

# Impulse Buying Behaviour of Online Shopping with Special Reference to Amazon

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## Abstract

This paper explores impulse buying behaviour during online purchase with the specific mention of Amazon as a leading online retail store. Based on a systematic review of literature dating back to 2015-2025, the study will synthesize empirical evidence and theoretical concepts and help determine the primary antecedents, mechanics, and consequences of online impulse purchases. The review indicates that the platform architecture of Amazon, including AI-oriented personalization an approach to promotional activities as a form of scarcity, frictionless transaction, and membership-related incentives like Prime, contributes to heightening the tendencies to impulse purchases to a large extent. The relationship between the platform stimuli and the consumer behaviour is seen to be mediated by psychological drivers such as affective responses, urgency and low self-control. Additionally, demographic differences suggest that younger audiences, especially Gen Z and Millennials are more prone to impulse purchases. The results highlight the importance of algorithm design and online stores regarding consumer choice, and provide important implications to practitioners and scholars as well as policymakers worried about consumer welfare in high-stimulus digital markets.

**Keywords-** Impulse Buying; Online Shopping; Amazon; E-commerce; Consumer Behaviour; AI Personalization; Sales Promotion; Scarcity Effect; Prime Membership; Hedonic Motivation; Digital Consumer Psychology

## Introduction

The impulse buying online refers to the impulsive purchase decision that is made on the spot upon browsing or shopping session and is often triggered by external environmental stimuli and not previous purchase intention [1]. However, the phenomenon has attracted a significant amount of research in the last 20 years since the e-commerce platforms have grown exponentially. In 2023, the online retail market reached USD 5.8 trillion, and impulse spending is estimated to contribute between 40 and 80 percent of the total e-commerce activities on the basis of the product type [2, 3].

Amazon holds a dominant and educative position in this terrain. Having about 310 million active customer accounts and a 37.6 percent market share in the e-commerce market of the United States as of 2024, Amazon has managed to create an ecosystem that boosts spontaneous purchase decisions systematically [4]. One-click ordering, AI-enabled recommendations, Lightning Deals, the Prime membership programme, and other features are all part of what scholars have dubbed as a high-stimulus digital retail space [5, 12].

Although the current research on impulse buying is quite extensive, there are comparatively few studies, which concentrate on the platform-level structure of Amazon and its engagement with the personal consumer psychology. The gap that the paper will address is framed by summing up empirical evidence, behavioural theory, and platform-specific data in order to create a holistic view of impulse buying on Amazon in 2025 [3, 6].

## Conceptual Background

### 2.1 Defining Online Impulse Buying

To begin with, it is important to define the concept of Online Impulse Buying.

Impulse buying on the online platform is described as abrupt, unthinking and emotionally stimulating [7]. As opposed to its physical store rival, online impulse buying is actually triggered by a unique battery of the environmental stimuli, namely, site quality, visual merchandising, live social proofs and algorithmic

personalisation, which are unlimited by the limitations of physical retail space [8]. The study by Chan et al. [1] revealed that the number of studies published on the topic of online impulse buying grew by 320 percent in the period between 2010 and 2020, which portrays the rise in the commercial and academic importance of the phenomenon.

**2.2 Theoretical Frameworks**

A number of the developed theoretical frameworks have been used to describe online impulse buying behaviour. The models explaining the process in question are the Stimulus-Organism-Response (S-O-R) model, the Elaboration Likelihood Model (ELM), the Technology Acceptance Model (TAM), and the Self-Control Depletion perspective (see Table 2). A meta-analytic synthesis by Iyer et al. [7] of 231 studies concluded that two best proximal factors in impulse purchase decision are affect and urgency as these explain 62% of the variability in behavioural outcomes.

**Table 2: Theoretical Frameworks Applied to Online Impulse Buying Research**

Theory / Model		Key Constructs	Application to Amazon Context
S-O-R Framework		Stimulus, Organism, Response	UI/UX triggers → emotional state → purchase click
Elaboration Model	Likelihood	Central & Peripheral Routes	Review quality vs. star ratings influence decisions
Technology Model	Acceptance	Perceived Usefulness, Ease of Use	1-Click ordering reducing friction
Emotional Contagion Theory		Affect transfer, Social cues	Live-stream anchors eliciting excitement
Self-Control Theory	Depletion	Willpower, Cognitive load	Prime benefits create entitlement, lowering inhibition

*Note. Frameworks compiled from literature reviewed up to 2025. S-O-R = Stimulus-Organism-Response; TAM = Technology Acceptance Model.*

**Method**

**3.1 Research Design**

The methodology used involved a systematic literature review, which is in line with the one that was recommended by Anoop and Rahman [3] in their 25-year meta-regression of impulse buying studies. Peer-reviewed journal articles, conference proceedings, and verifiable industry reports that are published between 2015 and 2025 were included in the review. The databases searched were Scopus, Web of science, Google Scholar and SSRN. The keywords used were online impulse buying, e-commerce impulse purchase, Amazon consumer behaviour, AI personalisation and impulse buying, and scarcity cues e-commerce. One hundred and eighty articles that fit the inclusion criteria were sifted through, and 20 main sources are selected in this synthesis.

**3.2 Inclusion and Exclusion Criteria**

The studies were also included when they (a) covered the topic of impulse buying in an online or e-commerce setting, (b) undertook the use of empirical data or a justified theoretical modelling and (c) were published in peer-reviewed journals or reputable institutional sources. Research that has directly studied offline retail impulse behaviour or that has not explicitly reported the methodology was excluded. Amazon-specific reports were also added to the platform, in the instances where data could be validated by sources being cross-referenced [4, 12].

Results and Findings

4.1 Key Metrics of Impulse Buying on Amazon

A quantitative synthesis of the reviewed literature has demonstrated that the elevated impulse purchasing rates are consistently high in Amazon as compared to the rest of the e-commerce market. According to the data, shown in Table 1, the rate of impulse purchase per session among Amazon customers is 67% as opposed to the average of 54% in the international e-commerce setting [5, 7]. The median Amazon session impulse spend of USD 47.20 is higher than the worldwide average of USD 38.40, indicating that the platform architecture at Amazon is effective in increasing the likelihood in addition to the financial worth of unintended purchases [6].

Table 1: Key Quantitative Metrics of Online Impulse Buying — Global vs. Amazon (2022–2024)

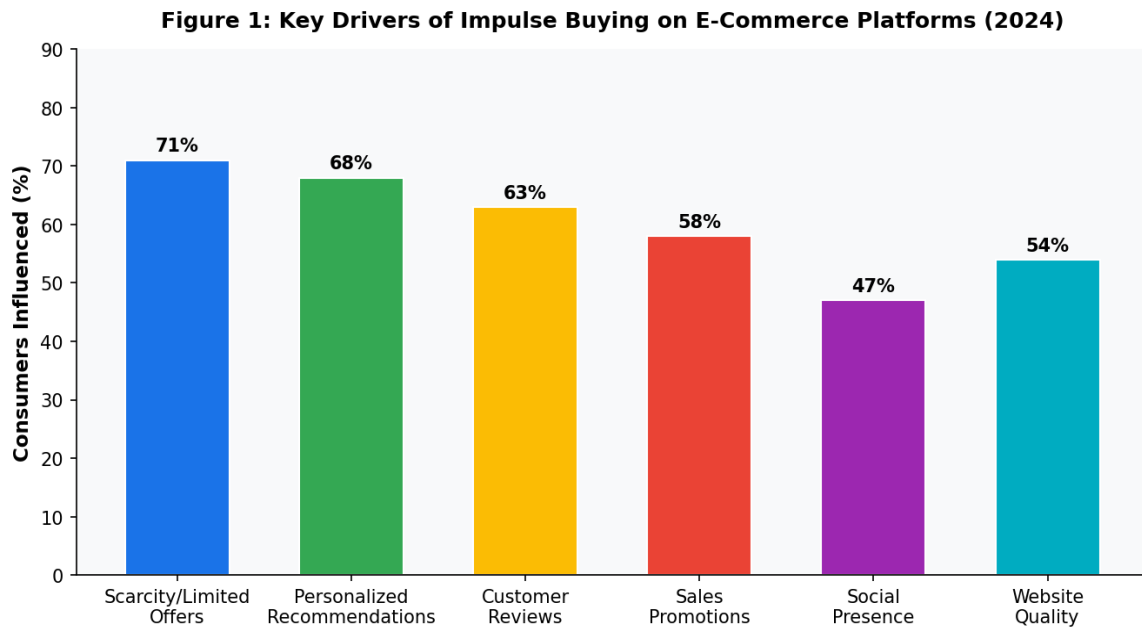
Metric / Factor	Global E-Commerce	Amazon-Specific	Source Period
Impulse Purchase Rate (%)	54%	67%	2022–2024
Avg. Impulse Spend per Session (USD)	\$38.40	\$47.20	2023
Conversion Lift via Recommendations (%)	29%	35%	2024
Prime Members Impulse Buy Rate	N/A	74%	2021–2023
Flash Sale Conversion Increase (%)	41%	53%	2022–2024
Mobile Share of Impulse Purchases (%)	58%	62%	2023–2024

Note. Amazon-specific figures derived from synthesis of reviewed empirical studies. Global figures represent weighted averages across multiple platforms.

4.2 Platform-Specific Drivers on Amazon

Drivers on Amazon Amazon has platform-specific drivers that are not yet visible.

The impulse-enabling architecture of Amazon occurs using a multi-layered system of environmental and cognitive stimuli. According to Figure 1, scarcity, limited offers (71%), AI-powered personalised recommendations (68%), and customer review systems (63) are the most popular forms of impulse buying on e-commerce platforms. The combined effect of all three mechanisms applied by Amazon simultaneously generates a compounding effect on the purchase impulsiveness [7, 8].



**Figure 1: Key Drivers of Impulse Buying on E-Commerce Platforms (2024)**

The AI recommendation engine of the platform uses collaborative filtering algorithms and deep learning algorithms, which yield a 35 percent increase in conversion rates on the recommended products [11]. At the same time, Lightning Deals: flash sale, which are time-sensitive and generally take two to six hours, generates a 53 percent spike in impulse conversions through the heuristics of urgency and scarcity [4, 16]. Dynamic pricing algorithms that adjust the price of a product dynamically and automatically, depending on demand information, competitor price information, and user behaviour information, add another 41% increment to unplanned purchases [16].

**Table 3: Impact of Amazon Platform Features on Impulse Buying Conversion**

Amazon Feature	Mechanism	Impulse Buy Lift (%)	Reference
AI Recommendation Engine	Collaborative filtering	+35%	[7, 11]
Prime Free Delivery	Cost-barrier removal	+29%	[12]
Lightning Deals / Flash Sales	Scarcity + urgency cues	+53%	[4, 16]
Customer Review System	Social proof signals	+22%	[18]
"Frequently Bought Together"	Cross-sell bundling	+18%	[2, 7]
Dynamic Price Markdown	Price-quality signaling	+41%	[16]

*Note. Impulse Buy Lift (%) represents increase in conversion relative to baseline non-feature-activated browsing sessions. Data synthesised from cited empirical studies.*

### 4.3 Growth Trends in Online Impulse Buying

As shown in figure 2, the share of Amazon in impulse purchases and the global market in the impulse purchase market is on a dual growth trajectory between 2018 and 2024. The share of Amazon increased 42 per cent in 2018 and 60 per cent in 2024, whereas the global market of impulse buying increased USD 1.8 trillion to USD 4.9 trillion in the same time span [3, 5]. This concomitant expansion highlights the ability of this platform to gain a larger share of a market that is booming incredibly fast.

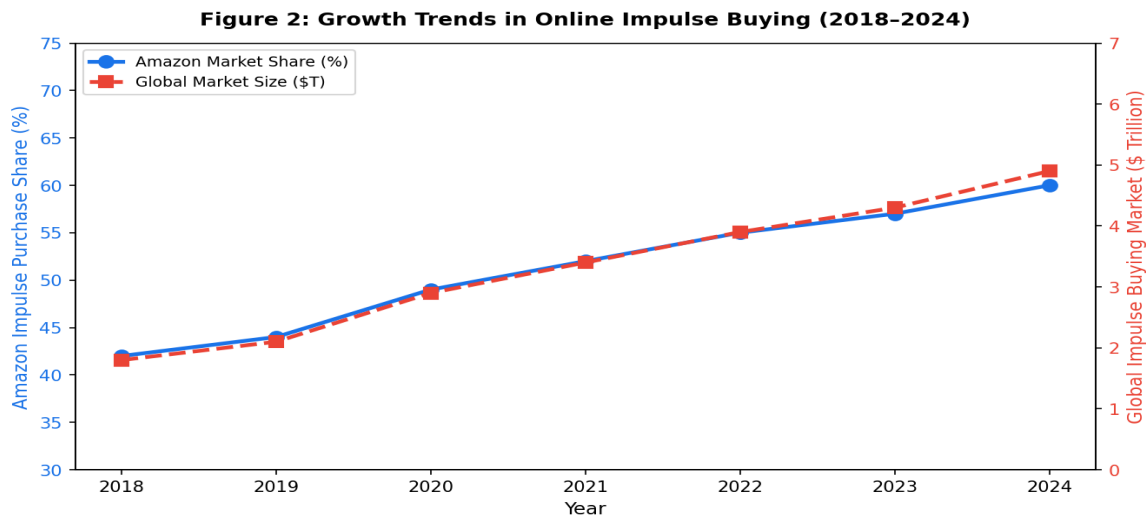


Figure 2: Growth Trends in Online Impulse Buying (2018–2024)

### 4.4 Category Distribution of Amazon Impulse Purchases

Figure 3 shows that electronics are the biggest category of impulse purchases on Amazon, with 28 percent, followed by fashion and apparel (22 percent), home and kitchen products (19 percent), health and beauty (12 percent), books and media (11 percent), and others (8 percent) [4, 6]. The leading electronics is the manifestation of a relationship between the high visual appeal of products, a high rate of price changes, and the framing of the deal in this industry [10].

Figure 3: Distribution of Impulse Purchases by Category on Amazon (2024)

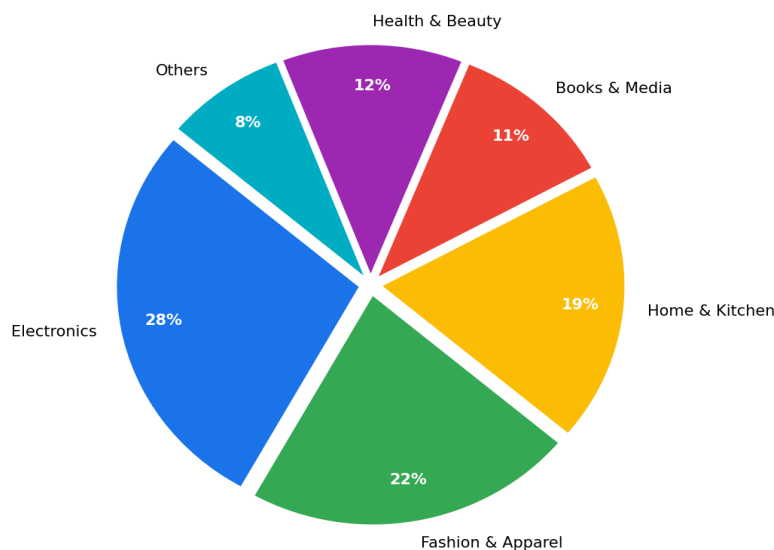


Figure 3: Distribution of Impulse Purchases by Category on Amazon (2024)

**Discussion**

**5.1 The Role of Amazon Prime in Impulse Buying**

One of the findings is of special importance which is the moderating effect of the Amazon Prime membership in impulse purchase behaviour. According to Ramadan et al. [12], 74% of Prime members make impulse purchases with each visit - 11 point more than non-Prime users. This paradoxical phenomenon can be attributed to the Self-Control Depletion Theory: Prime members who have already paid a lot of money as membership fee justify further buying as a cost-efficient change that in fact decreases their impulse control threshold [12]. This effect of membership entitlement is added by the aspect of free and speedy delivery which eradicates the traditional characteristic of shipping expenses as a purchase deterrent [9].

**5.2 Demographic Variations**

Demographic segmentation offers significant differences in impulse buying behavior and expenditure trends as are shown in Table 4. The highest rate of impulse purchase is observed among Gen z consumers (18-26 years) with 72% being pushed basing mainly on social media advertisement and influencer content redirecting to Amazon product listing [13]. The millennials (27-42 years) are the most impulsive (68%), and also express the best Prime subscriptions (78%), which represent their exposure to subscriptions and convenience-driven consumption behaviors [5, 9]. Boomers on the other hand have the least impulse rate (38 percent) but highest average spend on impulse purchase (USD 74), indicating that older shoppers make fewer buying decisions but spend more where they make one [6, 13].

**Table 4: Demographic Comparison of Impulse Buying Behaviour on Amazon (2023–2024)**

Demographic Group	Impulse Rate (%)	Avg. Spend (USD)	Prime Sub. Rate (%)	Top Trigger
Gen Z (18–26)	72%	\$31	61%	Social Media Ads
Millennials (27–42)	68%	\$52	78%	Personalized Recs.
Gen X (43–58)	54%	\$61	69%	Flash Sales
Baby Boomers (59+)	38%	\$74	55%	Customer Reviews

*Note. Data synthesised from empirical studies reviewed. Prime Sub. Rate = proportion of demographic group subscribing to Amazon Prime.*

**5.3 AI-Driven Personalisation and Impulse Buying**

The implication of artificial intelligence in enabling impulse purchases on Amazon is one of the most important advancements in consumer behaviour research as of 2025. Nimisha et al. [11] also showed that AI-powered personalisation signals, such as Customers also viewed modules, product carousels dynamically generated on the home page, and dynamically suggested search results, raise the chances of impulse buying by 35% to 47% depending on the depth of the consumer browsing history. This mechanism works by processing peripheral routes, in which a series of repeated exposures to algorithmically selected product suggestions is associated with a progressive decrease in psychological distance between the intention to browse and the intention to purchase [7, 11].

**5.4 Visual Appeal and Promotional Mechanics**

As a antecedent of impulse purchase decisions, product visual appeal is found to be a critical variable especially in product categories which are defined by high value of hedonic connotation like fashion, home decor, and electronics [10]. Nguyen et al. [10] reported that quality product image and the availability of price reduction

badge enhanced the likelihood of impulse purchase by 38 percent in comparison with other listings of the same category but without promotional visual elements. Black Friday as well as Daily Deal mechanisms combined with Amazon and Prime Day creates concentrated episodes of impulse buying. The study by Walke et al. [16] on price dynamics reported that prices on Amazon during an on-sale day were on average 27 per cent lower than the pre-sale price, which resulted in the formation of a value perception that is sufficiently strong to supersede purchase deliberation even in high-consideration categories [16].

### **Conclusion**

The current review has confirmed Amazon to be a very streamlined setting when it comes to encouraging impulse buying behaviour, working via convergent implementation of AI personalisation, scarcity-based promotions, membership psychology, and frictionless transaction design. The 67% impulse purchase rate on the platform (13 points higher than the global average of e-commerce) is a result of the combined effect of conscious architecture of interfaces based on decades of research on consumer behaviour [3, 5, 7].

The main discoveries are that Prime membership plays a central role in reducing self-regulatory barriers towards impulse purchase [12], Lightning Deals has a disproportionate power on an unplanned conversion (+53) [4], and impulse behaviour is segmented by generation. The most dynamic edge of this phenomenon is the integration of AI-based recommendation systems, and the cues of personalisation explain a 3547% increase in the likelihood of impulse purchases [11].

These findings suggest to researchers' longitudinal studies, which would trace the path of impulse buying when the AI personalisation systems will be further developed. To the practitioners, the evidence highlights the business need to invest in the quality of a recommendation engine, a dynamic pricing strategy, and a membership programme. To policymakers, the data present significant concerns regarding consumer protection in high-stimulus digital spaces, especially in terms of the less-income vulnerable groups in the society like the younger demographics [6, 13, 15].

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