond the behavioral and product factors, information search behavior strongly predicts returns for a person choosing to pay cash on delivery, but delivery reasons significantly predict returns for a person using an electronic payment option.

Multiple Categories of Products

Behavioral and product reasons remained significant predictors for categories in general. In addition, return depended significantly on information search behavior for those who purchased less than three categories of products.

The Extent of Information Search

Individuals who only looked for sufficient information left the search due to delivery issues and discontent. Nonetheless, those who conduct thorough product returns search for behavioral, delivery, and product-related reasons as well as informational purposes.

Discussion

This study intends to find the role of behavior, product characteristics, delivery experience, information search behavior, information correction, and dissatisfaction in online purchase returns. It concludes that in online transactions, the buy return is primarily influenced by the behavioral characteristics of the clients. The second-highest contributors to product returns are delivery-related issues and product quality, while information search activity makes up the third-largest portion. Purchase return behavior consists of factors such as experimentation (e.g., trying a new product), volition (e.g., no reason required), unethical behavior, situational factor (inability to pay at delivery), impulse purchase, period (seasonal purchase), promotional purchases, and imposed choices (e.g., gift). The unethical and situational factors may not be related to prior purchase decision factors. There are demography-related differences in purchase returns. Delivery-related reasons were significant for the younger age group (<25 years). Prior research indicated a significant relationship between age, gender, profession, search intensity, and categories (e.g., textile and household goods) with return frequency (Kar, Kar, & Tripathy, 2022).

Return behavior is significant for both genders, whereas product and delivery-related reasons are significant for males only. The family annual income effect indicates that behavior and information search are significant for lower annual income; whereas, information search is not significant for higher income (>₹ 500,000). For lower-income groups, this demonstrates return sensitivity. There's a higher likelihood of information searches among lower-income individuals. A similar result is obtained when the monthly expenses are considered. However, when only the return frequency was taken, the family income, payment method, purchase frequency, and monthly spending did not indicate a significant relation with return frequency (Kar, Kar, & Tripathy, 2022).

Implications

Theoretical Implications

In the context of using the theory of planned behavior in product returns in line with earlier research (King et al., 2008), we explored the three elements: Attitude toward information search (search for online customer review information, consider information search as a time waste, enjoy information search), subjective norms (ask others before returning), and perceived behavioral control (customers find it fun to return the product, the customer buys to get loyalty points but returns later, customer returns the product as there is scope to return without explaining, customers want to protest and penalize by returning their product). The notion of a customer contact person in the product return process is not well defined, according to an earlier research study (Autry et al., 2007), which indicated the need for more investigation. Conflict with the delivery person was one of the study's focal points—a reason for product returns.

Managerial Implications

This research identified managerial implications consistent with other research findings. Product and delivery-related reasons are controllable by e-commerce organizations, whereas return behavior and information search behavior are customer-related. The website design can influence information search behavior (Das et al., 2022). According to research, consumers are less likely to stick with a brand if they are sequentially given choices after first encountering it and then receiving contradicting information about it, as opposed to those who only hear good things about the brand afterward (Bechwati & Siegal, 2005). According to this, offering substitutes may discourage consumers from being loyal to a business in spite of unfavorable suggestions. Further, reducing the return time frame may not necessarily reduce the number of returns (Janakiraman & Ordóñez, 2012).

Customer loyalty can be increased by allowing returns, and many e-commerce businesses may find it beneficial to provide customers with the opportunity to provide return evaluations (Griffis et al., 2012). According to Powers and Jack (2013), customers experience less emotional and product dissonance when liberal return policies are taken into account. Strong online businesses have lower return rates and necessitate constant observation (Walsh et al., 2016).

Providing quality assurances, detailed descriptions of product characteristics and benefits, and efforts to recover any issues during a customer's initial return inquiry can significantly benefit online retailers in reducing product returns (Powers & Jack, 2015). Similarly, online retailers need to be able to distinguish between “positive returns” (when customers order multiple items but only return a few) and “negative returns” (when all products are returned) by utilizing effective data mining techniques (Walsh & Brylla, 2017). Customers returning a product can offer significant insights into reasons for the product return, helping the company manage its product portfolio better (Minnema et al., 2018). Higher product returns and operating costs per order may result from directing customer behavior while introducing new channels (Seeger et al., 2019). Certain marketing strategies, such as free delivery, catalogs, internet ads, and newsletters, may also result in returns (El Kihal & Shehu, 2022). It is highly recommended that consumers be informed about the return policies before their purchase to alleviate any potential tensions during return encounters (Dailey & Ülkü, 2018). Finally, managers must evaluate the influence of returns on future purchases across categories and look for variances in the return and future spending linkages between customer segments (Zhang et al., 2022).

Limitations of the Study and Scope for Future Research

The information was not sought for this study at the time of return. Among the methodological constraints include purposive sampling, internet-based surveys, and self-reporting, all of which have the potential to introduce response bias. Because it is based on subjective assessments, the ordinal item scale used to measure return frequency is not similar among respondents.

Information search, order creation, payment, and product receipt are all steps in the purchasing process. This study suggests that each step of these procedures may be moderated by the way customers return. Additionally, the client has the option to modify their opinion at any time, which suggests that more triggers lead to dissonance. For example, it can be in the form of an opinion from an influencer through social networks, among others. An open system like this produces dissonances, which in turn leads to more information being sought and decision-making revisions at various points in time. Return choices are made within a window established by the policy's duration from order creation and permitted return time. It requires more research because the duration may affect the return.

Authors' Contribution

Brajaballav Kar conceptualized the study, prepared the questionnaire, collected data, and performed data analysis. Piyusa Pritiparnna Das was responsible for data analysis, initial draft preparation, and final draft review. Sasmita Mohapatra was involved in the conceptual stage, data collection, analysis, and preparation of the final draft.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript.

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