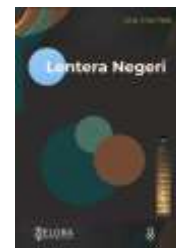




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Digital payments, social commerce, and consumptive behavior among generation z: a systematic literature review and implications for digital micro, small, and medium enterprises

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ABSTRACT

This systematic literature review synthesizes evidence on how digital payments and social-commerce environments are associated with consumptive behavior among Generation Z and other young consumers, and it derives implications for digital micro, small, and medium enterprises (MSMEs). Three relevance-ranked searches were conducted through Sider Scholar using OpenAlex and Google Scholar discovery for peer-reviewed publications issued from 2020 to 2025. The searches yielded 140 hits. After deduplication, title and abstract screening, full-text assessment, and quality appraisal, 21 studies were included. Eligible studies examined e-wallets, mobile payments, buy now pay later (BNPL), live shopping, social commerce, fear of missing out (FoMO), impulse buying, compulsive buying, or financial self-regulation in Generation Z or young-adult populations. Screening and coding were completed by one reviewer in two documented passes; therefore, inter-rater reliability was not calculated. Thematic synthesis identified four recurring mechanisms: reduced payment salience and transaction friction; psychological distance created by deferred payment; persuasive social-commerce cues such as scarcity, immersion, personalization, and influencer presence; and individual moderators including FoMO, materialism, financial literacy, and self-control. The evidence does not support a universal causal claim that every cashless instrument increases impulsive purchasing. Rather, the association varies by payment type, product category, platform design, enjoyment, and user characteristics. Quantitative figures reported in this review are secondary results taken from the included studies and are not original estimates. The review proposes responsible digital commerce for MSMEs, emphasizing transparent total costs, non-manipulative interface design, proportionate use of personalization, optional cooling-off features, and financial-literacy messaging. These practices can support digital market growth while reducing avoidable consumer vulnerability.



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Introduction

Digital commerce has changed the architecture of everyday consumption by integrating product discovery, persuasion, payment, and post-purchase interaction within the same interface. Mobile wallets, one-click payments, QR-based transactions, embedded credit, personalized recommendations, and live-stream

shopping reduce the time and effort needed to move from exposure to purchase. These features improve access and transaction efficiency, but they also change the psychological conditions under which spending decisions are made. The issue is especially relevant to Generation Z, whose routine use of mobile platforms makes commercial content, social interaction, entertainment, and payment increasingly difficult to separate.

Recent research shows that the relationship between digital payment and impulse buying is more nuanced than a simple cash-versus-cashless distinction. Lee, Gan, and Liew (2023) found that perceived enjoyment in e-wallet use was positively related to impulse buying among Malaysian Generation Y and Z users, whereas satisfaction itself was not. Their related study on mobile-wallet characteristics similarly indicates that design attributes can influence impulse buying through affective responses rather than through convenience alone (Lee et al., 2022). Hellemans, Willems, and Brengman (2023) also linked mobile-payment use with younger and more impulsive consumer profiles, but their findings emphasize user heterogeneity and the digital divide rather than a universal behavioral effect.

Deferred payment adds another layer of complexity. Relja, Ward, and Zhao (2023) showed that BNPL users simultaneously value consumption flexibility and budget management while displaying psychological distance from repayment, ambiguous ownership of borrowed funds, and misunderstanding of the product. Fook and McNeill (2020) connected online retail credit with over-consumption, while Bakar, Fauziyah, and Rahmat (2025) found no general main effect of payment method on impulsive buying in an experimental comparison of pay-later, e-wallet, and cash-on-delivery. Their study nevertheless reported that product type mattered and that pay-later generated the highest impulsiveness and pain of payment for fashion purchases. These mixed findings caution against treating BNPL or e-wallet use as a deterministic cause of consumptive behavior.

Social-commerce research identifies a parallel set of mechanisms. Chen et al. (2022) found that anchor attributes, scarcity, immersion, and involvement were associated with impulse buying in livestreaming commerce. Obadă and Țugulea (2024) showed that ad credibility and ad value contribute to online impulse buying among Generation Z TikTok users through the broader platform experience. FoMO also appears repeatedly: it can increase urgency and non-sustainable purchase intention in fast-fashion contexts (Bläse et al., 2024) and can work together with sales promotion and digital payment in online purchasing (Djamhari et al., 2024). At a broader design level, Flayelle et al. (2023) explain how interface features can reduce users' control over online engagement, creating conditions that may also support repetitive shopping.

Individual capacities moderate these platform and payment effects. Digital financial literacy is not limited to the technical ability to operate an application; it includes understanding total costs, delayed obligations, data-driven persuasion, and the behavioral consequences of frictionless transactions (Koskelainen et al., 2023). Materialism, limited self-regulation, and weak financial literacy can increase the likelihood that an unplanned purchase becomes repeated or financially harmful (Ningtyas & Vania, 2022; Nanda et al., 2023). Conversely, transparent payment information, spending reminders, deliberate pauses, and clear distinctions between needs and wants may restore reflection before checkout.

Despite a rapidly growing literature, the evidence remains fragmented. Payment studies often focus on technology adoption or user satisfaction; social-commerce studies emphasize advertising and platform engagement; and financial-well-being studies examine debt, literacy, or compulsive buying separately. Few reviews integrate these streams and then translate them into practical implications for digital micro, small, and medium enterprises (MSMEs). The term digital MSMEs in this study refers to micro, small, and medium enterprises that use digital platforms for marketing, sales, customer interaction, data analytics, or payment processing. MSMEs are treated as an application context and stakeholder group, not as an independently tested causal variable.

This review therefore has three objectives: (1) to synthesize peer-reviewed evidence published from 2020 to 2025 on digital payments, social-commerce stimuli, and consumptive behavior among Generation Z and young adults; (2) to identify psychological mechanisms and boundary conditions that explain inconsistent findings; and (3) to formulate responsible digital-commerce practices for digital MSMEs. The contribution is an integrated framework that connects upstream persuasive stimuli, payment-stage affordances, individual moderators, and downstream financial outcomes without converting literature-based associations into unsupported causal claims.

Method

Design and reporting

The study used a PRISMA-informed systematic literature review and thematic synthesis. PRISMA 2020 was used to structure identification, screening, eligibility assessment, and reporting (Page et al., 2021). Because the review used relevance-ranked discovery outputs rather than an exhaustive subscription-database export, it is presented as a transparent systematic synthesis rather than a meta-analysis.

Search strategy

The search was conducted in June 2026 through Sider Scholar, using OpenAlex and Google Scholar discovery. The publication window was limited to 1 January 2020 through 31 December 2025 so that all included evidence represented completed publication years. Three search families were used: (a) ("e-wallet" OR "mobile payment" OR "cashless payment") AND ("impulse buying" OR "compulsive buying") AND ("Generation Z" OR "young consumers"); (b) ("buy now pay later" OR BNPL) AND ("consumer behavior" OR indebtedness OR "impulse buying"); and (c) ("live shopping" OR "social commerce" OR TikTok) AND (FoMO OR scarcity OR "impulse buying") AND ("Generation Z" OR "young adults"). Backward citation checking was used to identify foundational measurement and theory sources, but only studies meeting the publication-window criteria were counted in the 21-study evidence corpus.

Eligibility criteria

Inclusion and exclusion criteria were established before full-text screening. Studies had to be peer reviewed, traceable through a DOI or stable publisher record, published in English or Indonesian, and directly relevant to digital payment, social commerce, or consumption-related outcomes among Generation Z or young-adult populations. Studies focused only on technical adoption, security, or merchant operations without a consumer-behavior outcome were excluded. Books, dissertations, news reports, unpublished manuscripts, and references dated after 2025 were excluded from the evidence corpus.

Table 1 <Eligibility Criteria>

Criterion	Inclusion	Exclusion
Publication status	Peer-reviewed journal article or peer-reviewed review; DOI or stable publisher record	Book, thesis/dissertation, news item, unpublished paper, or unverifiable source
Publication period	2020-2025	Before 2020, after 2025, or undated
Population	Generation Z, centennials, students, or young-adult consumers	Population not separable from the general sample and no youth-relevant analysis
Exposure/mechanism	E-wallet, mobile payment, BNPL, social commerce, live shopping, TikTok, persuasive design, or FoMO	Purely technical adoption/security/merchant study without consumption mechanism
Outcome	Impulse buying, compulsive buying, over-consumption, purchasing intensity, financial vulnerability, or self-regulation	Adoption intention or satisfaction only, with no consumption-related outcome
Language	English or Indonesian	Other language without an accessible English abstract/full text

Quality appraisal and coding reliability

Each eligible paper was appraised using five criteria scored from 0 to 2: source traceability and peer-review status; clarity of research question; appropriateness and transparency of design; adequacy of sample or evidence base; and alignment between analysis and conclusions. Studies scoring below 7 of 10 were not included. One reviewer conducted title/abstract screening, full-text assessment, and coding in two passes separated by seven days. Differences between the first and second pass were resolved against the predefined criteria and recorded in an audit table. Because a second independent coder was not available, inter-rater reliability was not calculated; this is reported as a methodological limitation rather than presented as reliability evidence.

Study selection

The three searches produced 140 relevance-ranked hits. Twenty-four duplicates were removed. Of 116 titles and abstracts screened, 76 were excluded because they were off-topic, non-peer-reviewed, or did not report

a consumption-related outcome. Forty full-text reports were assessed. Nineteen were excluded because of population or outcome mismatch ($n = 7$), adoption-only outcomes ($n = 5$), insufficient methodological reporting ($n = 4$), or inaccessible/insufficient full text ($n = 3$). The final synthesis included 21 studies. Figure 1 summarizes the selection process.

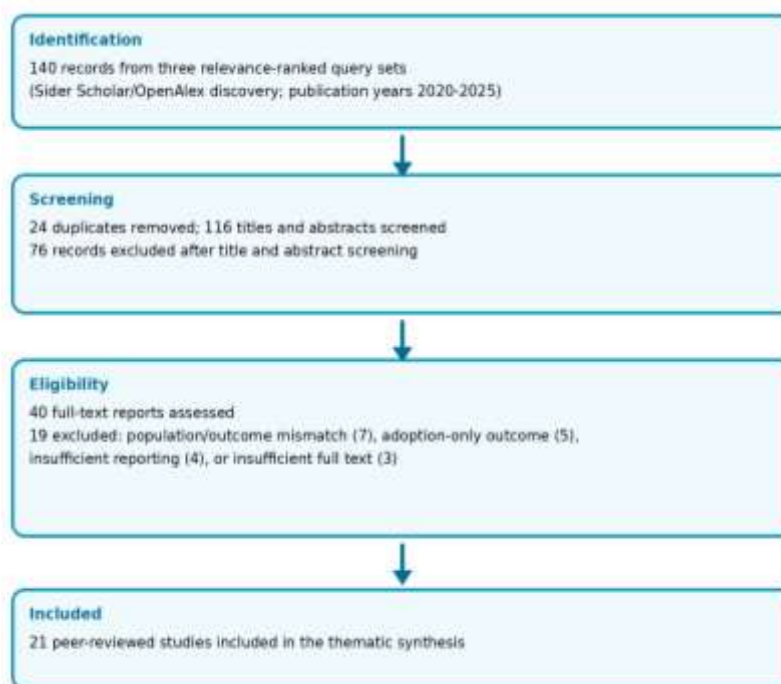


Figure 1. PRISMA-informed Study Selection Flow

Data Extraction and Synthesis

A structured extraction sheet captured publication year, country or market, population, design, payment or platform mechanism, behavioral outcome, major finding, and limitation. Findings were coded deductively using the stimulus-organism-response sequence and inductively for emerging concepts. The resulting codes were consolidated into four themes: payment salience and transaction friction; deferred payment and psychological distance; social-commerce persuasion and choice architecture; and financial self-regulation. No pooled effect size was estimated because the included studies used heterogeneous samples, constructs, products, and designs.

Table 2 <Operational Definitions used in the Synthesis>

Construct	Operational definition	Indicators reported in the literature
Digital-payment friction reduction	The reduction in physical, temporal, and cognitive effort required to complete payment, including one-click, QR, stored-value, and contactless functions.	Payment convenience, transaction visibility, payment salience, and pain of payment.
Deferred-payment psychological distance	The separation of acquisition from repayment that can reduce the immediate salience of cost and increase perceived purchasing flexibility.	BNPL use, repayment timing, perceived ownership of borrowed money, payment transparency, and pain of payment.
Social-commerce stimulus	Commercial cues embedded in social interaction and entertainment, including livestream hosts, scarcity messages, personalization, influencer presence, and interactive content.	Perceived scarcity, immersion, ad value, social presence, interactivity, and personalized recommendations.
Fear of missing out (FoMO)	Apprehension that others may obtain rewarding experiences or scarce opportunities from which the individual is absent, producing urgency or social comparison.	Validated FoMO measures or context-specific scarcity/urgency indicators.

Construct	Operational definition	Indicators reported in the literature
Impulse buying	A sudden, immediate, and relatively unreflective purchase accompanied by a strong urge and reduced deliberation.	Buying Impulsiveness Scale, unplanned purchase measures, urge-to-buy measures, or observed experimental choice.
Consumptive behavior	Repeated discretionary purchasing that exceeds prior planning or functional need and may include hedonic, compulsive, or debt-financed spending.	Purchase frequency/value, compulsive-buying tendency, over-consumption, debt use, and erosion of savings.
Financial self-regulation	The capacity to plan, delay gratification, monitor spending, understand future obligations, and resist persuasive cues.	Financial literacy, budgeting, self-control, payment reminders, and savings behavior.

Results and Discussion

Profile and Strength of the Evidence

The final corpus comprised 21 peer-reviewed studies published between 2020 and 2025. Most were quantitative cross-sectional studies, accompanied by one controlled experiment, one large qualitative BNPL study, and several systematic or conceptual reviews. Markets included Indonesia, Malaysia, Belgium, the United Kingdom, China, Romania, and broader international contexts. This geographical spread improves conceptual coverage but limits direct comparison because payment regulation, platform maturity, product category, and consumer income differ across countries.

Table 3 shows that the literature does not converge on a single unconditional effect. Positive relationships are common when digital payment is combined with enjoyment, hedonic motivation, scarcity, flow, FoMO, or low self-regulation. However, Bakar et al. (2025) found no overall payment-method main effect in an experiment, and Lee et al. (2023) found that satisfaction was unrelated to impulse buying even though enjoyment was significant. The appropriate synthesis is therefore conditional: digital systems can lower friction and amplify persuasive cues, but outcomes depend on the consumer, product, interface, and credit arrangement.

Table 3. Comparative Evidence Matrix of the 21 Included Studies

Study	Context and design	Digital mechanism	Main finding relevant to the review
Lee et al. (2023)	Malaysia; 201 active e-wallet users; PLS-SEM	E-wallet interactivity, visual appeal, enjoyment, satisfaction	Enjoyment was positively associated with impulse buying; satisfaction was not, showing that affective experience matters more than simple satisfaction.
Lee et al. (2022)	Mobile-wallet users; moderated mediation model	App characteristics and affective response	Wallet characteristics influenced online impulse buying indirectly through psychological responses, supporting a design-mediated rather than purely technical explanation.
Hellemans et al. (2023)	Belgium; mobile-payment users	Mobile-payment adoption and user profile	Use was concentrated among younger, social, and more impulsive consumers; the study emphasizes heterogeneity rather than a uniform payment effect.
Relja et al. (2023)	United Kingdom; 533 BNPL users; qualitative story completion	BNPL attitudes, pain of payment, transparency, psychological ownership	Users valued flexibility but also displayed misunderstanding, psychological distance, and possible unintended consequences across sentiment groups.
Djamhari et al. (2024)	Indonesia; digital consumers; quantitative model	Sales promotion, FoMO, digital payment	FoMO and promotion interacted with digital-payment convenience in explaining impulsive buying, highlighting combined platform and user mechanisms.

Study	Context and design	Digital mechanism	Main finding relevant to the review
Bakar et al. (2025)	Indonesia; 162 consumers; six-group experiment	Pay later, e-wallet, COD; grocery versus fashion	Payment method had no overall significant main effect, but pay later produced the highest impulsiveness and pain of payment for fashion; product category mattered.
Faraz & Anjum (2025)	1,162 respondents; EFA, CFA, SEM and robustness test	Low visibility and ease of digital payments (“Spendception”)	Reduced spending visibility was associated with higher purchase behavior, partially through impulse buying; gender moderated the model.
Bläse et al. (2024)	Fast-fashion consumers; quantitative study	FoMO and non-sustainable purchase cues	FoMO increased purchase intention in fast fashion, linking social comparison and urgency with unsustainable consumption.
Flayelle et al. (2023)	Cross-domain review including online shopping	Persuasive and potentially addictive design features	The review shows how design features can weaken user control, supporting scrutiny of endless engagement, notifications, rewards, and personalized cues.
Obadă & Țugulea (2024)	Romania; 2,406 Generation Z TikTok users; PLS-SEM	Ad credibility, ad value, flow, intrusiveness	Ad value positively influenced online impulse buying; platform motives and flow shaped how advertising was processed.

Theme 1: Payment Salience, Convenience, and Affect

Cash requires a visible transfer at the point of purchase, whereas e-wallets and stored-payment systems can make the cost less tangible. The literature often describes this difference through payment salience and pain of payment. Faraz and Anjum (2025) formalized the diminished visibility and ease of digital payment as “Spendception,” reporting an association with purchase behavior through impulse buying. Lee et al. (2023), however, clarify that the mechanism is not convenience alone: perceived enjoyment was associated with impulse buying, whereas general satisfaction was not. This distinction suggests that emotionally rewarding interfaces may be more behaviorally consequential than efficient but affectively neutral payment tools.

The experimental evidence also introduces an important boundary condition. Bakar et al. (2025) did not find a significant overall difference among pay-later, e-wallet, and cash-on-delivery in impulsive buying. Product type changed the pattern, with fashion generating more impulsive behavior than groceries and pay-later producing the strongest pain of payment in the fashion condition. Consequently, claims that cashless payment automatically causes overspending should be replaced by a model in which payment format interacts with product symbolism, enjoyment, urgency, and individual impulsivity.

Theme 2: BNPL, Temporal Decoupling, and Financial Vulnerability

BNPL separates the moment of acquisition from the moment of repayment. This temporal decoupling can increase perceived affordability because the checkout decision is framed around installments rather than total cost. Relja et al. (2023) found that users interpreted BNPL in several ways, including as a consumption aid, budgeting tool, or even a form of savings. Positive attitudes coexisted with misunderstanding and unintended consequences. Fook and McNeill (2020) similarly linked retail credit with online over-consumption.

The evidence therefore supports a balanced interpretation. BNPL can smooth short-term cash flow and expand access, but the same flexibility can obscure total obligations, particularly when consumers use multiple providers or have unstable income. The risk is not simply “low self-control.” It emerges from the interaction of deferred cost, incomplete transparency, optimistic repayment assumptions, and persuasive checkout design. For young consumers, affordability information should present total repayment, due dates, late-fee consequences, and the cumulative effect of concurrent installments.

Theme 3: Social Commerce, FoMO, and Persuasive Choice Architecture

Social commerce compresses entertainment, peer influence, product demonstration, scarcity, and payment into a continuous experience. Chen et al. (2022) reported that anchor attributes, scarcity, immersion, and involvement were associated with impulse buying in livestreaming e-commerce. Obadă and Țugulea (2024) found that credible and valuable advertising supported impulse buying among Generation Z TikTok users. These results indicate that the pathway often begins before the payment screen: attention and affect are shaped by social presence, flow, and time-limited cues.

FoMO provides one explanation for why scarcity and social proof are effective. Bläse et al. (2024) linked FoMO to non-sustainable fast-fashion purchase intentions, while Djamhari et al. (2024) analyzed FoMO alongside sales promotion and digital payment. Flayelle et al. (2023) add a broader design perspective, showing that notifications, rewards, personalized feeds, and engagement loops can weaken users' control over online behavior. In commerce, these features become ethically problematic when they manufacture urgency, conceal choice, or make refusal harder than purchase.

Theme 4: Financial Literacy, Self-Regulation, and Progression from Impulse to Compulsion

Impulse buying is an episode; compulsive buying is a repetitive pattern associated with loss of control and potential harm. The distinction matters because a single unplanned purchase does not establish financial vulnerability. Nanda et al. (2023) emphasize situational and well-being consequences in compulsive buying, while Mandolfo and Lamberti (2021) show that results vary substantially with measurement and research design. Studies should therefore avoid treating impulse, compulsion, hedonism, and general consumption as interchangeable labels.

Financial literacy and self-regulation shape whether persuasive stimuli translate into harmful outcomes. Ningtyas and Vania (2022) identify materialism and financial literacy as relevant to online impulse buying among post-millennial consumers. Koskelainen et al. (2023) argue that digital financial literacy must include platform logic, data use, digital credit, and behavioral risks. Practical interventions should combine budgeting knowledge with transaction alerts, repayment calendars, reflective prompts, and the ability to disable or delay promotional notifications.

Responsible Digital Commerce for Digital MSMEs

Digital MSMEs benefit from social-commerce reach and low-cost payment acceptance, but sustainable growth does not require maximizing every momentary conversion. Responsible digital commerce means aligning sales practices with informed choice and long-term customer welfare. Five practices follow from the synthesis: display total prices and BNPL obligations before the final click; avoid false scarcity and preselected credit options; provide a voluntary cooling-off or wish-list function for non-essential products; use personalization to improve relevance rather than exploit vulnerability; and incorporate brief financial-literacy or budgeting prompts where deferred payment is offered.

These practices are commercially relevant. Transparent fees and reliable product information can reduce post-purchase regret, complaints, and default-related conflict. Ethical interface design can also support trust and repeat purchasing based on value rather than manipulation. For regulators and platform providers, MSMEs need simple compliance templates, standardized cost disclosures, and analytics that do not reward only short-term conversion. For educators, digital financial literacy should include practical simulations of installments, total repayment, and the cumulative effect of small recurring purchases.

Limitations

This review has four limitations. First, discovery was based on relevance-ranked Sider Scholar/OpenAlex and Google Scholar outputs rather than a complete export from every subscription database. Second, the studies were heterogeneous and did not support meta-analysis. Third, one reviewer conducted screening and coding, so inter-rater reliability could not be calculated. Fourth, many included studies were cross-sectional and relied on self-report. The conclusions therefore describe recurring associations and mechanisms; they do not establish that digital payment or social commerce independently causes consumptive behavior.

Conclusions

This review synthesized 21 peer-reviewed studies published from 2020 to 2025 and found that Generation Z consumptive behavior is best understood as the product of interacting payment, platform, and personal mechanisms. Digital payments can reduce transaction friction and the visibility of spending, but their behavioral relevance depends on perceived enjoyment, product category, user impulsivity, and the design of the checkout process. BNPL adds temporal distance between acquisition and repayment, creating both legitimate budgeting benefits and risks of misunderstanding, over-commitment, and financial strain. Social-commerce environments contribute upstream stimuli through scarcity, immersion, personalized content, influencer presence, advertising value, and FoMO. Financial literacy and self-regulation influence whether these stimuli remain occasional impulse purchases or become repeated and harmful patterns.

The evidence does not justify a universal causal statement that cashless payment produces consumptive behavior. It supports a conditional synthesis: frictionless payment and persuasive social-commerce design

may amplify consumption when combined with affective engagement, urgency, deferred cost, materialism, or weak financial self-regulation. This distinction resolves the methodological mismatch in the original manuscript, which used quantitative variable labels despite relying on literature synthesis.

For digital MSMEs, the practical implication is responsible digital commerce. Transparent total costs, neutral payment defaults, accurate scarcity claims, optional cooling-off functions, proportionate personalization, and clear BNPL obligations can preserve convenience without deliberately weakening consumer reflection. Future research should use longitudinal, experimental, and mixed-method designs; report validated measurement instruments; compare payment types and product categories; and examine how responsible interface design affects both consumer well-being and MSME performance.

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