

# Impulse Buying in the Digital Age - The Influence of Personalized Ads, Recommendations, and Instant Purchasing Options

Sonia Pal

Department of Management Studies, Rukmini Devi Institute of Advanced Studies, Delhi, INDIA.

Corresponding Author: [soniapalofficial@gmail.com](mailto:soniapalofficial@gmail.com)



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## ABSTRACT

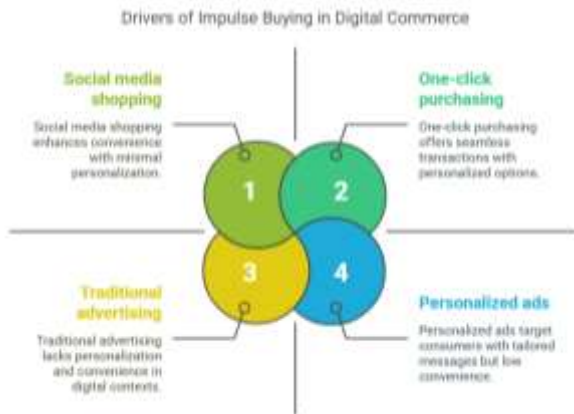
Impulsive purchase, or autonomous consuming, has long piqued the curiosity of consumer experts. However, with technological advancements, the situation has deteriorated. Integrating e-commerce with AI, big data, and personalised marketing strategies has intensified impulsive purchasing behavior among customers. Online targeted advertising, AI-driven product suggestions, and a streamlined purchasing procedure profoundly impact consumer decision-making by fostering instances of self-indulgent spending. This study examines impulsive purchase behaviour's psychological and technical dimensions, emphasising immediate gratification, emotional state, and persuasive stimuli. It also examines the implementation of recommendation systems, which discern patterns in customer behavior and genuine needs and interests, subsequently suggesting things the consumer would not have considered. The study recognises the ethical issues associated with data-driven marketing, including the infringement of privacy rights due to the collection of personal information, manipulation of consumer behavior, and the potential extraction of financial value from customers. Consequently, the article examines solutions for consumers to mitigate impulsive buying behaviors, including prudent purchasing habits, budgeting, and comprehension of digital financial technology. Consequently, it becomes more manageable for consumers and commercial enterprises to function ethically within this constantly evolving digital economy.

**Keywords-** Impulse Buying, Digital Consumer Behavior, Personalized Advertising, AI-Driven Recommendations, One-Click Purchasing, Ethical Concerns in Marketing.

## I. INTRODUCTION

The cultural shift enabled by internet shopping has exacerbated the occurrence of impulsive buying. In conventional retail settings, several persuasive strategies have prompted consumers to buy unanticipated items; digital platforms have used sophisticated technology to encourage impulsive online purchases. The existing prospects in e-commerce, social commerce, and AI-driven advertising have shown the capacity for accurate consumer data in the business sector, enabling hyper-personalization. This section demonstrates that customised marketing significantly affects impulsive purchasing behaviour among consumers in the digital

environment. The advancement of advertising using information and communication technology has markedly progressed, enabling organisations to monitor user actions, browser history, and purchase behaviour. This enables the generation of relevant adverts instantaneously using data analytics and artificial intelligence (Ngo et al., 2024). He noted that social media, search engines, and e-commerce platforms use advertisements that target those susceptible to hasty purchases. The commercials, with dynamic pricing, time-limited discounts, and one-click purchasing options, make the products appealing and foster impulsive buying.



**Figure 1: Drivers of impulse buying in Digital commerce**

It is important to acknowledge that section suggestions significantly impact customers, alongside marketing. This approach utilises current activities, purchasing behavior, and analogous consumers to find and propose things of interest to the buyer. Major online marketplaces such as Amazon, Alibaba's T-mall, and Walmart use machine learning algorithms to suggest items via 'Bought Together' or 'Customers Also Bought' features. In addition to enhancing the product's usability for customers, these recommendations also encourage consumers to acquire other items not included on their shopping lists. Moreover, the alternative payment methods associated with download links provide users an immediate method for acquiring the desired content. Functions such as buy one get one, one-click ordering, digital wallets, and similar features have significantly simplified the purchasing process for customers, minimising the work required. The psychological barrier of entering payment information or enduring a lengthy checkout procedure has been eliminated, allowing individuals to indulge in items while immediate gratification is promoted. Retailers exploit this inclination by using countdown clocks, flash deals, and early-bird incentives that drive consumers to purchase.

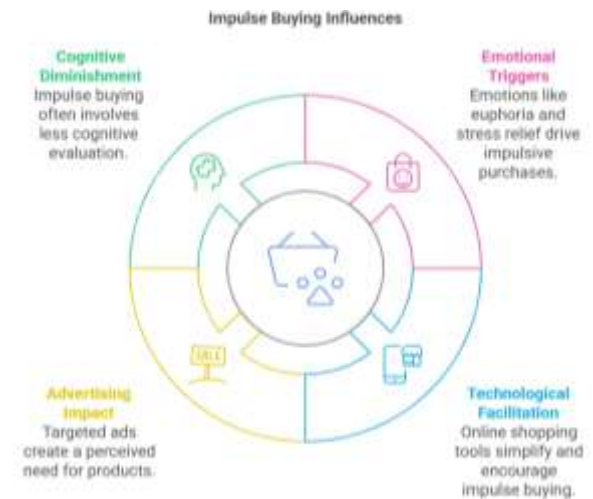
Another factor contributing to impulsive spending is social proof, informational social influence, and user-generated content. Online evaluations and endorsements from preferred social media influencers and acquaintances provide individuals with validation and acknowledgment. The inclination to purchase will likely arise when customers get favorable feedback from others, particularly those they see as influential. Live-stream shopping, with influencers showcasing items in real time, has proven efficient in facilitating impulsive purchases due to its engaging and dynamic nature. The accessibility of mobile commerce has facilitated impulsive purchasing among consumers due to the ease of making purchases (Faisal et al., 2020). Through the frequent use of shopping apps and the availability of

alerts and alert features, customers are perpetually subjected to promotional offers. Social media platforms like Instagram, TikTok, and Facebook Marketplace facilitate seamless purchasing by enabling users to find things immediately inside the apps.

**II. THEORETICAL BACKGROUND**

**2.1. Impulse Buying: Definition and Characteristics**

Impulse purchasing denotes purchases executed without previous forethought, resulting in fast consumer judgments. In branded items, there is previous recognition and comparison of brands; nonetheless, impulse buying is a category of purchasing mostly driven by impulsive influences such as convenience and advertising. In contemporary society, the extensive use of the Internet, online retail, tailored offers, and one-click shopping has further facilitated such behavior. Impulse purchasing is characterised by hasty decision-making, when acquiring goods occurs rapidly and with little forethought (Faisal et al., 2020). A consumer might be easily influenced to purchase a product due to its aesthetic appeal or the urgency created by a limited-time offer. This differs from the need to act without a provoking situation. The last attribute of impulsive purchases is that they are mostly influenced by buyers' impulses, which are fundamentally derived from emotions. The euphoria experienced when shopping might lead individuals to make trivial purchases, since shopping alleviates stress and enhances mood.



There exists a link between impulsive purchasing and diminished cognitive evaluation. Impulsive buyers make spontaneous purchases, sometimes without thoroughly evaluating the goods' usefulness. Facilitating one-click ordering, streamlined checkout procedures, and product recommendations has reduced the gap between desire and actual purchase. New media tools have significantly facilitated impulsive

purchasing. Advertisements tailored to prevalent browsing behaviors engender a sense of relevance in customers, prompting the perception of need for the products. Moreover, recommendation systems provide relevant or popular goods, incentivising users to acquire additional things at checkout. The capacity for spontaneous spending in the digital era arises from psychological triggers, advanced technology, and targeted promotional activities designed to activate the consumer's purchasing impulse.

**2.2. Psychological Triggers Behind Impulse Purchases**

Impulse purchasing by consumers in the digital era is conditioned by psychological aspects illuminating consumer purchase choices. The emergence of online trading, customised marketing, AI-driven recommendation systems, and discreet purchasing choices has led to a substantial rise in impulsive buying. Several variables contribute to individuals' behavior in this context, leading them to engage in excessive online spending. Another reason individuals succumb to impulsive purchasing is due to carnal desires. Digital platforms augment this technique via seamless checkouts, unique discounts, and referral programs that create a sense of urgency. Additional psychological triggers that drive consumers to make impulsive purchases include enthusiasm, pleasure, and the fear of missing out (FOMO), significantly influencing consumer purchasing behavior (Rodrigues et al., 2021). The prospect of receiving an immediate benefit, such as free shipment or a discount, enhances the likelihood of such an action. That may explain why customisation is a significant element in impulsive purchasing. Enhanced recommendation systems use consumers' browsing profiles and historical purchasing history to suggest goods of significant interest. This method depends on certain cognitive heuristics, such as the familiarity effect, which suggests that consumers are more likely to acquire a product with which they are acquainted.

Social proof similarly enhances this inclination. Reviews from actual purchasers, star ratings, testimonials, and endorsements from influencers confer authenticity and attractiveness to the product. This line of reasoning is used in a fundamental social psychological manner; for example, seeing friends, celebrities, or social icons using a certain product activates the brain's desire to purchase it. The use of technology in payment methods has significantly impacted impulsive purchasing. The ubiquitous utilisation of credit and debit cards, alongside recorded payment information and one-click purchasing, significantly diminishes the time, effort, and energy required for transactions to almost negligible levels. In a consumer-driven society, most individuals would not hesitate to purchase impulsively, inadvertently contributing to rampant expenditure.



**2.3. Evolution of Impulse Buying in Digital Platforms**

The phenomenon known as impulsive purchasing has significantly developed in the digital era. Historically, impulsive purchasing was exclusive to the physical retail environment, where strategically positioned merchandise near checkout counters prompted shoppers to make unplanned purchases. Nonetheless, via e-commerce, social networking platforms, and artificial intelligence, new definitions of impulsive buying are being formulated owing to tailored marketing, purchasing alternatives, and recommendation systems. A significant change pertains to the topic of quantitative advertising targeting individuals. These advanced techniques evaluate customer behaviors, historical actions, and patterns to generate adverts tailored to their preferences. Targeted adverts on social media, Google searches, and e-commerce platforms significantly increase the likelihood of impulsive purchasing by showcasing related items. Digital impulsive purchasing is further facilitated by suggestions powered by artificial intelligence (Ngo et al., 2024). Currently, Amazon and eBay assist customers by recommending certain goods based on the client's prior behavior, analogous behaviors of other clients, or browsing history. Suggestions such as 'You May Also Purchase' or 'consumers Who Bought This Also Bought' manipulate consumers by creating a sense of relevance or urgency, compelling them to make purchases based on the actions of others.

The following aspects further facilitate the impulsive buying behavior shown by contemporary consumers: one-click purchasing, digital wallets, and other functionalities that enable transactions via mobile applications. Elements like "Call to Action" buttons and stored payment methods obstruct various consumer decision-making processes and facilitate impulsive purchases for those who may otherwise deliberate longer before making a decision. Limited-time deals, flash

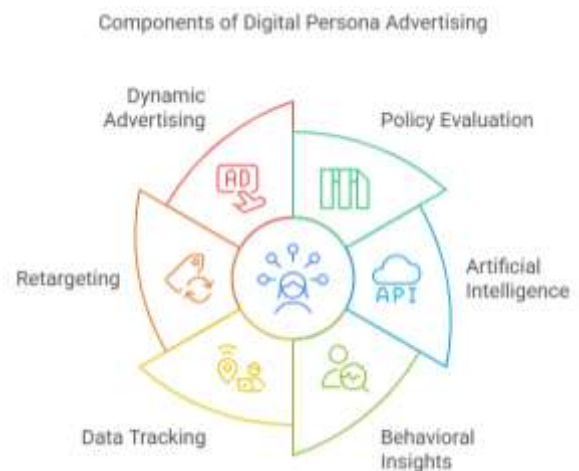
discounts, and countdown clocks further engage many psychological factors that amplify the impact of FOMO on consumers. The prevalence of impulsive purchasing is poised to escalate further due to emerging sophisticated technologies in the digital realm, including augmented reality, real-time voice commerce, and artificial intelligence-enabled bots.

### III. PERSONALIZED ADVERTISEMENTS AND THEIR ROLE IN IMPULSE BUYING

The expansion of internet shopping and advancements in marketing technology contribute to the increasing prevalence of impulsive purchasing. This predicament arises from several factors, particularly the current advances in marketing customisation driven by data analytics, artificial intelligence, and consumer behavior analysis. Unlike traditional marketing strategies focusing on specific demographics such as age, gender, or ethnicity, personalised advertisements aim at individual consumers based on their predicted preferences, previous purchases, interests, and subconscious triggers. This degree of customisation increases the likelihood of product acquisition, promoting impulsive purchases since the consumer perceives it as unique, urgent, and essential.

#### 3.1. The Mechanism of Personalized Advertising

Digital persona advertising is a complex marketing strategy that integrates policy evaluation, artificial intelligence, and behavioral insights to stimulate impulsive purchasing among customers. Modern companies track user activity across websites, apps, and social networks, amassing extensive data on their preferences, interests, and behaviors. The information is then analysed using sophisticated algorithms to guarantee that the adverts are relevant and timely, increasing the likelihood of impulsive purchases. A prevalent strategy used in the execution of advertising personalisation is the monitoring of actions and data. Cookies, tracking pixels, and AI-driven techniques assist digital platforms in monitoring users' behavior, including search preferences and prior purchases. This allows the corporate community to comprehensively understand customers and anticipate potential purchasing motivations (Upreti et al., 2024). Retargeting and dynamic advertisements further enhance the propensity for impulsive purchases. When a customer visits a website and expresses interest in certain goods, adverts for related items are consistently shown, subtly encouraging the user to purchase.



The examination of trends in consumer behavior and future preferences accomplishes this. For example, the 'add-ons' in the consumer context may include product recommendations or a curated selection of articles based on the user's profile, the implementation of which might affect impulsive buying behavior. Moreover, the HDM used compelling language in hyper-personalized emails and timely offers, which enhanced exposure levels, while effective push alerts increased engagement. Expressions like 'exclusive deal for you' or 'limited-time offer' stimulate psychological states that drive individuals to acquire the goods. The tactics above enable advertisement customisation to engage customers' awareness and stimulate spontaneous purchases, making it a crucial element of digital commerce.

#### 3.2. Emotional and Cognitive Impact on Consumers

Consumers are significantly affected by personal advertisements in today's society, particularly with impulsive purchases. These are types of appeals that engage the psychological dimensions of the customer, perhaps prompting an impulsive purchase. Emotional involvement is a significant criterion, since advertisements may evoke a considerable degree of excitement, happiness, or even concern in individuals. Consequently, digital platforms provide consumers with many possibilities, leading them to make selections that ultimately overwhelm them. Personalised advertising mitigates this by offering a restricted selection, facilitating swift decision-making for consumers with little contemplation. This form of advertising is particularly successful since it amplifies the propensity for impulsive purchasing. Moreover, individuals exhibit greater trust and familiarity with businesses that disseminate advertisements aligned with their interests. This relationship elicits pleasure and justifies impulsive purchases of non-essential products that may be linked to happiness (Balboa et al., 2024). Another significant aspect is convenience, facilitated by seamless internet buying experiences. The elimination of the need for consumers to re-enter credit card information and browse different websites for checkout and the option for expedited or overnight shipment reduces the effort

required for product acquisition. This indicates that tailored advertisements induce consumers to make impulsive purchases in the digital marketplace via emotional appeal, little cognitive engagement, brand trust, and an accessible impulse purchasing mechanism.



### 3.3. Case Studies on Personalized Advertising Influence

The advancements in targeted advertising on e-commerce platforms have markedly heightened the propensity for impulsive purchases. Contemporary online marketplaces, such as Amazon, use recommendation algorithms to suggest goods based on client data, including browsing and purchase history and emerging trends. Recommendations such as "Frequently Bought Together" and "Customers Also Bought" are seamlessly integrated into the customer buying experience, fostering a predisposition for impulsive purchases. Research indicates that almost one-third of all Amazon purchases may be ascribed to the recommendation system, highlighting its efficacy in the consumer decision-making. Similarly, social media platforms like Facebook and Instagram use advanced targeting tactics to display advertisements. Individuals that engage with certain post themes, such as fitness, see adverts for exercise equipment, vitamins, and athleisure apparel. The click-to-buy functionality promotes increased impulsive purchasing. Nevertheless, Netflix is an example of a non-retail platform that uses artificial intelligence to suggest optimal items for people to purchase (Faisal et al., 2020). The notion is analogous to Netflix's strategy of maintaining customer engagement via tailored recommendations; e-commerce platforms use similar tactics to provide a seamless purchasing experience. Shopify is another prominent industry participant that aids small businesses by providing distinctive marketing options. Firms can engage customers at critical times through dynamic retargeting advertisements and email marketing, prompting immediate purchasing decisions with time-sensitive offers and exclusive incentives. These tactics elucidate how customisation, ease, and elements of a seamless digital experience significantly facilitate impulsive purchasing and bolster the utilisation of targeted advertising and recommendation systems prevalent in contemporary electronic commerce.

## IV. RECOMMENDATION ALGORITHMS AND CONSUMER BEHAVIOR

Recommendation algorithms have effectively transformed the globe into a pivotal mechanism influencing consumer behavior in the digital age. Artificial intelligence and machine learning may enhance impulsive purchase behavior based on individual preferences and specifications. This section examines the impact of recommendation systems on customers, focusing on the role of AI, enhancement of buy intention, and tactics for cross-selling and up-selling.

### 4.1. AI and Machine Learning in Product Recommendations

The use of AI and ML in e-commerce has transformed customer interactions with goods and services. Machine learning algorithms analyse vast datasets — including aggregated browser history, previous purchases, demographic data, and social media interactions — to provide highly personalised suggestions. For example, collaborative filtering combined with content-based filtering machine learning algorithms is used to forecast customer preferences. Collaborative filtering employs user behavior patterns to recommend items, identifying similar buyers. Conversely, content-based filtering enables the model to recommend things similar to those a user has previously engaged with, depending on their qualities. Hybrid models integrate various strategies to enhance the precision and pertinence of results. Amazon's recommendation engine, a quintessential illustration of AI-driven suggestions, has consistently accounted for a substantial portion of the company's income.

### 4.2. How Recommendations Enhance Purchase Intent

The location of suggestions is crucial in influencing customer purchasing behavior. Whenever a customer encounters a timely and strategically positioned suggestion, the likelihood of purchasing the product significantly increases, even if it was not originally intended. The psychological components involved in this process include the following. The most prevalent phenomenon is the simple exposure effect, which posits that heightened familiarity with a certain product enhances the desire to acquire it. This consideration effectively ensures that frequently sought or related goods are prominently shown several times, enhancing memory and attractiveness. Social proof is a significant component of several aspects affecting decision-making in a social environment. Many recommendation systems propose all-time top items and use pop-up suggestions such as 'customers who purchased this item also bought' leveraging the bandwagon effect. It facilitates establishing trust and permits hasty or impulsive decisions about empty-value

options (Leskovec et al., 2007). Furthermore, the suggestions are influenced by urgent considerations such as time-sensitive promotions and limited inventory, compelling the customer to take fast action. For example, the inventories of online retailers like ASOS and Zalando provide real-time alerts such as 'sold out soon' and 'in stock now.' Personalisation also mitigates decision-making fatigue, serving as a justification for purchasing decisions. These systems curate options to align with customer relevance, facilitating the impulsive purchasing process and increasing its likelihood.



### 4.3. Cross-Selling and Upselling Strategies

Recommendation systems are used not just for direct sales but also for cross-selling and upselling efforts. Cross-selling pertains to using supplemental items that may be generally categorised as associated with the primary transaction. Consequently, a client may get recommendations for phone covers, screen protectors, or wireless earbuds when purchasing a smartphone. This technique enhances the value of each order and elevates customer happiness by offering a broader range of services inside a single establishment. In upselling, the buyer is encouraged to purchase a superior version of the product they intend to buy. An algorithm may present a laptop for sale with marginally superior specs compared to another throughout the purchasing process. AI DP may facilitate the persuasion of customers to increase purchases by showcasing more appealing offers, enhancing the perceived value of higher-end items relative to their cost (Dennis et al., 2020). Apple, Samsung, and several other contemporary apparel retail corporations use upselling strategies to enhance the allure of higher models by comparing their features against less expensive alternatives. For instance, supplementary services like Amazon Prime and Spotify Premium use upselling, enabling people to pay a nominal extra fee to access enhanced features.

## V. INSTANT PURCHASING AND ITS PSYCHOLOGICAL IMPACT

### 5.1. The Rise of One-Click Purchasing

The one-click ordering system used by Amazon and similar corporations has transformed how consumers acquire products online. It is favored by major e-commerce entities like Amazon, where the consumer is not required to input payment details or navigate a lengthy checkout process. This reduces the phases of purchasing affected by external influences typical in the conventional buying process, hence facilitating impulsive buying. One-click shopping may be elucidated via psychological principles, particularly cognitive ease and immediacy. An efficient transaction procedure encourages the buyer to complete the purchase without considering the product's need. The rapidity of the transaction engenders an instinctive cognitive reaction in customers, prompting impulsive purchasing behavior that precludes consumers from reconsidering the things they are acquiring. Furthermore, the proliferation of mobile commerce and apps indicates that one-click purchasing is prevalent, facilitating impulsive buying in contemporary society.

### 5.2. The Role of Payment Convenience in Impulse Buying

Another factor affecting the propensity for impulsive purchases is the simplicity of payment facilitated by technological advancements. The ability to finalise purchases using digital wallets, stored credit card information, and buy now pay later services has significantly reduced the psychological barriers to expenditure. The absence of time, anxiety, and the perception of a straightforward and safe payment procedure are significant elements that increase the propensity for consumers to engage in impulsive purchasing. The underlying principle is the "pain of payment," which posits that individuals experience a degree of suffering when purchasing a good (Rodrigues et al., 2021). Nonetheless, psychological discomfort is alleviated by digital payment systems, which often bring considerable human error via the input of payment information or any action necessitating user involvement, such as biometric identification or auto-filling payment data.

Consequently, BNPL services such as Afterpay, Klarna, and Affirm have altered the consumption behavior of their consumers, enabling immediate purchases while deferring payments over time. This financial flexibility reduces the effective cost of an item at the point of purchase, facilitating simplicity for customers when making impulsive buying decisions. The habitual consumption also includes subscription-based buying patterns, which involve customers' choice to provide payment information for recurring purchases. Automated payments eliminate further psychological obstacles to purchasing, reinforcing the impulsive buying behavior of digital consumers.

**5.3. Fear of Missing Out (FOMO) and Urgency-Based Marketing**

A prevalent incentive in contemporary life, particularly in the postmodern era, is FOMO, or the 'fear of missing out.' This message, especially pertinent to social media and digital marketing, exploits customers' apprehension of losing out on business, product, or sales chances associated with exclusivity, restricted offers, or short timeframes. Numerous e-commerce tactics use aspects of scarcity that encourage customers to complete purchases; examples include countdown clocks, low stock notifications, and real-time buy alerts. Scarcity exploits individuals' loss aversion; the want to prevent losing out on an opportunity often outweighs logic about its importance (Bell et al., 2020).



Furthermore, the influence of social factors on FOMO is amplified by displaying the viewing count of an item or buy notifications, among other elements. This occurs when customers feel obligated to acquire such things owing to the influence of witnessing others making similar purchases, perceiving it as a trend from which they do not want to be excluded. Numerous social media platforms linked to influential bloggers and targeted advertisements substantially influence impulsive purchasing driven by time constraints. Consequently, time-limited discounts and limited stock availability compel consumers to acquire things to prevent missing out. Secondly, pop-ups and emails serve as continual stimuli that incite impulsive behaviors.

**VI. ETHICAL CONSIDERATIONS IN DIGITAL IMPULSE BUYING**

Compulsive buying in contemporary society arises from effective advertising campaigns, AI recommendations, and the ease of direct purchasing. Consequently, although these technologies have enhanced user experience in the market, they have raised significant ethical problems around privacy, security, and consumer awareness in marketing. The primary ethical concerns of impulsive buying stem from managing customer data, including its acquisition, processing, and use in purchasing activities. Consequently, this engenders a discourse on self-governance, consumer sovereignty, and business

responsibility as risk managers for their customers. This section of the paper examines ethics of impulsive purchasing, specifically focusing on customer data privacy, regulation of targeted advertising, and consumer awareness about advanced digital persuasion techniques.

**6.1. Consumer Data Privacy and Ethical Marketing**

One of the foremost ethical concerns of digital impulse purchasing is the consumer's data privacy. Presently, enterprises monitor customer searches, online history, purchases, and sharing behaviors, thus significantly advancing the notion of ethical data collection. Currently, customers are presented with personalised information and adverts derived from algorithms used by several digital shops and marketers; nevertheless, they are often unaware of the precise mechanisms behind these decisions. Identifying the appropriate audience is challenging due to its significant connection to customers' privacy rights. All facets of customer data must be clearly articulated about their acquisition, storage, or use for marketing purposes. Companies must get prior permission before collecting data on customers or their behaviors, and they should be obligated to provide consumers with the option to opt out of targeted marketing (Habib et al.; 2019). Nonetheless, prioritising financial gain supersedes ethical considerations, leading to practices such as covertly monitoring users, selling customer data to third parties, and utilising application prompts that exploit psychological vulnerabilities to manipulate consumer behavior. Dark patterns are deceptive designs that exploit users, compelling them to make decisions they would often avoid; these tactics are frequently used on e-commerce platforms to induce impulsive purchasing behavior. Consequently, countdown clocks and other indicators, such as discount notifications, chevron discounts, and promotional banners, provide an additional ethical complexity to digital marketing.

**6.2. Regulation of Personalized Advertising**

Due to the drawbacks linked to individualised advertising, the government plays a crucial role in advancing ethical and suitable advertising practices. Numerous governments and regulatory bodies worldwide have recognised the need to implement robust regulations to prevent the exploitation of consumer information. Prominent examples are the GDPR in Europe and the CCPA in the United States, which established a framework for consumer data management, necessitating users' sharing of personal information. These rules mandate companies to elucidate the procedures for holding personal data, provide mechanisms for opting out of marketing, and allow consumers to delete their data. Nonetheless, several corporations continue to seek legal avenues to revert to more intrusive data collection practices and targeted advertising. The technology used in digital marketing evolves rapidly, making it challenging for regulations to keep pace. Businesses use generic privacy rules that make permissions difficult for consumers to

comprehend. Thirdly, cross-border data transmission presents regulatory challenges due to the variability of consumer protection regulations among jurisdictions (Sahoo et al., 2024). Consequently, robust enforcement mechanisms and standardised standards are required worldwide to improve ethical digital marketing. It should be mandatory for companies that engage in deceptive advertising or violate individuals' privacy to face penalties. Similarly, corporations should adopt self-regulating mechanisms such as ethical advertising guidelines and third-party audits. Technology firms and e-commerce platforms must use protective measures for the information they collect, such as encryption, anonymisation, and safe data storage, to mitigate data breaches.

### **6.3 The Role of Consumer Awareness and Digital Literacy**

However, measures implemented alone by regulators cannot substantially mitigate the ethical concerns associated with digital impulsive purchasing by assessing consumers' literacy in digital media. Many people are unaware of how their data is gathered and used for marketing objectives. Individuals without knowledge are susceptible to manipulation by advertising tactics; for example, they may feel compelled to incur debt, deplete their funds to purchase a certain product, or even get a product or service they did not initially need. This indicates that digital literacy initiatives must educate consumers on the mechanics of internet advertising, the risks associated with consumer tracking, and methods to protect their information. The study's findings indicate that customers must be adequately educated on privacy strategies, including setting up websites, mobile applications, and social media accounts, to mitigate intrusive data collecting. It elucidates dark patterns such as coerced subscriptions, misleading countdown clocks, and spurious discounts (Narayanan et al., 2020). Acquaintance with these strategies equips the customer for their buying pursuits. Furthermore, financial literacy should be integrated into comprehensive digital literacy to empower customers to recognise psychological triggers associated with impulsive purchasing. Understanding the impact of tailored advertisements on expenditure might assist individuals in managing their purchasing behavior online. The persistence of the cookie, such as budget monitoring applications, extensions designed to restrict tracking cookies, and ad-blocking software, might assist consumers in avoiding the allure of targeted advertisements directed at them.

## **VII. STRATEGIES TO MITIGATE IMPULSE BUYING ONLINE**

This phenomenon is intricately linked to compulsive purchasing, whereby customers are readily influenced by targeted marketing across several platforms, artificial intelligence suggestions, and

expedited checkout procedures that facilitate unplanned purchases. While such techniques enhance the profitability of e-commerce platforms and generate new sales, they also threaten financial well-being, lead to buyer's remorse, and contribute to excessive family spending. As technology progresses and digital marketing proliferates, it is crucial to implement strategies that regulate impulsive purchasing while preserving consumers' decision-making autonomy. Impulsive purchase may be mitigated using the following techniques: Client-based strategies include budgeting procedures, while retailer-based methods involve ethical advertising.

### **7.1. Consumer-Controlled Settings and Ad Blockers**

One possible solution to minimising or avoiding impulse buying is taking away the control of the advertisements and recommendations from the consumers. Targeted ads are employed based on customer data, web surfing history, and purchasing preferences to present appropriate products. Although such ads raise the traffic rate to these e-commerce platforms, their implementation motivates people to make impulsive and unnecessary purchases. Consumers can use ad blockers designed to remove ads that pop up or are shared on social media platforms. Adblock and uBlock Origin are extensions that eliminate pop-ups, thus preventing one from being drawn to the site offering one-day or two-day sales or promotional items. Some social networking sites and e-shops also contain additional settings for advertisement filtering, through which users can manage what kind of advertisements they want to see. Unplugging the potentially tempting offers on platforms such as Facebook, Instagram, and Google Ad is possible (Cobbe, 2020). In the same way, consumers can also delete their browsing data and cookies to make recommendation algorithms new and refresh them, thus avoiding being bombarded by adverts that were relevant to them in their previous search spree. Besides, one can also unsubscribe from promo emails and other types of advertisements that harness FOMO as advice to make spontaneous purchases. Through the conscious regulation of the ads they encounter and the regulating of the personalisation features on the sites one uses, the consumers can build a positive environment that aids in the practice of the act of 'not buying things that you do not need'.

### **7.2. Budgeting Tools and Spending Awareness Apps**

Currently, impulse buying can be effectively controlled by having an understanding of financial affairs, and this comes easy with the help of the latest technology. Personal finance and expenditure applications and services act as budgeting allies in that one can track when they are about to exceed their set budget. This is through the use of the app, including Mint, YNAB (You Need a Budget), and PocketGuard, which categorises spending, helps to identify when spending is impulse and offers analysis on where the money is being spent. These tools monitor spending



activity and assist users in creating or setting up spending targets and spending limits for certain selected sections, such as entertainment, food, etc. Some of the most widely used features of the heretofore-discussed applications include real-time notifications that give a user feedback after the user makes a purchase. Also, advanced technologies and some banks integrate spending analysis and notification systems to inform the consumer when he has been reckless with their spending, especially on purchasing (Wen et al., 2018).

This is about delayed purchase mechanism systems, which can also be used effectively as a strategy. Some spending awareness apps apply features that make it easier for individuals to add items to a wish list rather than buying them on the spot. This practice is called cooling-off period since the consumer is given time to think twice whether they need the product or whether the desire is merely due to the eagerness to purchase. It is recommended that any impulse buying be done immediately, because if one is talked into waiting for 24 hours, this tendency will be highly likely and easy, making it easier to ignore the impulse. In addition, an electronic purse and mobile payment system can operationalise spending constraints where a certain amount of money is provided for discretionary expenditure. For instance, consumers can reduce their PayPal balance to limit usage or require extra verification for a transaction, making consumption intentional and not a result of impulse. People can modify their spending habits through these financial tools and not resort to impulse purchases.

### 7.3 Responsible Marketing Practices by E-Commerce Platforms

Although consumer-driven approaches and financial instruments reduce this behavior [impulse buying], they also have social responsibility to uphold appropriate marketing. Most online retailers use psychological strategies such as countdown timing mechanisms, one-click purchase, and a unique 'deal of the day,' related to psychological behavioral tendencies. To this effect, the e-commerce businesses can make changes that will not influence customers' buying decisions but provide them with useful information they need to make the right decisions. One of the ways is to improve the transparency of prices and available products.

## VIII. CONCLUSION

The prevalence of sightseeing purchases has increased in contemporary society due to technological advancements and the use of data in marketing. The prevalent sales strategies online merchants and digital service providers use include targeted marketing, artificial intelligence-driven suggestions, and one-click purchasing. These solutions use a sophisticated approach that integrates past browser data, prior purchases, and current interests to provide highly tailored goods for

impulse purchasing, making it more accessible than before. Consequently, one-click buying, mobile wallets, and social network shopping features persist in removing decision-making obstacles, prompting customers to make impulsive purchases. While firms experience increased sales income and heightened customer attention, questions arise over the adverse effects on customers' financial well-being, ethical dilemmas related to advertising, and the infringement of consumers' privacy rights. It is not unusual to find persons who engage in impulsive purchasing, leading to stress when payments are due or when they realise that the acquired items do not meet their expectations or needs. Nevertheless, ethical concerns emerge when consumers are manipulated by persuasive tactics that excessively use self-generated information, distorting their decision-making process. Addressing these issues may be accomplished via implementing legislative and regulatory measures, corporate social responsibility, and consumer awareness initiatives. Identifying appropriate methods for displaying information and effectively combining marketing with ethical considerations in emerging e-commerce is achievable via integrating many methodologies. This research emphasises the significance of consumer awareness about the adverse effects of impulsive purchasing and the implications of advertising regulations on consumer data privacy. Comprehensive study must be undertaken over time to ascertain the effects of digital impulsive purchasing on consumers' psychological conditions and to identify methods for promoting suitable consumer habits. Consequently, when the government and enterprises strive for development, they will cultivate an atmosphere that enables customers to behave properly.

## REFERENCES

- [1] Balboa, E., Ladesma, M., & Manguerra, Atty. N. (2024). Digital Financing Innovations and Their Impact on the Financial Performance of SMEs in the Digital Economy Era.
- [2] Cobbe, J. (2020). Algorithmic Censorship by Social Platforms: Power and Resistance. In *Philosophy & Technology* (Vol. 34, Issue 4, p. 739). Springer Nature (Netherlands). <https://doi.org/10.1007/s13347-020-00429-0>
- [3] Dennis, A. R., Yuan, L., Feng, X. J., Webb, E., & Hsieh, C. J. (2020). Digital Nudging: Numeric and Semantic Priming in E-Commerce. In *Journal of Management Information Systems* (Vol. 37, Issue 1, p. 39). Taylor & Francis. <https://doi.org/10.1080/07421222.2019.1705505>
- [4] Faisal, M., Nabilah, K., Sadik, M. Z., Hassian, U. K., Abidin, M. I., & Ibrahim, K. (2020). Malaysian Gen Y and Impulsive Shopping Behavior? Roles of Hedonic Shopping

- Motivation. In *International Journal of Academic Research in Business and Social Sciences* (Vol. 10, Issue 3). <https://doi.org/10.6007/ijarbss/v10-i3/7051>
- [5] Faisal, M., Nabilah, K., Sadik, M. Z., Hassian, U. K., Abidin, M. I., & Ibrahim, K. (2020). Malaysian Gen Y and Impulsive Shopping Behavior? Roles of Hedonic Shopping Motivation. In *International Journal of Academic Research in Business and Social Sciences* (Vol. 10, Issue 3). <https://doi.org/10.6007/ijarbss/v10-i3/7051>
- [6] Habib, H., Zou, Y., Jannu, A., Sridhar, N., Swoopes, C., Acquisti, A., Cranor, L. F., Sadeh, N., & Schaub, F. (2019). An Empirical Analysis of Data Deletion and Opt-Out Choices on 150 Websites. In *Symposium On Usable Privacy and Security* (p. 387). <https://www.usenix.org/system/files/soups2019-habib.pdf>
- [7] Leskovec, J., Adamic, L. A., & Huberman, B. A. (2007). The dynamics of viral marketing. In *ACM Transactions on the Web* (Vol. 1, Issue 1, p. 5). Association for Computing Machinery. <https://doi.org/10.1145/1232722.1232727>
- [8] Narayanan, A., Mathur, A., Chetty, M., & Kshirsagar, M. (2020). Dark patterns. In *Communications of the ACM* (Vol. 63, Issue 9, p. 42). Association for Computing Machinery. <https://doi.org/10.1145/3397884>
- [9] Ngo, T. T. A., Nguyen, H. L. T., Nguyen, H., Anh, H. T., Tran, T. H. T., & Hoang, P. L. (2024). A comprehensive study on factors influencing online impulse buying behavior: Evidence from Shopee video platform. In *Heliyon* (Vol. 10, Issue 15). Elsevier BV. <https://doi.org/10.1016/j.heliyon.2024.e35743>
- [10] Rodrigues, R., Lopes, P., & Varela, M. E. (2021). Factors Affecting Impulse Buying Behavior of Consumers. In *Frontiers in Psychology* (Vol. 12). Frontiers Media. <https://doi.org/10.3389/fpsyg.2021.697080>
- [11] Rodrigues, Rosa, et al. "Factors Affecting Impulse Buying Behavior of Consumers." *Frontiers in Psychology*, vol. 12, Frontiers Media, 2 June 2021, <https://doi.org/10.3389/fpsyg.2021.697080>.
- [12] Sahoo, L., Mohapatra, D., Raghuvanshi, H. R., Kumar, S., Kaur, R., Anshika, Sapna, S., Chawla, R., & Afreen, N. (2024). Transforming Agriculture through Artificial Intelligence: Advancements in Plant Disease Detection, Applications, and Challenges. In *Journal of Advances in Biology & Biotechnology* (Vol. 27, Issue 5, p. 381). Sciedomains International. <https://doi.org/10.9734/jabb/2024/v27i5796>
- [13] Upreti, K., Gangwar, D., Vats, P., Bhardwaj, R., Khatri, V., & Gautam, V. (2024). Artificial Neural Networks for Enhancing E-commerce: A Study on Improving Personalization, Recommendation, and Customer Experience. In *Lecture notes in electrical engineering* (p. 141). Springer Science+Business Media. [https://doi.org/10.1007/978-981-99-8661-3\\_11](https://doi.org/10.1007/978-981-99-8661-3_11)
- [14] Wen, Y., Yeh, P.-W., Tsai, T.-H., Peng, W.-C., & Shuai, H.-H. (2018). Customer Purchase Behavior Prediction from Payment Datasets (p. 628). <https://doi.org/10.1145/3159652.3159707>