



# Click to Buy: Behavioral Insights into Impulse Buying Triggers in E-Commerce Environments

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## Abstract

On the contrary, e-commerce has surely taken a complete revolution to the retail marketplace, allowing consumers unprecedented convenience, accessibility, and choice. Meanwhile, it has created fertile ground for impulse buying to switch unplanned purchases based on emotion rather than on rational judgment. This paper addresses the underlying behavioral triggers of impulse buying in online shopping environments and considers psychological, technological, and social factors that impinge on the behavior of a consumer. Impulse buying has indeed become very extensive in e-commerce environments, being highly characterized by spontaneity and immediacy of purchases. It is influenced by a variety of behavioral, psychological, and technological factors. This review discusses drivers of impulse buying in online settings, the role of platform design, and implications for consumers and businesses. Furthermore, the study shall seek to draw on how the understanding of such dynamics shall help businesses optimize user experience on e-commerce platforms while putting ethical considerations into account.

**Index Terms:** Impulse Buying, E-commerce, Consumer behavior, Psychological Triggers

## Introduction

Impulse buying, in other words unplanned and spontaneous buying, has often been studied in traditional retail atmosphere. However, the rise of online shopping has made this behavior more sophisticated, driven largely by personalized marketing, instant gratification, and convenience. Understanding the motivations for impulse buying in this digital space can help e-commerce businesses maximize sales while considering ethics. E-commerce platforms have changed every aspect of shoppers' behaviors. The following review explores the explanation of impulse-buying mechanisms through behavior, based on e-commerce design elements and ethical considerations of the promotion of this type of consumer behavior.

Hence, the phenomenal growth of e-commerce has revolutionized the retail environment by offering unparalleled convenience and choice for consumers. This E-commerce revolution has simultaneously brought about some significant changes in consumer behavior, especially when it comes to impulse buying. Impulse buying is an unplanned purchase because of emotions and spontaneity; hence, it is an important area of study within consumer psychology and behavioral economics. This review article discusses the factors affecting impulse buying in e-commerce environments, related to psychological, technological, and environmental variables that throw light on the mechanisms of such behaviors and ways to manage them effectively.

## Psychological Factors Driving Impulse Buying

### Emotional Statuses and Impulse Buying

Impulse buying is an unplanned, spontaneous decision to buy a certain product or service. Oftentimes, it is triggered by emotional states rather than the rational decision-making process. The relationship between different emotional states and impulse buying has been a subject of considerable interest in consumer behavior studies. Emotional states, which can be from positive emotions like joy and excitement to negative ones like stress and anxiety, play an important role in consumers' decisions.

While emotions are the most critical drivers of impulse buying behavior. Positive emotions, such as excitement or happiness, may reduce consumers' self-control and thus lead them to make unplanned purchases. On the other hand, negative emotions like stress or sadness would serve as motivators for spending retail therapy. Most e-commerce websites, with their bright-colored interfaces and personally presented recommendations, tend to be rather provocative in their emotional effect. Emotions can be the trigger to make impulse purchases. Generally speaking, positive emotions, like excitement and joy, are usually associated with a high degree of susceptibility to buying on impulse. Negative emotions such as the state of stress or boredom may also lead a consumer to make unplanned purchases as a coping mechanism.

### Cognitive Biases

Cognitive biases strongly influence impulse buying. Key biases that include impulse buying can be illustrated as follows:

- **Scarcity Effect:** Limited-time offers or low-stock alerts create a sense of urgency, pushing consumers to act quickly.
- **Anchoring Bias:** Discounts and comparative pricing anchor consumers' perceptions of value, making deals seem more attractive than they might be.
- **Overconfidence Bias:** Many consumers overestimate their ability to resist temptations, leading to impulsive decisions.

Cognitive biases, such as the scarcity effect and anchoring, plays an important role in online (E-commerce) impulse buying. The Scarcity effect, which is a situation whereby because of limited availability, urgency is created, and Anchoring, which is a situation where initial prices determine perceived value, is a common practice utilized by e-commerce platforms.

One of the strongest psychological triggers in ecommerce is the scarcity factor-perception of availability. "Only 3 left in stock!" and time-limited discounts will then provide urgency toward action so one does not miss the opportunity. It is in most aspects applying the use of "fear of missing out," using loss aversion, another cognitive bias whereby the pain from losing is stronger than the pleasure from gaining.

### Personality Traits

The impulsiveness and extraversion or low conscientious personality characteristics have a strong influence on impulsive buying behavior. These determine the degree at which individual differences influence vulnerability to triggers from environmental settings when it relates to e-commerce settings. Also, impulsivity and self-control form critical aspects in impulse-buying behavior, in that impulsive individuals are quite easily swayed compared to individuals with a high level of self-control against marketing stimuli. Impulsiveness is a general individual trait characterized by acting without thinking and giving in to the immediate impulse. Highly impulsive individuals can make unplanned purchases, especially where the emotional states and environmental contingencies like a sale or promotion are influencing their behavior.

Personality traits are enduring characteristics that reflect the way people think, feel, and act. In the context of one of the most widely accepted frameworks for classifying personality traits, Big Five Personality Traits framework-namely, extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience-these can be aligned when carrying out Behavioural insights on impulse buying. Each of the aforementioned traits drives consumer behavior uniquely in a particular manner or other in conditions involving impulse purchasing.

Extraverts are loud, energetic, and sociable, and they seek thrill and social contact. These traits predispose them to be more sensitive to external stimuli, which would include advertisements and sales promotions or a glittering dazzling environment at the store level. Extraverts are more likely to engage in impulse buying because it enhances their feeling of good mood or satiates the desire for immediate gratification.

Whereas, Neurotic people are emotionally unstable, anxious, and experience mood swings. They use shopping as an escape from negative feelings like stress, sadness, or frustration. This makes them more prone to impulsive purchases, especially of products that provide comfort, distraction, or temporary relief. Additionally, Agreeable individuals are empathetic, cooperative, and concerned with maintaining social harmony. While less impulsive than other personality types, they do use impulse buying to show they care about others, such as making unplanned purchases of gifts. Most of their impulse buying is targeted at maintaining relationships or social expectations.

### **Affect Infusion Model (AIM)**

The Affect Infusion Model-AIM-is one such framework, introduced by Joseph P. Forgas, that shows how mood influences judgment and decision-making. It describes how either positive or negative feelings can "infuse" cognitive processes, such that the way people perceive, interpret, and evaluate information changes. The AIM postulates that an individual's emotional states will influence their cognitive processes and decision-making. For instance, positive emotions may lead people to perceive products as more attractive and hence to buy on impulse. On the other hand, negative emotions may lead to compensatory purchases in order to elevate mood.

### **Dual-Process Theory**

Dual Process Theory describes two systems of thinking and decision-making: automatic and intuitive System 1, and deliberative and analytical System 2. The theory goes a long way in helping to explain consumer behavior, especially impulse buying, which is emotional and spontaneous. This theory highlights the interplay between impulsive-emotion-driven-and reflective-logic-driven-systems in decision-making. Personality traits, such as impulsivity and conscientiousness, determine which system dominates in making purchasing decisions. For instance, impulsive people are more likely to depend on the impulsive system, hence making purchases spontaneously. Personality traits significantly influence the likelihood and nature of impulse buying. For example, extraversion, neuroticism, and impulsivity have positive relations with impulsive purchasing behaviors, whereas conscientiousness and self-control serve as protective factors. The elucidation of such dynamics goes a long way in providing marketers with immense help in formulating workable strategies, and also aids consumers in making better choices.

### **Impact of Technological Factors and E-Commerce Features towards impulse buying**

Impulse buying, generally defined as unplanned, spontaneous purchases impelled by emotional or situational triggers. This has taken on a whole new dimension with evolving technology and growing e-commerce. Advanced technologies have been seamlessly integrated into online shopping to create an ecosystem that not only fosters convenience and personalized experiences but also subtly encourages impulsive behavior.

### **Artificial Intelligence and Personalization**

E-commerce is now using Artificial Intelligence as a cornerstone, promoting highly personalized experiences within the shopping spree. AI algorithms create recommendations based on consumer browsing history and other consumer patterns for merchandise. Commonly referred to as "You may also like," these options or "Frequently bought together" greatly raise the number of unplanned purchases due to their presentation in such an item-relevant-desirable manner.

Personalization builds familiarity and attachment to products, making choices easier because the shopping experience is enhanced. For example, Amazon and Netflix use AI to predict what consumers will want to buy or watch next, easing them toward purchases. This breeds convenience, yet it also leads to ethical concerns

about manipulation, where consumers may unknowingly fall victim to targeted marketing methods that take advantage of their vulnerabilities.

## Mobile Technology and Accessibility

The rise of the smartphone has converted shopping into an omnipresent activity. Mobile applications and responsive websites make online stores available instantly to the user and are usable at any time and from any location for browsing and buying. Features like push notifications, notifying users about flash sales or items in stock, have emerged as powerful triggers for impulse buying. The same mobile platforms also facilitate buying through one-click ordering and digital wallets by reducing friction, which triggers spontaneity. These innovations will improve user experience but may result in financial overextension, since consumers too often give in to convenience rather than making rational choices.

Mobile shopping applications have made online shopping even more accessible. Features like one-click purchases, push notifications, and mobile wallet integrations reduce friction in buying processes, therefore fostering impulsivity. Most applications have loyalty points, gamification, or rewards when one is making a purchase. This enhances customers' engagement and possibly impulsive purchases because users feel that they are gaining more value than in the product alone. Besides, the integration of social features like product reviews, ratings, or shareability might affect the decisions. Positive reviews, or seeing the purchases of friends, may give them assurance-social proof-that will stimulate them to buy impulsively.

Mobile apps create an enabling environment for impulsive purchases by removing friction in buying, creating personalized and engaging experiences, and capitalizing on psychological triggers such as urgency, convenience, and social influence.

## Personalized E-commerce Algorithms

Contemporary e-commerce platforms rely on advanced algorithms in personalizing the experience. These systems, while considering past buying habits, browsing history, and demographics, offer personalized product recommendations. While personalization enhances user satisfaction, it increases the probability of impulse buying as consumers are faced with things that are difficult to resist. Advanced algorithms used in e-commerce websites offer recommendations that enhance the chances of impulsive purchases. Research has shown that personalized product recommendations, considering past browsing history and stated preferences, create a feeling of relevance and immediacy.

## Gamification

Gamification features-spinning wheels to get discounts, earning points towards purchases-avail the intrinsic motivational drive of getting rewards. Similarly, repeat purchase incentives through loyalty programs build a feeling of progress and exclusivity, continued engagement with the platform. While this improves satisfaction and loyalty among its users, such features may result in impulsive spending because shopping appears to be a game. A balance between the two-engagement and responsibility-can be achieved to avoid excessive consumption. Therefore, Gamification elements like reward points, badges, and limited-time challenges would give a sense of achievement and urgency. These features tap into consumers' intrinsic motivations and competitive instincts, encouraging unplanned purchases.

## Social Media Integration

Consequently, social media platforms such as Instagram, TikTok, and Facebook stands where browsing products, services and organisations. With such developments as shoppable posts, promotion by influencers, and the introduction of live-product showcases, buying has been introduced into the communication part and created fertile conditions for making an unplanned purchase of goods. Because a potential customer receives online real-time feeds about popular deals of items and limited availability, "FOMO" works its wonders over social media channels of communication. Influencers are central in this network and use their credibility and reach to promote certain products. Their recommendations mostly sound very trusting and relatable, which

may encourage followers to make impulsive purchases. This practice has raised questions about transparency and authenticity, as not all influencer partnerships are always disclosed.

Where technological factors and e-commerce features have drastically shaped the landscape of impulse buying, convenience and personalization were facilitated, along with raising ethical and sustainability concerns. The combination of AI, mobile technology, integration of social media, and innovative e-commerce features have formed a very consumer-friendly environment that serves the impulsive tendencies of people. It is also imperative to consider the chances of overconsumption, financial stress, and ethical dilemmas. The key to a sustainable and consumer-friendly ecosystem in e-commerce is striking a balance between technological advancements and the fostering of responsible practices. Transparency, education, and ethical innovation would, in fact, allow stakeholders to minimize the negative consequences of these emerging trends without necessarily compromising their advantages.

## **Behavioral Theories on Impulse Buying**

### **1. Theory of Planned Behavior (TPB)**

TPB claims that humans' behavior is affected by intention, attitude, subjective norms, and perceived behavioral control. It can be viewed that in impulse buying, e-commerce platforms manipulate positive attitudes toward various products, generate social norms for reviews, and decrease perceived control with one-click purchasing. According to the model, the most emphasized components of the attitude, subjective norms, and perceived behavioral control are those that molds the intentions and behaviors. Social norms and perceived ease of purchase in e-commerce could be strong antecedents for impulse buying. For example, "limited time offers" with seamless checkout processes increase perceived control and urgency.

### **2. Stimulus-Organism-Response (S-O-R) Model**

This model explains how the environmental stimuli—specifically, the website design and promotions affect an individual's internal state, which includes emotions and cognition, thereby leading to particular responses, including impulse buying. E-commerce sites enhance their stimuli to ensure favorable organismic states that will lead to impulsive behavior.

Relating the impulsive buying situation to the SOR model, the stimulus is the customer visiting the online store where a banner ad pops up saying, "50% off selected items, Sale ends in 30 minutes!" The website also shows a countdown timer and highlights a few items of trendy clothes with a "limited stock" label. A variety of excitement in the customer because of the presence of a sale, coupled with a fear of losing an opportunity. This excitement coupled with a perceived value because of heavily discounted items will provide a mental justification of buying. The rationale of saving money because one is buying now is the Organism (O). Therefore, Response (R) would be that the customer impulsively clicks on a number of items, adds them to the cart, and then proceeds to checkout without actually considering if they really need the items. Hence, the unplanned purchase is the response stirred by the stimulus and internal emotional processes.

The S-O-R model can be used to explain the dimensions of external stimuli in an e-commerce environment that may trigger impulse buying behavior. A close analysis of the stimuli that activate emotional and cognitive processes among consumers can thus help businesses create more effective marketing strategies for the encouragement of impulsive purchasing.

### **3. Self-Regulation Theory**

Impulse buying is usually conceptualized in relation to the failure of self-regulation. Ego depletion, decision fatigue, and the immediacy of rewards in e-commerce contexts all undermine a consumer's resistance to temptations.

Self-Regulation Theory describes how individuals manage their impulses, emotions, and behaviors to achieve long-term goals. Relating to impulse buying, the theory postulates that a consumer generally exercises self-control in making buying decisions by weighing his or her desires against future consequences. Impulse

buying, therefore, occurs when self-regulation has failed, such as when immediate gratification outweighs long-term goals. Self-regulation, therefore, becomes weak due to factors such as emotional states, stress, or any external cues-for example, sales or promotions-which make consumers very prone to unplanned purchases. Thus, self-regulation theory emphasizes the inner conflict between immediate desires and conscious efforts to avoid impulsive buying behaviors.

### **Implications on leveraging impulse buying for E-Commerce Businesses**

This has great implications for the e-commerce business in the evolution of rapid changes in technology, consumer behavior, and global market dynamics. These changes will continue to offer great opportunities and challenges that shape the ways in which companies conduct and compete in the digital marketplace. Key factors driving and shaping e-commerce businesses today include technology, consumer expectations, regulatory environments, and sustainability.

E-commerce operations are being transformed by emerging technologies such as AI, machine learning, and blockchain. AI helps in personalizing the shopping experience of customers through data analysis to suggest products and price optimization. Chatbots and virtual assistants enhance customer service, ensuring that customers get support anytime, anywhere. While blockchain increases the security of transactions and transparency in supply chains, it builds trust among consumers. Those businesses that do not adopt these technologies will lag behind in the increasing competition.

While modern consumers want seamless and frictionless shopping experiences. M-commerce has surged, with many shoppers now preferring to browse and buy through their smartphones. This trend indicates the need for mobile-optimized websites and apps. Besides, for delivery, consumers are asking for quicker options, which is driving the same-day and next-day shipping services. E-commerce businesses need to invest in logistics and inventory management to meet such expectations. Furthermore, the increasing use of social media for product discovery puts greater demands on effective digital marketing strategies, influencer partnerships, and engaging content.

On the other hand, e-commerce companies must operate in an increasingly complicated regulatory environment. Data protection laws, such as the General Data Protection Regulation (GDPR) in Europe, and the California Consumer Privacy Act, place strict demands on companies with respect to handling customer data. The result of non-compliance can be huge fines, besides loss of reputation. In addition, each business operating across borders will have to adapt to different tax regulations and trade policies. Adapting to these legal frameworks requires huge investment in compliance measures, legal expertise, and technology infrastructure.

Sustainability has been turning out to be an important consideration for consumers when making purchasing decisions. They are likely to support a business that makes key considerations in sustainability. This may compel e-commerce companies to utilize sustainable packaging, minimize carbon footprint in logistics, and sell eco-friendly products. Such features will help bring brand loyalty and appeal to green-minded consumers.

At the same time, authenticity and transparency in all actions would not be labeled as "greenwashing."

Moreover, the success of e-commerce is much about data-driven decision-making. A business should make use of analytics tools to derive insight into customer preference, purchasing patterns, and market trends. Predictive analytics would forecast demand, optimize inventory, and reduce operational costs. However, collecting and using data responsibly is important to gain customer trust and compliance with data protection regulations.

Therefore, the business environment for electronic commerce is highly dynamic and fiercely competitive. This is a key factor. In positioning for success over the long term, companies need to integrate technological innovations, consumer expectations, regulatory complexity, and sustainability into their business. As the digital landscape continues to shape-shift, it is about remaining proactive, using data and innovation to meet the demands of a sophisticated global audience. Indeed, those best able to juggle these competing priorities will thrive in this ever-changing e-commerce world.

## Strategies for Consumers to Manage Impulse Buying

Impulse buying is an unplanned and spontaneous purchase of products based on feelings, marketing strategies, and environmental stimuli. While impulse buying gives a person momentary satisfaction, if unchecked, it could result in financial stress and a buyer's regret. The review will cover strategies that are considered helpful for consumers in handling impulse buying and becoming more conscious with spending.

Well, the key to managing impulse buying is to understand what triggers it. The drivers of impulsive purchases are usually emotional states, such as stress, boredom, or happiness. Retail environments amplify the temptation to buy through sales promotions, limited-time offers, and persuasive advertising. Much can be gleaned from reflection by the consumer on his or her spending in the form of a journal of purchases, looking for patterns, and finding specific triggers. Greater self-awareness provides the foundation for making deliberate and informed purchasing decisions.

Clearly defined financial goals could keep impulse spending at bay. Whether it is saving for a vacation, debt repayment, or building up an emergency fund, a tangible objective keeps many people disciplined. Budgeting allows the consumer to correlate spending with those goals. A consumer should earmark certain amounts for discretionary expenses and monitor how well he or she stays within the limits. One practice that may help in this regard is the delayed gratification, like waiting 24–48 hours before making a purchase. Mindfulness techniques will also aid in overcoming an impulsive urge. A consumer has to stop before buying and should ask himself some questions: "Do I need this item?" or "How will this benefit me in the long run? Hence, Engaging the rational part of the brain helps counteract emotional decision-making. Furthermore, some consumers tend to swear by the "30-day rule," which involves waiting a month before buying something not essential, to see if it's still important.

A well-outlined shopping plan-impulses may be minimized, particularly for grocery and retail shopping trips. It should be done by making a precise list of the needed items and rigidly adhering to it. The comfort of online shopping introduces other challenges, including one-click purchase options and online targeted ads. To balance out these disadvantages, browsers' extensions can similarly be utilized to block advertisements or turn off the saved payment methods in order to give a person pause before finishing their purchase. Managing impulsive purchases involves a mix of awareness, discipline, and acting in proactive ways. This could be appropriately achieved by recognizing triggers, considering financial goals, and using overall mindful practices to effectively balance indulging occasionally while keeping money matters in their proper perspective. In a consumerist environment, nurturing this ability would help not only protect the purse but also ensure an intentional and sustainable culture of consumption.

## Strategies Businesses could use to Leverage Impulse Buying

Impulsiveness is one of the most powerful drivers of consumer spending contributing to a significant percentage in retail sales. Impulse purchases are those unplanned purchases triggered by various stimuli through the process of a customer's journey either instore or online. Impulse buying is a natural phenomenon that can be harnessed to maximum effect by businesses.

The most suggested ways of encouraging impulse buying include strategic product placement. Physical stores can place high-margin or attention-grabbing products near checkout counters, where customers are most likely to make fast, spur-of-the-moment purchases. Items like snacks, cosmetics, and small accessories are generally placed at check-out points to entice shoppers. Online shopping can be given product recommendations by browsing history or placing impulse-buy suggestions in the cart. All this will definitely develop the tendency to make more purchases before checkout. Similarly, an enjoyable atmosphere for shopping will make customers more vulnerable to impulse buying. Companies should think about creating an immersive atmosphere through sensory elements like lighting, music, and scent. For example, retailers can use upbeat music to create the atmosphere that motivates consumers to spend more time in a store, walking around and looking for something to buy. Appealing displays with clearly visible, easily scanned sections can guide customers' attention to unplanned items that may be purchased on impulse.

Thus, loyalty programs and rewards not only retention of customers but impulsive buying comes with the same ticket when offering immediate reward satisfaction. Business owners can even tailor rewards so that customers get something instantly, tempting them to make an instant buy. A customer receives special discounts when he reaches the threshold limit after spending so much or gets points to avail later impulsively. These programs tap into the psychology of instant rewards, encouraging customers to make unplanned purchases in order to gain more benefits. Whereas, Urgency acts as a driver for impulse purchases. A customer is bound to take action due to limited-time offers or flash sales that create a sense of shortage. Offering discounts that are to expire within a few hours or promoting "flash sales" with a countdown timer can trigger consumers into making snap decisions. FOMO, or the fear of missing out, is a very strong psychological trigger that businesses could use to compel purchases. It works particularly well online and in-store, as the ticking clock or "limited availability" message nudges customers toward acting quickly.

Moreover, loyalty programs and rewards are effective not only in retaining customers but also for impulse purchases through immediate gratification. Businesses can design rewards that give customers an instant incentive to make a purchase. For example, a customer may get a special discount after spending a certain amount or earn points redeemable on impulse buys later. Such programs tap into instant rewards psychology, wherein customers, in a race to getting more benefits from these very programs, spend money not planned upon. Social proof also tends to be among the most powerful means of encouraging impulse purchases. Positive reviews, user-generated content, and endorsements by influential individuals will surely convince customers to indulge in unplanned spending. Product page ratings and testimonials showcasing the popularity or trending of a certain item will help create confidence in the customer. When they see that others are buying the same product, it justifies their choice, influencing them to purchase impulsively.

Impulse buying requires the business to understand human psychology very well and establish an environment that will lead to the occurrence of these purchases. Businesses can embrace a number of strategies cashing in on this behavior—from product placement, personalized recommendations, and limited-time offers to experiences that engage people. By properly understanding the factors that will trigger impulse purchases, businesses could increase their sales and build long-term relationships with their customers.

## Ethical Considerations

Behavioral insights in relation to impulse buying triggers have now become a powerfully exercised instrument of business in e-commerce environments. By understanding the consumer's psyche and using data-driven strategies to influence buying behaviors, businesses could optimize their respective online platforms as a means to help drive sales. While these strategies might be highly effective, again, they raise important ethical concerns regarding consumer autonomy, privacy, and manipulation. The utilization of this insight in triggering impulse buying should be with ethical practices with the aim of putting the consumer first.

The most important ethics in the use of behavioral insight within e-commerce is being able to avoid attempting to manipulate consumers into making certain purchases when they are not in need or even desire them. It may lead to regret and financial burden later, especially when consumers are rushed to make quick decisions without a chance to really consider their purchasing behavior or, more importantly, the long-term consequences of a purchase. For instance, sales strategies such as scarcity ("only 3 items in stock") and countdowns for urgency may force a consumer into making a decision based on more emotional rather than well-thought-out reasoning. These strategies may, while effective for increasing sales, undermine the principle of consumer autonomy and nudge people towards decisions they may never have made when under less compulsion. Ethical e-commerce will want to refrain from manipulative techniques that take unfair advantage of a vulnerable consumer, for instance, the use of one-sided psychological tricks to favor immediate sales over the welfare of a customer.

Ethics also have to be applied when it comes to the collection and use of data on consumers in e-commerce. Most of the insights into behavior are based on the data provided by consumers through browsing history, buying behavior, or personal information. In most cases, this is used by e-commerce businesses for personalizing their marketing efforts through product recommendations or targeted promotions. There are a lot of privacy concerns raised through the use of consumer data. Not every time, the consumer is aware of how and where data are collected or treated, it may be also transferred to the third party without consent. Ethical approach in this respect should be the business has to provide transparency in collection of information

and get valid consent and informed consent on use of their personal information from consumers. Moreover, the companies need to adopt rigorous data protection policy to prevent unauthorized access or data leakage that can further cause consumer harm.

Children, the elderly, people in bad financial situation, may fall prey to over buying due to impulsive purchasing. Application of targeted marketing to the consumer in these segments is considered an ethical issue with recommendation of expensive goods or creating illusion of scarcity. These are people who might not have the resources, the critical thinking, or the abilities to make an informed decision and, as such, may be easily exploited. In an ethical e-commerce environment, businesses should take extra precautions in ensuring that marketing tactics do not exploit these vulnerable groups. For instance, offering products that promote well-being or providing financial transparency in pricing could help protect vulnerable consumers from undue influence. Besides, businesses should take into account the broader impact on impulse buying to influence customer wellbeing. An impulse buy may appear innocuous over the short term, but continued purchasing could culminate in financial hardship, stress, and a negative attitude toward consumerism. E-commerce companies have to keep in mind the repercussions of their long-term plans concerning consumer behavior and wellbeing. This can be encouraged through responsible marketing, clarity of pricing, and information to enable consumers to make well-considered choices. The possible introduction of "cooling-off periods" or pre-checkout reminders about budget could reduce the negative impact caused by impulse buying. Another ethical issue that arises is related to the level of transparency in the marketing strategies being implemented. While many e-commerce companies use behavioral insights to drive impulse purchases, it is critical that marketing materials be transparent and not misleading. False claims of product availability or inflated promises about the efficacy of products deceive consumers into buyer's remorse. Ethical business needs to ensure that all advertising is truthful, transparent, and not misleading; therefore, consumers can make their choices in full awareness and are not deceived into making premature decisions.

Gaining insights on the triggers of impulse buying can handsomely and powerfully help an e-commerce approach; however, companies need to be concerned about ethics in marketing practices. These could be used responsibly by businesses in pitting marketing strategies that respect consumer autonomy, protect privacy, avoid the exploitation of vulnerable groups, are transparent, and consider the long-term well-being of the consumer. Ethical e-commerce practices are not only a moral responsibility but can build up consumer trust and loyalty in ways that will ensure sustainable marketplace growth.

## Conclusion

A combination of behavioral, environmental, and practical strategies can assist consumers in controlling impulse buying. Impulse buying can be considerably reduced by developing self-discipline with the help of a shopping list, budget, and being more mindful. Recognizing triggers and understanding psychological and emotional triggers also helps in making more thoughtful and deliberate purchasing decisions. In this way, one can learn how to take control over their spending and avoid financial losses due to impulse buying.

Impulse buying in an e-commerce environment is a sophisticated phenomenon influenced by an interaction of psychological, technological, and environmental factors. While this might help in driving sales for businesses, this knowledge shall be put to use considering ethical and consumer welfare angles. Understanding the underlying mechanisms of impulsive behavior may allow stakeholders to work out a balanced and sustainable electronic commerce ecosystem. In fact, future research should be done on longitudinal studies regarding the assessment of long-term impacts of e-commerce strategies on consumer behavior and interventions that will lead to responsible consumption.

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