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GEN Z AND THE DIGITAL MARKETPLACE: UNDERSTANDING CONSUMER BEHAVIOUR IN THE AGE OF DOPAMINE AND DARK PATTERNS

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Generation Z, the most developed generation to date, has significantly influenced many economic and social fields. This research paper examines how these digital natives affect consumer behaviour and the implications for today's markets. In a dopamine-driven society, which focuses on instant gratification and planned impulsivity, various issues can arise, such as dark patterns. This project aims to look at these cognitive designs and highlight instances of misuse related to creating a world of social media and closely controlled consumption. Additionally, this review seeks to draw conclusions by analysing risk-taking and consumption, the benefits of these behaviours, and the growth of the digital economy. It will assess the potential of the digital economy for long-term sustainability and trust concerning Gen Z's contributions.

KEYWORDS: ***Generation Z, Consumer Behaviour, Digital Marketplace, Dopamine, Dark Patterns***

1. INTRODUCTION

Generation Z, typically defined as those born between 1997 and 2012, represents a crucial part of the current conversation around the term "Generation Z." Their established styles and the impact of technology touch nearly all areas of global markets. Growing up surrounded by technology, Gen Z has developed distinct preferences, beliefs, and habits that differ significantly from those of generations X and Y. In particular, following COVID-19, Gen Z has taken these trends to a new level. With rapid changes in the digital marketplace and on social media, Gen Z has witnessed the most shifts in how markets operate and how consumers behave. This clearly shows that this generation is the most flexible and experimental. Questions arise about how these trends come about and how accurately we can observe and predict consumer behaviour. This highlights the importance of market studies and the efforts of individuals who strive to understand consumer behaviour while developing strategies to influence market dynamics and supply.

This generation has grown up with a natural understanding of technology and constant exposure to online environments. They have distinct tastes, beliefs, and habits that set them apart from earlier generations (Prasanna & -, 2024) (Yahya & Mammadzada, 2024). Their heavy use of digital media, social media, and instant messaging tools greatly affects their views on products and their overall online shopping behaviour (Chang & Chang, 2023). Businesses that want to succeed in today's fast-paced market must recognise their consumer behaviour, shaped by their buying power and personal digital skills (Kusuma et al., 2024).

Generation Z's constant exposure to digital content and social networks significantly influences their product perceptions and online shopping habits (Chang & Chang, 2023). Because they have substantial spending power and are skilled in digital environments, companies need to understand their buying patterns to compete effectively in the swiftly changing marketplace today (Kusuma et al., 2024). Their digital familiarity and potential consumer spending make them a key market force (Guerra-Tamez et al., 2024).

This literature review seeks to summarize current research on Generation Z's online shopping, focusing on the factors that drive their purchasing power and involvement in the digital economy (Theocharis et al., 2025). The study will examine the effects of online marketing efforts, especially those tailored for Gen Z, since they depend on digital technology for information and are inclined to buy products online (Zhulal et al., 2024) (Archana & Shree, 2024). Moreover, Generation Z's unique values, like a desire for authenticity, social connections, and social responsibility, significantly impact how they engage with brands. Therefore, it's essential to assess how these values are integrated into online marketing strategies (Sahu & Karnuta, 2022) (Dahlquist & Garver, 2022). This review will also look into the psychological aspects of Generation Z's online behaviour, exploring how "dopamine" and "dark patterns" affect their consumption habits.

This includes looking at how factors that release dopamine, like social media interaction and gamification, influence their consumption decisions. It also explores the moral issues raised by "dark patterns" that subtly shape their online choices (Murtarelli et al., 2024). This review will give e-retailers and marketers valuable insights on how to connect with this generation of digital natives. It will improve our understanding of modern consumer behaviour (Thangavel et al., 2019).

2. UNDERSTANDING GEN Z AS CONSUMERS

This generation, with an inborn technological capability and constant exposure to virtual realities has certain tastes, believes in particular things, and follows customs that are very different from those of previous generations (Prasanna & -, 2024) (Yahya & Mammadzada, 2024). Their widespread use of digital media, social media, and messaging apps greatly influences their product attitudes and overall online consumer behaviour (Chang & Chang, 2023). By their buying power and their own unique digital literacy, their consumption decisions need to be perceived by businesses seeking to remain competitive within this era's fast-evolving marketplace (Kusuma et al., 2024). Their widespread utilisation of online media, social media, and instant messaging websites significantly influences their product attitudes and overall consumer behaviour online (Chang & Chang, 2023). With their own digital acumen and spending power, their consumer behaviour has to be deciphered by businesses prepared to be competitive in the speed-oriented market of today (Kusuma et al., 2024). Their inbuilt digital capability and vast prospective consumer expenditure potential position them as a market highlight (Guerra-Tamez et al., 2024). This review tries to integrate studies on Generation Z's digital consumption, with a focus on determinants that affect their purchasing power and participation in the digital economy (Theocharis et al., 2025). The research will examine the effects of online promotional campaigns directed at Gen Z, taking into consideration that they are information-reliant on digital technologies and inclined towards buying online (Zhulal et al., 2024) (Archana & Shree, 2024). Furthermore, unique values of Gen Z like passion for authenticity, human interaction, and social awareness are also critical in influencing their engagement with brands and buying behaviour and hence require an examination of how these values are utilised through digital marketing initiatives (Sahu & Karnuta, 2022) (Dahlquist & Garver, 2022). This examination also explores the psychological basis of Gen Z's online activities, specifically how "dopamine" and "dark patterns" affect their consumption processes in the digital space.

This involves investigating how dopamine-inducing features, like social media interaction and gamification, affect their consumption patterns and the moral ramifications of "dark patterns" that subtly influence their online choices (Murtarelli et al., 2024). In order to better understand current consumer behaviour, this thorough review will offer useful insights to marketers and e-retailers looking to target this generation of digital natives (Thangavel et al., 2019).

Gen Z makes up a large share of the global population, about 23% in 2013, and is expected to dominate as the main consumer group in the coming years (Vieira et al., 2020; Thangavel et al., 2019). This means businesses need to adapt to the growing market and must understand how and why Gen Z's "buy".

2.1 Defining Generation Z (Demographics and Characteristics)

Gen Z includes people born roughly between the mid-1990s and early 2010s (Alruthaya et al., 2021; Chen & Ha, 2023). Unlike Millennials, who saw the rise of the internet as they grew up, Gen Z has lived entirely in a connected world. This has shaped their worldview, study habits, and consumer behaviour in ways that are very different from previous generations (Benítez-Márquez et al., 2022; Gentina, 2020). Sometimes called Zoomers or post-Millennials, they are known for preferring visual content like videos and memes, using multiple platforms at once, and doing online research before buying something (Benítez-Márquez et al., 2022; Archana, 2024). Their comfort with technology also means they have high expectations: they want fast, reliable, and seamless digital experiences.

This tech fluency is not just about convenience. It has also influenced their values and attitudes. They are often more open to diversity, better at networking, and more cautious about money compared to older generations (Tulasmi et al., 2023). They are careful with spending but expect value for money, blending financial caution with digital savvy. Generation Z makes up about a quarter of the global population and has around $450 billion in buying power. This gives it a significant role in the current global economy. In the US, Gen Z has an estimated buying power of $360 billion and continues to strongly influence consumer behaviour and markets. It's also predicted that Gen Z's financial impact will grow as they mature. Some forecasts estimate their total global spending could reach $12 trillion by 2030. This mix of economic strength and demographic influence means businesses need to understand and respond to the unique behaviours of this generation.

2.2 Digital Natives and Online Behaviour Patterns

The term “digital native,” introduced by Marc Prensky, describes people who grew up with digital technology as a natural part of their lives (Mertala et al., 2023; Remizantseva & Ablyazov, 2019). This definition perfectly fits Gen Z, as their daily routines are built around digital platforms (Штепура, 2018; Öngel et al., 2023). Their digital fluency means they are skilled at switching between platforms and multitasking. For instance, many Gen Z teens use YouTube every day, scroll Instagram for trends, and chat with friends online simultaneously (Dospinescu et al., 2019). They also use digital tools in education, showing confidence in online learning environments (Bergdahl & Nouri, 2020). However, not every scholar agrees that being born in the digital age automatically makes someone digitally literate. Some argue that “digital native” is too broad, since using technology casually is not the same as having advanced digital literacy (MN et al., 2020). Still, it is clear that digital exposure from birth has influenced Gen Z’s thinking patterns and behaviour. They process information quickly, rely heavily on online content, and prefer interactive experiences (Wandhe, 2024).

2.3 Values, Attitudes, and Expectations in Consumption

Gen Z consumers are not only influenced by technology, they also bring strong values into their shopping habits. They often look for brands that match their personal beliefs and expect authenticity and honesty from said brands (Norris, 2001; Alruthaya et al., 2021). They tend to support businesses that show commitment to social causes, environmental protection, and ethical practices (El-Menawy & Saleh, 2023). Because they gather information mostly online - reviews, influencer recommendations, and user-generated content have more influence on their buying decisions than traditional advertising (Lazar et al., 2023). Platforms like TikTok have made trends, authenticity, and social proof especially powerful in shaping what Gen Z buys (Bulazo et al., 2025). Another feature of Gen Z is that they are less loyal to brands. They will switch quickly if they find a better deal, but they are also willing to stick with brands that reflect their values and create emotional connections (Pillay, 2021). This makes trust and authenticity even more important for companies trying to win long-term loyalty (Wan, 2025). Finally, Gen Z's constant exposure to global news and social issues makes them more likely to favour companies that contribute positively to society. This pushes brands to go beyond sales and actively demonstrate social responsibility.

3. THE DIGITAL MARKETPLACE: AN EVOLVING ECOSYSTEM

Digital technology has changed how people interact with brands and make purchasing decisions. E-commerce and data-driven marketing have not only transformed the way companies sell products but also reshaped consumer expectations. Today's consumers, especially Gen Z, expect shopping to be easy, fast, and tailored to their preferences (Kumo, 2023). More importantly, many of them want businesses to align with their values and provide ethical, transparent experiences (Matheny, 2019).

3.1 The Rise of E-Commerce and Social Commerce

In recent times, shopping has shifted from physical stores to digital platforms. E-commerce has become the dominant model for buying; and this trend grew even faster during the COVID-19 pandemic (Reinartz et al., 2019). To keep up, companies have had to change how they connect with customers, making online experiences more interactive and engaging (Figueiredo et al., 2025).

One of the biggest changes in recent years is the rise of social commerce, shopping directly through social media platforms. Social commerce combines the convenience of e-commerce with the influence of social media, allowing people to buy products they see in posts, videos, or live streams (A. D., 2023). This makes shopping more social, as people are influenced not only by advertisements but also by friends, communities, and influencers (Özen & Hus, 2025).

Social media platforms are no longer just places to chat or share photos. They have become powerful sales tools, shaping how people discover and trust brands (Shaheen, 2025). Businesses now need strong social media strategies that build communities, encourage interaction, and create authentic connections. Word-of-mouth through online reviews, recommendations, and ratings has become just as important (Correia & Medina, 2014).

Social commerce platforms often include features such as customer ratings, comments, tags, and recommendations. These features give users more confidence when making decisions (Rashid et al., 2022). By blending e-commerce and social media, "S-commerce" allows people to share experiences, ask for advice, and shop as part of a community (Abdelsalam et al., 2020; Guo & Lei, 2022). This turns shopping into a more interactive and trustworthy activity, where peer influence plays a central role in decision-making (Rashid et al., 2020).

Social commerce, which mixes social media and shopping, stands out as one of Generation Z's key shopping habits. In 2024, more than half of Gen Z consumers made at least one purchase through social commerce channels. Additionally, 79% of Gen Z and Millennials use social media platforms while shopping, based on a recent report. By 2028, social commerce is projected to be worth over $1 trillion, showing its major impact on the online marketplace. Also, 67% of Gen Z consumers reported finding new products on social media through organic videos. This highlights the influence of marketing by individuals and content created by users.

3.2 Mobile-First Experiences and Omnichannel Strategies

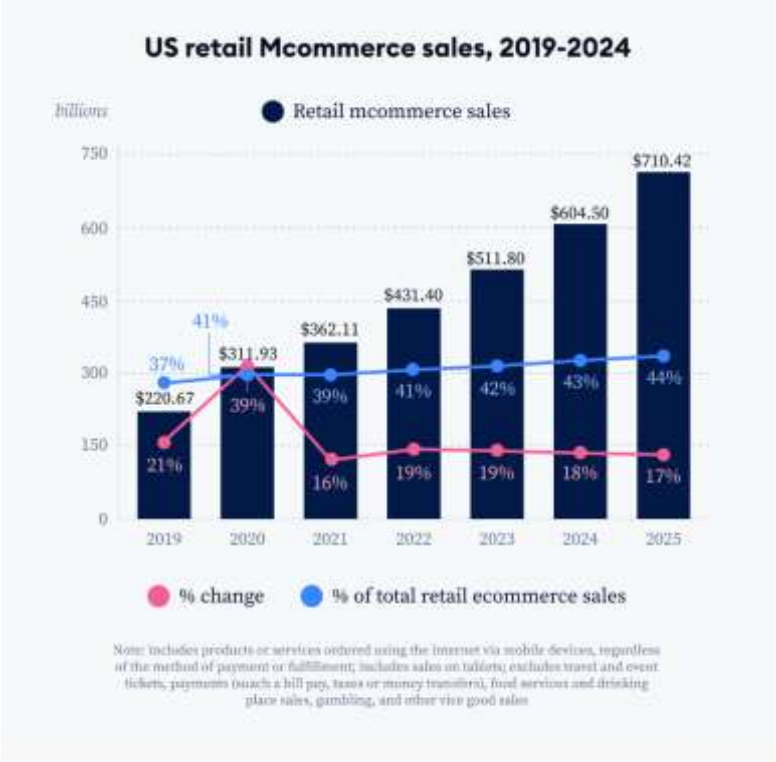
Smartphones have completely changed how people interact with brands. For many, the phone is the first and main way they shop, search for information, or interact with customer service. Because of this, businesses are expected to adapt to design experiences that work seamlessly on mobile devices (Sari et al., 2023).

However, mobile-first design is just one part of a bigger shift: the move toward omnichannel strategies. Omnichannel means giving customers a smooth and consistent experience whether they shop in a physical store, browse a website, use a mobile app, or contact a brand through social media. The goal is to make everything connected and convenient (Moued & Abdullah, 2018).

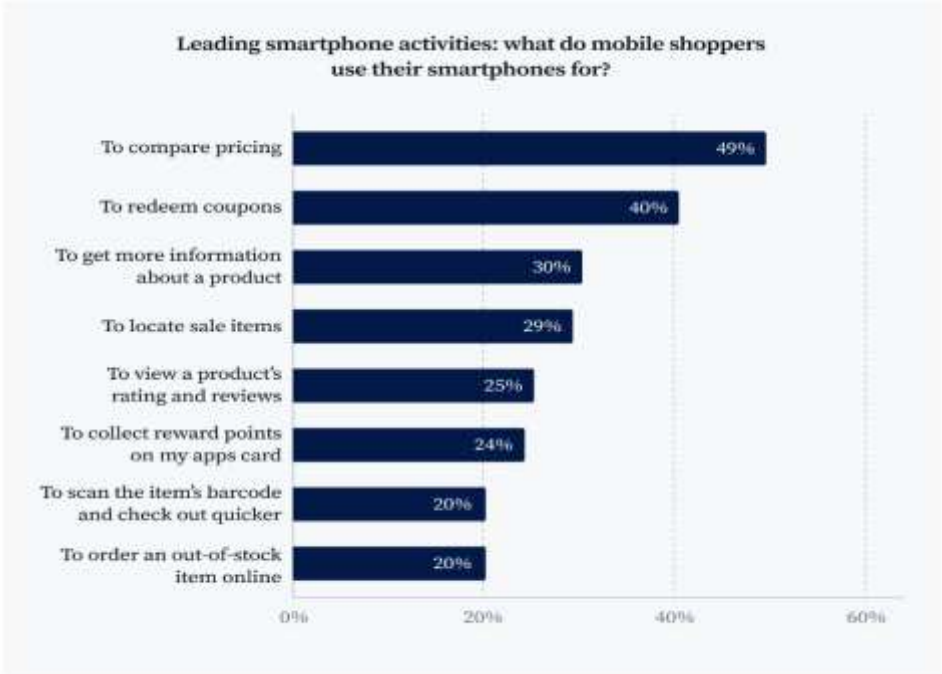
Today's consumers often move between channels before making a purchase. For example, they might research a product online, try it in a store, and then buy it later through an app. Companies that succeed are those that can unify these elements into a single, consistent brand experience (Rey-García et al., 2018).

Gen Z's demand for smooth, mobile-first experiences is rapidly changing how businesses approach digital retail. By 2025, 76% of U.S. adults will regularly shop from their smartphones, with Gen Z leading the way. Mobile commerce now accounts for more than 72% of global online retail sales. Additionally, 74% of Gen Z prefer a mobile shopping app over a mobile website, and mobile cart abandonment rates can reach up to 75.5%. Clearly, tackling the high rate of mobile cart abandonment, along with Gen Z's growing preference for using their mobile devices to shop, means that any successful omnichannel strategy must focus on mobile accessibility, user experience, and the ease of accessing digital shopping carts across various devices.

This requires careful use of data analytics to personalise interactions and predict what customers want. Brands like IKEA, for instance, have integrated their online and offline services so that customers can research products one way and complete purchases the other (Prassida & Hsu, 2022). In this way, omnichannel strategies don't just create convenience; they also build customer loyalty by making interactions feel effortless and personalized (Iglesías-Pradas & Acquila-Natale, 2023).



(Figure 1: Mcommerce Sales in the United States)



(Figure 2:Smartphone activities and their implications on the black patterns approach)

3.3 The Role of Social Media, Influencers, and User-Generated Content

Perhaps the most influential force in the digital marketplace is social media. Platforms such as Instagram, TikTok, and YouTube have turned shopping into an interactive and social experience. Unlike traditional advertising, which delivers one-way messages, social media allows two-way communication where consumers can comment, share, and create their own content (Granata, 2020).

This shift has given rise to user-generated content (UGC) and influencer marketing. Instead of only listening to companies, Gen Z often trusts influencers, online communities, and even strangers on review platforms (Faria & Carvalho, 2025). They want to see real people using products and sharing honest opinions.

This participatory culture means consumers are now co-creators of brand stories. By posting photos, reviews, and videos, they shape how other people see products and companies. Businesses that encourage this participation, through hashtags, challenges, or community spaces, can build stronger loyalty and more authentic relationships (Shaheen, 2025).

In short, social media has blurred the line between marketing and everyday communication. For Gen Z, the decision to buy is not just about advertisements; it is shaped by influencers, trends, friends, and viral content. For businesses, this means success depends on transparency, engagement, and trust rather than traditional sales tactics.

4. NEUROSCIENCE OF CONSUMER BEHAVIOUR: THE DOPAMINE FACTOR

People's buying behaviour isn't shaped only by culture, technology, or money. It's also influenced by the brain. Research in neuroscience shows that dopamine, a chemical in the brain, has a big role in driving motivation, creating a sense of reward, and shaping the decisions we make. In digital environments, dopamine becomes especially important because online platforms are designed to trigger quick emotional responses and reinforce certain behaviours (Shah, 2024). Understanding how dopamine works helps explain why Gen Z often engages in impulse buying, enjoys gamified shopping features, and seeks instant gratification online.

Advances in brain imaging allow researchers to see how people respond to digital interactions in real time. These studies show that dopamine activity increases when people anticipate rewards, such as discounts, likes on social media, or completing a purchase (Hill, 2003; Venkatraman et al., 2011). This means marketers can influence consumer decisions not only through information but also by appealing directly to unconscious emotional responses. For businesses, this creates opportunities for more engaging design. But it also raises ethical concerns about manipulation, since these triggers can bypass rational decision-making (Ngo et al., 2024).

4.1 Dopamine and the Psychology of Reward

Dopamine is a chemical linked to the brain's reward system. It is released when we expect something pleasurable, motivating us to repeat those behaviours (Lee & Goto, 2018). This is why people feel excitement when they get a notification, find a bargain online, or win a game. In marketing, this reward cycle is important because it explains why people enjoy shopping and why certain strategies keep them hooked.

For Gen Z, who spend much of their time in digital spaces, dopamine release is constantly stimulated. Online purchases, social media likes, and engaging digital content can all create small bursts of dopamine, reinforcing behaviours and making them more likely to repeat them (Plaßmann et al., 2008; Salamone, 2009). This is also why some platforms feel addictive; they are built to keep activating these reward pathways again and again (Dresp, 2023).

4.2 Instant Gratification in Online Shopping

One of the strongest effects of dopamine in digital contexts is the desire for instant gratification. In e-commerce, everything is designed for speed: one-click purchases, saved payment details, and fast delivery services. This bypasses slower, more rational decision-making and instead appeals directly to the brain's desire for immediate reward (Zhao, 2022).

Research shows that the anticipation of receiving something quickly triggers dopamine, which makes impulse buying more likely (Taber et al., 2012; Wise, 2008). Gen Z, who are used to fast digital interactions, are especially drawn to these systems. Advertisers often exploit this by targeting impulse buyers with discounts, limited-time offers, and one-click checkout options (Mendenhall, 2014).

4.3 Gamification and Engagement Loops in Digital Platforms

Another way dopamine is triggered is through gamification, adding game-like elements to non-game settings. Online platforms use features such as points, badges, leaderboards, or daily rewards to keep users engaged (Santos et al., 2023). These features create small achievements that stimulate dopamine release, making people feel satisfied (Wu, 2020).

For Gen Z, who already enjoy gaming culture, these techniques feel natural. But they also increase the risk of impulsive behaviours and compulsive engagement. While gamification can make platforms more fun, it also blurs the line between entertainment and manipulation.

5. DARK PATTERNS IN THE DIGITAL MARKETPLACE

While dopamine-driven design encourages people to keep engaging with digital platforms, another factor also plays a major role in shaping consumer behaviour: dark patterns. Dark patterns are user interface designs that deliberately manipulate people into making decisions they may not want (Bongard-Blanchy et al., 2021).

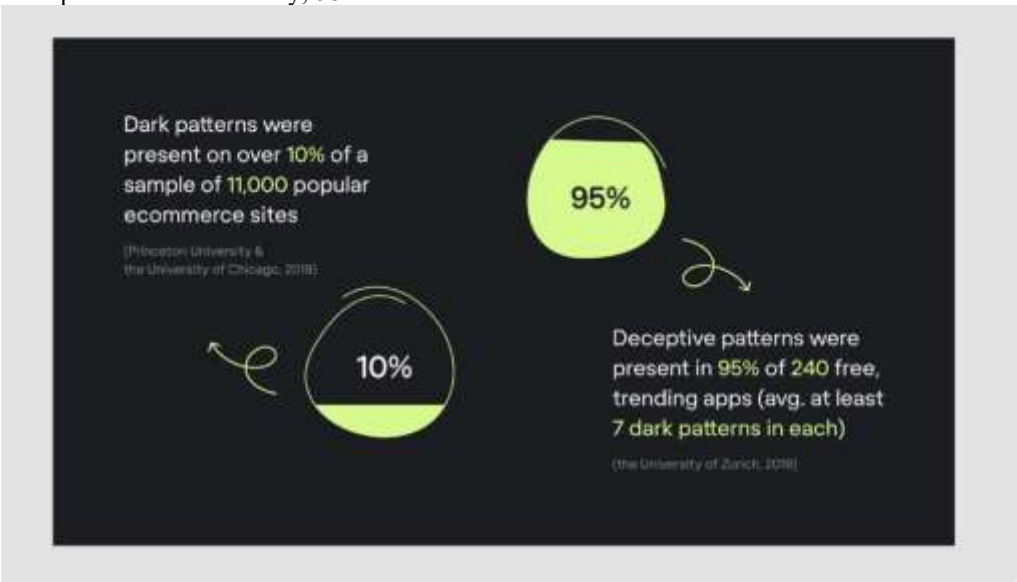
These designs are not merely persuasive tactics; they are structured manipulations. They take advantage of natural human biases, such as our tendency to avoid loss, respond to urgency, or follow defaults. For example, a website might hide the "unsubscribe" button, add items to a cart automatically, or make cancellation confusing on purpose. In each case, the company benefits while the user takes the loss (Gray et al., 2021).

Dark patterns are common in this day and age. They are designed to keep users engaged longer, spend more money, or share more information than they originally intended. This can create frustration and a sense of being exploited, even when they are aware of the manipulation (Bongard-Blanchy et al., 2021).

The widespread use of these techniques raises important ethical questions. If platforms are made to exploit weaknesses in human psychology, do people truly have free will? Many scholars argue that dark patterns directly threaten mental autonomy, making it harder for people to act according to their genuine intentions (McCarthy-Jones, 2019).

An increasingly concerning issue in online shopping is the use of dark patterns. These are design choices in interfaces, like apps, that aim to influence user behavior. 56% of respondents indicated they have less trust in digital brands that they think manipulate the user experience. Additionally, 95% of mobile apps and 97% of consumer apps in the EU feature at least one dark pattern. Subscription services are especially problematic. According to 76% of respondents, these services often use dark pattern elements to encourage long-term use or to make cancellation difficult. These findings lead us to question the ethics of persuasive design in online environments.

As awareness of dark patterns grows, some countries are considering stricter rules to protect consumers from the most harmful designs (Obi et al., 2022). Still, the problem is widespread and constantly evolving (Zac et al., 2025).



(Reference: https://www.eleken.co/blog-posts/dark-patterns-examples)

(Figure 3: Presence of Dark Patterns on e-commerce and online trade forums)

6. INTERSECTIONS: DOPAMINE, DARK PATTERNS, AND GEN Z

When dopamine-driven design and dark patterns come together, they create a powerful mix that strongly influences Gen Z's online behaviour. This generation is highly engaged with digital platforms, but their developing brains and constant online presence make them vulnerable to these techniques. The combination of psychological reward systems and manipulative design leads to a digital environment that is both engaging and risky.

6.1 How Dark Patterns Exploit Reward Systems

Many digital platforms are designed not just to attract attention but to hold it. Dark patterns often work by tapping into the same brain reward systems that dopamine activates. For example, features like endless scrolling or constant notifications provide small bursts of positive reinforcement. Every time a user scrolls or sees a new update, the brain gets a reward signal, which encourages them to continue (Bhargava & Velásquez, 2020).

Other dark patterns, such as hidden costs or forced continuity (where subscriptions renew automatically without a clear warning), take advantage of cognitive shortcuts. People may feel they are making free choices, but in reality, the design is guiding them toward decisions that benefit the company (Mildner et al., 2023). In this way, digital interfaces become less about serving users and more about steering behaviour for commercial gain.

6.2 Gen Z's Susceptibility to Digital Manipulation

The new generation, whose strength lies in digital fluency, sometimes makes them more susceptible to manipulation. Because they grew up fully immersed in technology, many of them see features like autoplay or push notifications as something natural rather than of a manipulative nature (Bergdahl & Nouri, 2020). This makes it easier for dark patterns to slip past their awareness.

At the same time, the adolescent and young adult brains are still developing, especially in sensitive areas relating to impulse control and long-term decision-making. This makes dopamine-driven designs more appealing for Gen Z, restructuring their habits and sometimes leading to overusage or addiction-like behaviours (Ranieri et al., 2021; Ahmed, 2019).

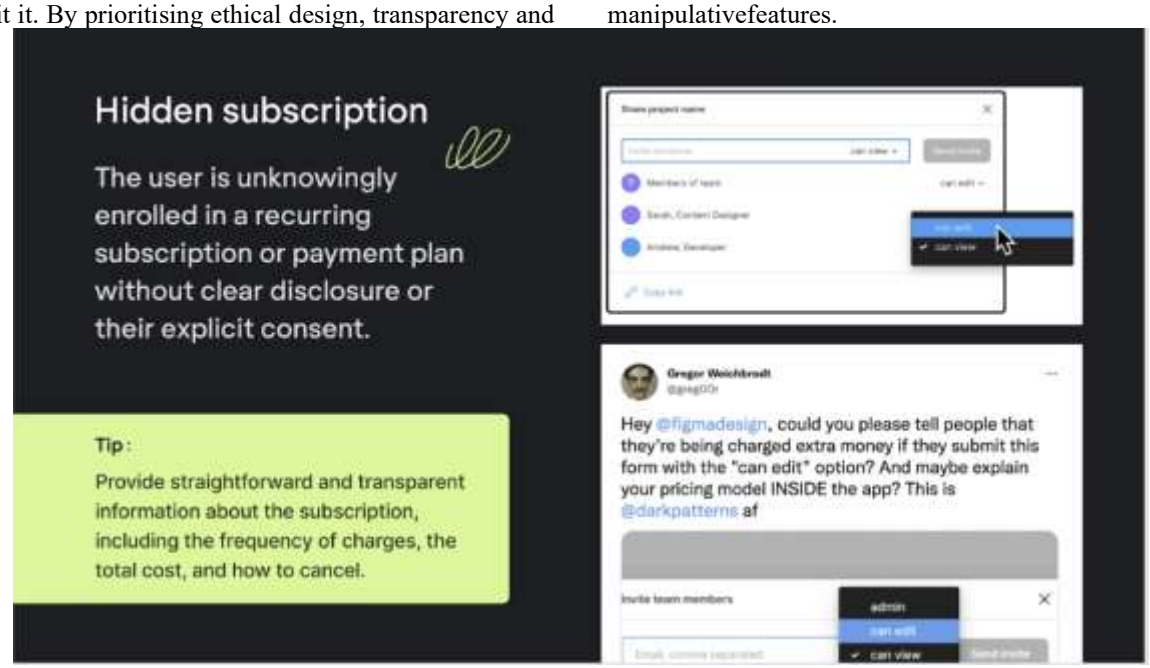
Studies show that some Gen Z individuals spend up to 16 hours a day on digital devices (Surat et al., 2021). This level of exposure increases the chances of being more attracted towards manipulative design. If the above phenomenon is repeated over time, rigorous engagement can create problems such as stress, poor productivity, and negative effects on a person's mental health. (Schaffner et al., 2025).

6.3 Resistance, Awareness, and Consumer Agency

Despite these risks, Gen Z is not powerless. In fact, many researchers have emphasised the use of digital literacy as a way to counter manipulation. If young consumers understand how to recognise dark patterns and know how the facet of dopamine-driven engagement works, they can make more intentional choices from a wide variety of products (Alruthaya et al., 2021).

But resistance cannot depend only on individuals. There is a need for ethical design and stronger regulation. Platforms have the power to design in ways that support user autonomy rather than exploit it. By prioritising ethical design, transparency and respecting consumer well-being, companies can build long-term relationships with consumers instead of short-term profits. Meanwhile, policymakers can help by creating stringent rules that prevent the most harmful dark patterns from being used in the first place.

For Gen Z, this balance is especially important. They are highly engaged in digital platforms, which represent the future of consumer culture. Spreading critical awareness and following responsible design practices can help them enjoy the boon of technology without being undermined by its manipulativefeatures.



(Reference: https://www.deceptive.design/types/hidden-subscription)

(Figure 4:Hidden subscription method used by service providers)

7. GAPS IN LITERATURE AND FUTURE RESEARCH

Though extensive research on digital technology is conducted, key gaps remain for Gen Z. Long-term studies are required to establish a relation between early digital exposure and later mental health and financial outcomes. The impact of gaming on learning habits and digital distractions also needs attention.

Financial literacy is another weak area, especially regarding parental misunderstandings and the rise of digital finance. Future studies should focus on how digital platforms affect stress, resilience, critical thinking, and socialisation. Finally, more research is needed to test design elements that increase or decrease risks related to issues like addiction and social comparison

8. CONCLUSION

According to this review, Gen Z is a generation of digital natives that is disrupting the marketplace. Three important points are identified. First, Gen Z consumer behaviour is primarily dictated by digital environments, where social media, influencers, and gamified shopping environments strongly influence their purchasing decisions. Second, dopamine, a chemical in the brain associated with reward and pleasure, is an important part of understanding Gen Z's proclivity to seek immediate rewards and affectively driven considerations leading to quick purchases, particularly in digital environments that are designed around dopamine design principles. Third, dark patterns present ethical issues, as these designs manipulate and prey on psychological vulnerabilities.

These trends are problematic for the digital economy. On one hand, dopamine-feed engagement and persuasive design have catalysed the rapid growth of e-commerce and social commerce. On the other hand, these tactics raise important concerns over long-term trust, mental health, and brand loyalty. As Gen Z continues to increase in global economic power and influence, over-reliance on nefarious tactics may backfire.

.This represents a crossroads for companies. They can either choose to continue extracting more short-term profit, or they can move towards an economic system built on trust, transparency, and consumer empowerment. To build an ethical digital marketplace, we need to build digital designs that honor user choice, develop trust, and inspire meaningful participation. We will also need policymakers and educators to push for digital literacy, so Gen Z has the skills to identify and resist these manipulative digital strategies.

Ultimately, the future of the digital economy relies on trust. Companies will have to find a way to balance profit with corporate responsibility, and start creating value for different stakeholders, beyond the shareholders of an organization, to respect consumer welfare. Through their behavior and expectations, Gen Z is not only changing how we consume; they are challenging corporations to reshape the digital commerce industry with new ethical standards.

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