
GOVERNANCE-BOUNDED ALGORITHMIC DESIGN LEVERS SHAPING DIGITAL CONSUMER BEHAVIOR: A SYSTEMATIC REVIEW AND LAYERED MODEL

Rony Arpinto ADY

Universitas Dian Nuswantoro, Indonesia

Vincent Didiek Wiet ARYANTO

Universitas Dian Nuswantoro, Indonesia

Diana AQMALA

Universitas Dian Nuswantoro, Indonesia

Abstract:

Algorithmic design levers in digital platforms shape attention, trust, and consumer decisions to adopt, continue, or resist platform mediated services. Evidence on interface signals, personalization, frictionless transactions, gamification, and governance is synthesized, treating governance and culture as boundary conditions for welfare outcomes including transparency, privacy, and perceived agency. Following PRISMA 2020, Scopus was searched for English language journal articles published from 2016 to 2025; records were screened using predefined criteria, yielding 70 peer reviewed studies. Thematic synthesis and vote counting were used to integrate heterogeneous contexts and measures. Findings converge on four domains: signal architecture and attention capture; personalization and recommender systems; frictionless transactions and gamified journeys; and social commercial convergence with governance. Across domains, levers operate through cognitive, affective, and social mechanisms, including perceived usefulness, enjoyment, trust, fairness, social proof, and perceived control. A governance bounded layered model is proposed to link levers to mechanisms and behavioral and welfare outcomes, and gaps are identified in construct standardization, interaction effects, and causal evidence. Future research should prioritize longitudinal and field designs and develop shared welfare and fairness metrics.

Key words: *algorithmic design, digital platforms, consumer behavior, personalization, governance*

1. Introduction

Digital platforms shape consumer behavior through algorithmic design levers, including interface signals, personalization, payments and friction reduction, gamification, and governance. Signals such as reviews, ratings, previews, and badges reduce uncertainty and support trust by making product and seller quality more observable (Redondo & Serrano, 2023; Zhao & Wagner, 2022). Personalization tailors content and

recommendations to inferred preferences and is widely used to increase relevance and sustain engagement (Qian & Jain, 2024; Zhang et al., 2024). Frictionless transactions and payment integration simplify purchase journeys and can encourage repeat interactions by lowering effort and increasing perceived convenience (Almunawar & Anshari, 2024; Ki et al., 2025). Gamified features and incentives, including points, progress indicators, and time limited promotions, can increase repeated usage, but their effects depend on perceived fairness and whether rewards are interpreted as supportive rather than manipulative (Anirvinna et al., 2025; Zhang et al., 2022). Governance mechanisms such as verification, disclosure, and moderation aim to ensure fairness and transparency by defining the rules of interaction and managing risk (Ahn & Kim, 2025; Geng, 2023).

Prior research across social commerce, streaming, mobile payments, and metaverse marketplaces shows how operators deploy these levers in combination (Hoang & Khoa, 2024; Qian & Jain, 2024). For example, signals such as reviews, ratings, previews, badges, and targeted advertising reduce ambiguity and frame expectations, which can increase purchase intention and platform trust (Redondo & Serrano, 2023; Zhao et al., 2023). Recommender systems enhance relevance and satisfaction but may also confine discovery and narrow exposure, raising concerns about fatigue, echo chambers, and reduced welfare when diversity and serendipity are not incorporated (Inoue et al., 2024; Zhang et al., 2024). Governance and interface designs, including disclosure labels, verification badges, and visibility rules, can reduce resistance by strengthening perceived fairness and trust, especially when misinformation, bias, or covert persuasion are salient (Geng, 2023; Rhue & Sundararajan, 2019; Turki, 2025). Responses also differ across markets and user segments because demographic factors and cultural expectations shape how consumers interpret personalization, pricing, and social cues (Apetrei et al., 2024; Macías Urrego et al., 2024; Żegleń et al., 2024).

However, much of the evidence base remains cross-sectional and context specific, so most findings should be interpreted as associations rather than causal effects of algorithmic interventions. Stronger causal inference requires field experiments, natural experiments, or longitudinal designs that observe behavioral changes following platform interventions (Lambrecht et al., 2024).

Despite a growing body of evidence, several gaps remain. First, findings are fragmented across platform contexts and levers, which limits cumulative knowledge about mechanisms and boundary conditions (Jain et al., 2023; Singh et al., 2024). Second, studies vary in how they define and measure transparency, fairness, privacy, and welfare related outcomes, which reduces comparability and constrains synthesis (Geng, 2023; Turki, 2025). Third, interaction effects among levers are underexplored even though platforms deploy signals, personalization, transactions, and social features simultaneously. Finally, governance is often treated as a background factor rather than modeled explicitly as a boundary condition that shapes whether levers build trust and welfare or trigger resistance (Ahn & Kim, 2025; Nazir et al., 2023).

This review addresses three questions: (RQ1) How have studies conceptualized and operationalized algorithmic design levers on digital platforms, particularly signals, personalization and recommender systems, frictionless transactions with gamification, and social commercial convergence with governance? (RQ2) Through which cognitive, affective,

and social mechanisms do these levers influence adoption, continuance, resistance, and welfare outcomes? (RQ3) What roles do governance and cultural context play, and which methodological and conceptual gaps remain? To answer these questions, this systematic review synthesizes 70 peer reviewed studies published between 2016 and 2025 and develops a governance bounded layered model that links design levers to mechanisms and outcomes while clarifying governance and cultural boundary conditions.

2. Literature review

2.1 Conceptual Domain and Scope

Digital platforms rely on algorithmic design levers to shape consumer experiences and behaviors. These levers include signal architecture, personalization and recommender systems, frictionless transactions with gamification, and social commercial convergence supported by governance structures. Each lever performs a distinct yet interdependent role in guiding attention, decision making, and engagement. Signals such as reviews, ratings, and previews act as cues of credibility that reduce uncertainty and strengthen trust (Redondo & Serrano, 2023; Zhao & Wagner, 2022). Personalization algorithms increase relevance but can also create information bubbles, fatigue, and perceived loss of control when over optimized (Inoue et al., 2024; Qian & Jain, 2024). Gamified features and streamlined payment systems minimize friction and enhance enjoyment, influencing habit formation and continued usage (Almunawar & Anshari, 2024; Ki et al., 2024). Governance mechanisms, including verification, disclosure, and moderation, foster trust and fairness by ensuring that interactions occur within transparent and ethical boundaries (Ahn & Kim, 2025; Poltanee, 2025). Collectively, these design elements facilitate engagement while simultaneously shaping perceptions of fairness, agency, and welfare.

2.2 Core Theoretical Perspectives

Research on consumer behavior in digital platforms commonly draws on adoption and continuance models. Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology link perceived usefulness and ease of use to intention and behavior, and recent reviews confirm their robustness across mobile and platform settings (Permana et al., 2024; Su et al., 2024). Expectation Confirmation Theory explains post adoption satisfaction and continuance when experience confirms prior expectations (Müller-Pérez et al., 2025). Theory of Planned Behavior adds a social and control pathway, connecting attitudes, norms, and perceived behavioral control to platform choices (Rozenkowska, 2023). Beyond these foundations, signaling theory and social proof explain why visible cues such as reviews, ratings, and badges reduce uncertainty and increase credibility (Hoang & Khoa, 2024; Rhue & Sundararajan, 2019). In AI mediated environments, transparency and perceived control become central because users evaluate relevance, fairness, and privacy trade offs (Jain et al., 2023; Turki, 2025). Switching cost perspectives further explain inertia when social or transaction frictions raise the cost of leaving (Macías Urrego et al., 2024).

Figure 1 summarizes how these theoretical perspectives cluster around algorithmic design levers and highlights the recurring role of trust, perceived control, and fairness as cross cutting mechanisms.

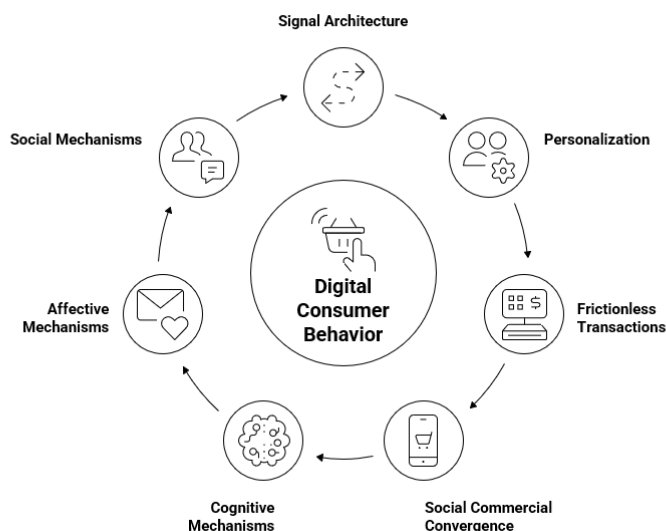


Figure 1. Conceptual positioning of algorithmic design levers and theoretical lenses in digital platforms.

2.3 Evidence from Signals and Attention Mechanisms

Signals such as reviews, ratings, previews, and badges shape consumer inference by reducing ambiguity and directing attention to options perceived as credible. Choi et al. (2019) show that previews and reviews interact to increase perceived diagnosticity and purchase likelihood because consumers can cross validate information across cues. Hoang & Khoa (2024) and Katyal & Sehgal (2025) similarly report that rating and review valence increase credibility and reduce perceived risk, supporting purchase intention and continued use. Rhue & Sundararajan (2019) add a visibility mechanism, demonstrating that anticipated peer observation can amplify demand when purchases are socially observable. Attention based evidence strengthens this account. Šola et al. (2024) find that badges and highlighted reviews capture visual attention and increase confidence through salience and priming. However, Redondo & Serrano (2023) note that excessive or inconsistent signaling can create cognitive load and skepticism, implying that signal architecture should be calibrated and supported by verification and content quality control.

2.4 Personalization and Recommender Systems

Personalization and recommender systems aim to improve relevance, satisfaction, and engagement by matching content and products to inferred preferences. Qian & Jain (2024) show that recommendation ranking shapes what users create and consume,

increasing engagement by raising perceived usefulness and relevance. Zhang et al. (2024) report similar dynamics in short video contexts, where content sequencing supports continuous watching when relevance is optimized. At the same time, welfare trade offs emerge when personalization is over optimized. At the same time, recent studies highlight welfare trade-offs when personalization is over-optimized. Lv et al. (2024) show that narrow recommendation loops can limit discovery and reduce longer term enjoyment unless platforms incorporate diversity and novelty seeking mechanisms. Inoue et al. (2024) demonstrate that serendipity oriented design can counter fatigue by widening exploration and supporting intrinsically motivated engagement. Governance and user agency moderate these effects: transparency, explainability, and configurable settings can reduce perceived bias and strengthen trust, especially when privacy concerns are salient (Katyal & Sehgal, 2025; Müller-Pérez et al., 2025; Turki, 2025).

2.5 Frictionless Transactions, Payments, and Gamification

Frictionless transaction design reduces effort at checkout and payment, supporting conversion and repeat use through convenience and habit formation. Xu et al. (2024) show that convenience and perceived security are central drivers of sustained use in major payment ecosystems. Visconti-Caparrós & Campos-Blázquez (2022) similarly show that simplifying payment flows can shift routine purchase behavior by reducing transaction friction. In younger cohorts and emerging markets, perceived usefulness is complemented by habit and ecosystem fit in explaining continued payment use (Sang, 2024). In delivery settings, reliability cues and service assurance become salient when consumers depend on platforms for essential purchases (Almunawar & Anshari, 2024). Gamification and incentives can increase participation by combining rewards with hedonic enjoyment, but require careful calibration. Anirvinna et al. (2025) show that perceived value and ease of redemption motivate digital coupon adoption when incentives are seen as fair. Yan et al. (2022) and Zhang et al. (2022) caution that urgency framing can also increase unplanned purchasing, which can trigger regret and resistance if users later perceive manipulation. Vardikou et al. (2025) further indicate that time sensitive nudges work best when source credibility and trust are high.

2.6 Social Commercial Convergence and Governance

The boundary between social interaction and commerce is increasingly blurred as platforms integrate community features, influencer content, and livestream selling into purchase journeys. Yan et al. (2022) show that entertainment, social proof, and scarcity cues intensify impulse buying by increasing arousal and perceived social validation. Ramos & Rodrigues (2023) add that cohort and relationship dynamics shape purchasing through information sharing and social comparison. Governance determines whether these social mechanisms build long term trust or short term engagement at the expense of welfare. Ahn & Kim (2025) show that perceived unethical platform behavior reduces trust and increases intentions to switch. Geng (2023) argues that disclosure and explanation should be designed for outcomes such as accountability and harm reduction rather than symbolic compliance.

In AI mediated commerce, Nazir et al. (2023) report that trust mediates the effect of AI features on repurchase intention, implying that verification, moderation, and enforceable rules are essential for sustaining adoption and loyalty. Governance effectiveness is also culturally bounded, with moderation and disclosure interpreted differently across markets and user groups (Mohammadkazemi & Falahat, 2024).

2.7 Methodological Landscape in Prior Research

Across the 70 studies in the sample, cross-sectional surveys are the dominant empirical approach, with relatively few longitudinal, experimental, or cross-platform designs. Surveys provide broad insights into attitudes and perceptions but are limited for establishing causal relationships between algorithmic interventions and behavioral outcomes. Only a small number of studies use preregistered field, quasi-experimental, or natural-experimental designs that can capture real-world behavioral effects of platform and marketing interventions (Lambrecht et al., 2024; Wang et al., 2025). Comparability is further constrained by inconsistent operationalization of transparency, fairness, and welfare, which complicates aggregation and encourages fragmented theorizing. Review and bibliometric studies in adjacent domains similarly call for clearer protocols, structured evidence mapping, and more standardized indicators to improve cumulative knowledge (Dorokhova et al., 2024; Ferreira et al., 2025; Ştefan et al., 2025).

2.8 Synthesis and Identified Gaps

The literature links algorithmic design levers to consumer outcomes, but the evidence base remains uneven. Signals and personalization often increase adoption by strengthening perceived usefulness and trust, yet can also create welfare risks when they reduce diversity, limit user control, or encourage high pressure engagement. Three gaps stand out. First, studies use inconsistent definitions and measures of transparency, fairness, privacy concern, perceived agency, and welfare, which limits comparability and aggregation. Second, interaction effects among levers are underexplored even though platforms deploy signals, personalization, payments, and social features together. Third, causal evidence is scarce because cross-sectional surveys dominate, so stronger inference requires field and natural experiments, longitudinal designs, and comparative multi platform studies. These gaps motivate the governance bounded layered model proposed in this review and inform the research agenda in the Discussion.

3. Methodology

3.1 Research Design

This review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines to improve transparency, reproducibility, and methodological rigor. We designed the protocol using established guidance from recent systematic and bibliometric reviews in marketing and management, which provide practical procedures for database selection, query design, eligibility rules, and quality appraisal

(Fares et al., 2022; Gupta et al., 2024; Hollebeek et al., 2023; Ma et al., 2023; Pappu et al., 2025; Rawangngam et al., 2025; Singh et al., 2024; Srivastava & Thaichon, 2022). The objective was to consolidate peer-reviewed evidence on how algorithmic design levers shape consumer behavior on digital platforms. The review comprised four stages: (1) database identification and search strategy, (2) screening and eligibility checks, (3) quality assessment, and (4) synthesis and reporting. Because the included studies vary widely in platform contexts, research designs, and outcome measures, we used thematic synthesis as the primary integration approach (Ghorbani et al., 2022). When statistical meta-analysis was not feasible, we used vote counting to summarize the direction of reported relationships across studies (Ghorbani et al., 2022).

3.2 Data Sources and Search Strategy

Scopus was selected as the primary database because it provides broad coverage of business, management, and information systems journals and supports consistent PRISMA accounting. Using a single index improved corpus coherence and ensured that screening decisions and eligibility tracking were fully auditable.

We executed the Scopus search and exported the results on 2 September 2025, and we treated the exported set as the frozen corpus for this review. Because Scopus may display advanced query strings differently across interfaces and over time, we report both the conceptual core query and the exact exported query string, together with the applied refinements.

Conceptual core query (for transparency): TITLE ABS KEY: digital platforms AND consumer behavior. Exported query string and refinements (as recorded in Scopus): TITLE-ABS-KEY (digital platforms AND consumer behavior) AND PUBYEAR > 2015 AND PUBYEAR < 2026 AND (LIMIT-TO (SUBJAREA , "BUSI")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (EXACTKEYWORD , "Consumer Behavior") OR LIMIT-TO (EXACTKEYWORD , "Digital Platform") OR LIMIT-TO (EXACTKEYWORD , "Sustainability")) AND (LIMIT-TO (LANGUAGE , "English")) .

The time frame from 2016 to 2025 was selected to capture contemporary platform algorithms during rapid growth in mobile use and AI enabled personalization. English language publications were prioritized to ensure consistent appraisal and extraction. As an auxiliary mapping exercise, we ran a keyword co-occurrence analysis in VOSviewer using the final corpus of 70 studies. Highly generic terms were excluded at the visualization stage to improve interpretability. The resulting clusters are reported in Supplementary Figure S1 (see Supplementary Tables S1 and S2 for the study-level evidence matrix).

3.3 Inclusion and Exclusion Criteria

Eligibility criteria were defined a priori to balance internal validity with conceptual breadth (Rozenkowska, 2023; Singh et al., 2024). Studies were included if they (a) examined consumer behavior in digital platform or online environments, (b) investigated one or more algorithmic design levers such as interface signals, personalization and recommender systems, payments and friction reduction, gamification, or governance, and (c) reported

behavioral outcomes such as adoption, continuance, purchase intention, trust, resistance, or loyalty.

Non empirical papers, grey literature, non English sources without translation, and studies lacking methodological transparency were excluded to preserve research quality (Gupta et al., 2024; Hollebeek et al., 2023). Studies focusing solely on offline contexts, purely technical or supply side algorithms, or non behavioral outcomes were also excluded (Ghorbani et al., 2022).

Table 1. Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Context	Digital platforms and online environments	Offline or non platform settings
Design levers	Signals, personalization, gamification, payments, governance	Technical or supply side algorithms only
Language	English or translated sources	Non English without translation
Method	Empirical quantitative, qualitative, or mixed methods	Conceptual, editorial, or grey literature
Outcomes	Adoption, continuance, trust, resistance, purchase intention, loyalty	Non behavioral outcomes

3.4 Screening and Selection Process

The screening process comprised two stages: title and abstract screening followed by full text review. Two reviewers independently applied the eligibility criteria, and disagreements were resolved through discussion and, when needed, consultation with a third reviewer to reduce selection bias (Blackburn et al., 2025; Hollebeek et al., 2023; Pappu et al., 2025). The Scopus search and export were executed on 2 September 2025, and the exported set was treated as the frozen corpus for PRISMA tracking. As shown in Figure 2, 1,753 records were identified and sequential filters (year, subject area, document type, keyword and language, and scope relevance) reduced the corpus to 70 studies for full text synthesis.

Figure 2. PRISMA flow diagram of the literature screening process

- Initial identification: 1,753 records; retained, 1,654; excluded, 99 (pre 2016).
- Subject area filter: retained, 984; excluded, 670 (non business).
- Document type filter: retained, 559; excluded, 425 (non article).
- Keyword and language filter: retained, 465; excluded, 94 (non keyword or non English).
- Scope relevance check: retained, 70; excluded, 393 (out of scope).

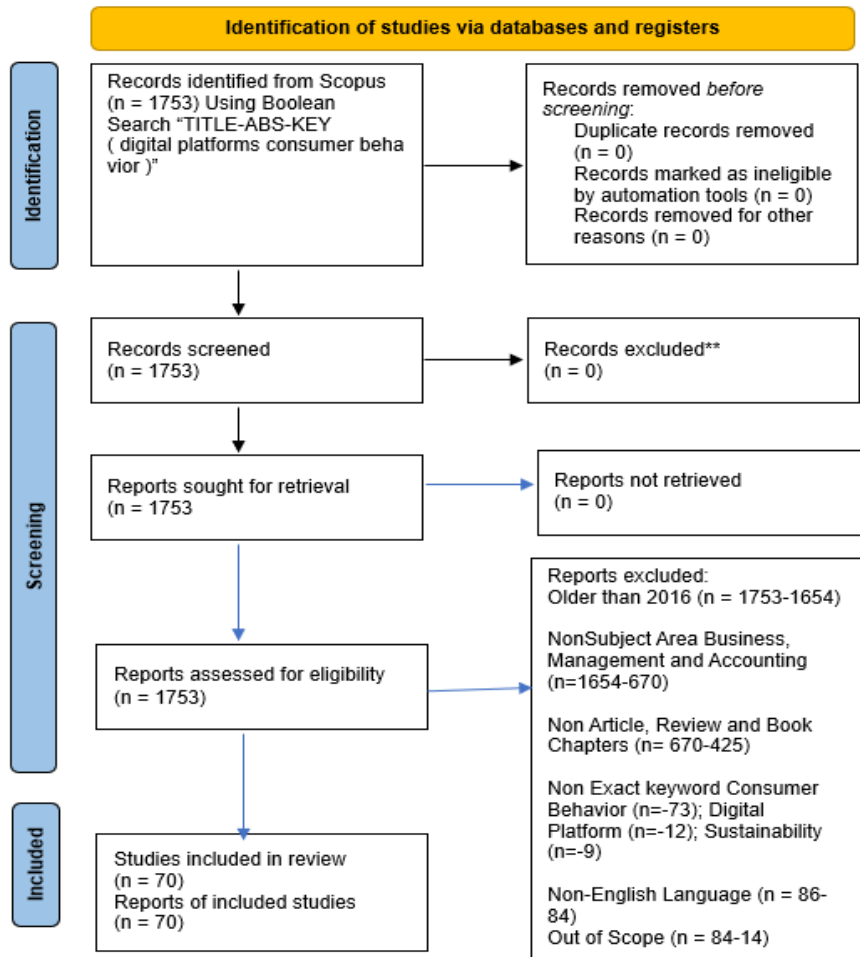


Figure 2. PRISMA based workflow and coding scheme for the systematic review of algorithmic design levers.

The final corpus of 70 peer reviewed studies formed the basis for data extraction and synthesis.

3.5 Data Extraction and Coding

We used a standardized extraction template to capture bibliographic information, platform type, algorithmic lever, theoretical lens, mechanisms, and behavioral outcomes. This approach follows established SLR and bibliometric practices that emphasize traceable coding decisions and consistent variable definitions (Fares et al., 2022; Jain et al., 2023; Liao et al., 2024). We coded central mechanisms frequently theorized in digital consumer behavior research such as trust, usefulness, enjoyment, fairness, transparency, and resistance because these constructs often mediate the effect of design levers on adoption, purchase, and continued use (Apetrei et al., 2024; Hoang & Khoa, 2024; Ke & Wisaeng, 2025; Qian & Jain, 2024; Redondo & Serrano, 2023). We also classified each study by

method (quantitative, qualitative, or mixed methods) and data source (survey, experiment, or secondary data) to support later interpretation of evidence strength. To improve traceability, we report a study level audit trail in the supplementary materials. Table S1 lists the full corpus with bibliographic metadata and thematic assignment. Table S2 provides an evidence matrix with method, platform context, lever, mechanism, outcome, and appraisal notes for each study.

Table 2. Data extraction categories

Category	Description
Platform type	E commerce, social commerce, streaming, metaverse, payment applications, and related formats
Algorithmic lever	Signals, personalization, payments, gamification, governance
Theoretical lens	TAM, UTAUT, ECT, TCV, CAB, signaling theory, TPB, switching cost theory, and related models
Mechanisms	Trust, enjoyment, fairness, agency, social proof, and other cognitive and affective constructs
Outcomes	Adoption, continuance, resistance, purchase intention, loyalty, and related behavioral indicators

Two coders independently coded all studies. They reconciled discrepancies through discussion and documented the final coding rules to preserve consistency and traceability.

3.6 Quality Assessment

To ensure methodological rigor across heterogeneous designs, we appraised studies using the Mixed Methods Appraisal Tool (MMAT), which supports consistent assessment of qualitative, quantitative, and mixed method studies (Hong et al., 2018). Quantitative studies were evaluated for sampling adequacy, construct validity, and reliability. Qualitative studies were assessed for transparency, credibility, and contextualization. Mixed method studies were appraised for integration quality and coherence between qualitative and quantitative components. Each study received an overall appraisal classification (high, moderate, or low). Studies with lower ratings were retained for coverage but were given less interpretive weight in thematic synthesis.

3.7 Synthesis Approach

Thematic synthesis was employed to integrate findings across heterogeneous study designs, contexts, and outcome measures (Ghorbani et al., 2022; Lv et al., 2024). The synthesis focused on four domains: signal architecture and attention capture, personalization and recommender systems, frictionless transactions and gamified journeys, and social commercial convergence with governance. When meta analysis was infeasible because designs and measures were not comparable, we used vote counting to summarize the direction and frequency of reported relationships between levers and outcomes. Vote counting was used as a descriptive indicator and was interpreted alongside narrative mechanism evidence. Full bibliographic details of all 70 included studies are provided in Supplementary Table S1.

Table 3. Distribution of studies by thematic domain

Theme	Number of studies	Representative references
Signal architecture	18	Choi et al. (2019); Redondo & Serrano (2023); Zhao et al. (2023)
Personalization and recommender systems	20	Qian & Jain (2024); Zhang et al. (2024); Inoue et al. (2024)
Frictionless transactions and gamification	16	Sang (2024); Anirvinna et al. (2025); Ki et al. (2024)
Social commercial convergence and governance	16	Ahn & Kim (2025); Nazir et al. (2023); Ki et al. (2025)

3.8 Reliability and Reproducibility

To enhance reproducibility, we documented eligibility rules, screening decisions, and coding procedures in a structured protocol. The Scopus export on 2 September 2025 was treated as the frozen corpus for screening and PRISMA accounting. Two coders independently coded all studies, and inter coder reliability checks indicated 91 percent agreement across coded variables. Discrepancies were examined and resolved by consensus before finalizing the dataset.

3.9 Limitations of the Review Process

Several limitations should be considered when interpreting the findings. First, relying on Scopus may omit relevant studies indexed elsewhere, which can introduce database coverage bias. Second, restricting the corpus primarily to English language journal articles can underrepresent non English scholarship and regional outlets, even though translated Indonesian studies were included where available. Third, excluding grey literature prioritizes peer reviewed quality and auditability but may increase publication bias if null or mixed findings are less likely to be published in journals.

Methodologically, most included studies are cross-sectional and context specific, which limits causal inference and generalizability. Vote counting is useful for summarizing the direction and frequency of reported effects, but it does not capture effect sizes and can understate contextual nuance. Future reviews can mitigate these limitations by triangulating additional databases (e.g., Web of Science), expanding language coverage with structured translation procedures, and applying meta analytic or qualitative comparative approaches when study designs permit.

4. Results/findings

4.1 Overview of Findings

The final corpus comprised 70 peer-reviewed studies grouped into four thematic domains: (1) signal architecture, (2) personalization and recommender systems, (3)

frictionless transactions and gamified journeys, and (4) social commercial convergence with governance. Across themes, studies consistently show that algorithmic design levers shape behavior through cognitive mechanisms (e.g., perceived usefulness, diagnosticity, perceived risk), affective mechanisms (e.g., enjoyment, flow, irritation), and social mechanisms (e.g., social proof, norms, parasocial interaction), with governance features conditioning when these mechanisms translate into adoption, continuance, and loyalty.

The evidence base is methodologically heterogeneous but dominated by survey/SEM designs (48/70), followed by experiments and field experiments (8/70), qualitative/case-based studies (4/70), and a small number of computational or quasi-experimental designs. This profile implies that most findings describe associations rather than definitive causal effects. Supplementary Table S2 summarises the evidence-base characteristics and appraisal rubric.

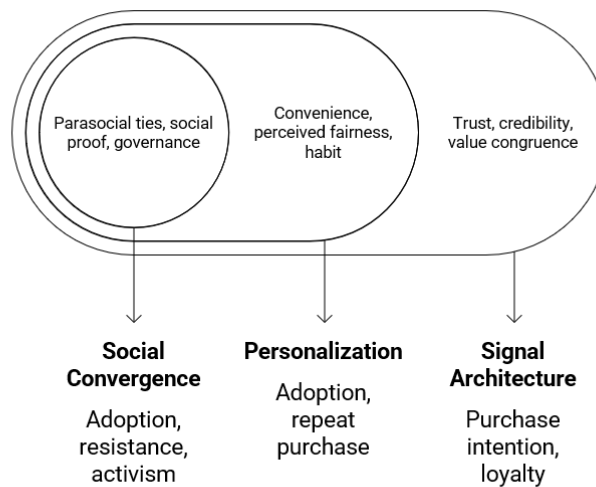


Figure 3. Conceptual model of algorithmic design levers and consumer behavior

Figure 3 highlights that design levers rarely operate in isolation. Instead, platforms typically bundle signals, personalization, transaction design, and social features, so the same lever may yield different outcomes depending on the surrounding interface and governance conditions.

4.2 Signal Architecture and Attention Capture

Across 18 studies, interface signals such as reviews, ratings, previews, and badges reduce ambiguity and shape purchase decisions by acting as credibility cues that foster trust and reduce perceived risk (Choi et al., 2019; Katyal & Sehgal, 2025; Redondo & Serrano, 2023; Zhao & Wagner, 2022). Choi et al. (2019) show that previews and reviews jointly increase diagnosticity, while review and rating studies link signal valence to credibility and lower risk perceptions (Hoang & Khoa, 2024; Katyal & Sehgal, 2025). Visibility effects further matter: Rhue and Sundararajan (2019) demonstrate that purchase disclosure changes behavior via social dynamics. Attention evidence indicates that badges and

highlighted reviews capture gaze and increase confidence through salience and priming (Šola et al., 2024). However, signal effectiveness varies by context. Sustainability cues can be more influential in European fashion and sharing economy settings (Apetrei et al., 2024; Žegleń et al., 2024), while hedonic and socially endorsed cues can dominate in other markets (Juanim et al., 2024). Overexposure or inconsistent formatting can create cognitive overload and skepticism, implying the need for calibrated signal architecture (Redondo & Serrano, 2023).

Tabel 4. Effects of Signal Architecture on Consumer Attention and Trust

Signal type	Mechanism	Outcome	Moderators
Reviews and ratings	Credibility and social proof	Purchase intention, adoption	Source quality, volume
Previews and badges	Priming and attention capture	Trust, confidence	Visual salience, frequency
Sustainability and ethical cues	Value congruence	Long term loyalty	Cultural orientation

Overall, signals act as trust anchors in digital environments, but their benefits weaken when users suspect strategic manipulation, misinformation, or low moderation.

4.3 Personalization and Recommender Systems

Twenty studies examine personalization and recommender design. Personalization typically increases engagement by improving relevance and perceived usefulness (Qian & Jain, 2024; Zhang et al., 2024).. Yet several studies show welfare trade offs when personalization is over optimized. Narrow recommendation loops can limit discovery and reduce longer term enjoyment unless diversity and novelty seeking are incorporated (Inoue et al., 2024; Lv et al., 2024; Sarwar-A Alam et al., 2019). Transparency and user control moderate these effects. Explanations attached to recommendations and configurable settings strengthen perceptions of fairness and trust and can reduce perceived bias, especially where privacy concerns are salient (Katyal & Sehgal, 2025; Müller-Pérez et al., 2025; Putra, 2024). Adoption work in streaming and subscription settings further suggests that perceived usefulness is insufficient when algorithms are experienced as opaque, reinforcing calls for explainability and user agency (Müller-Pérez et al., 2025).

Table 5. Summary of Personalization and Recommender Effects

Mechanism	Design element	Mediators	Outcome	Moderators
Relevance	Algorithmic ranking	Perceived usefulness	Engagement, satisfaction	Cultural norms
Diversity and serendipity	Novel recommendations	Enjoyment, reduced fatigue	Retention	Information load
Transparency and control	Explainability and settings	Fairness, trust	Loyalty, reduced resistance	Privacy sensitivity

4.4 Frictionless Transactions and Gamified Journeys

Frictionless transaction design, such as streamlined checkout, integrated wallets, and reduced payment steps, increases adoption and repeat use by lowering perceived effort and strengthening convenience (Almunawar & Anshari, 2024; Sang, 2024; Xu et al., 2024). In higher risk contexts such as cryptocurrency payments, trust and perceived risk control become especially salient for adoption (Murugappan et al., 2023). Evidence from alternative payment methods also suggests that simplifying payment flows can shift routine purchase behavior by reducing transaction friction (Visconti-Caparrós & Campos-Blázquez, 2022). In delivery and marketplace settings, transaction design often bundles logistics transparency.

Gamified journeys, including points, streaks, progress indicators, and time-limited incentives, encourage repeated participation through hedonic enjoyment and reinforcement mechanisms (Ki et al., 2024; Tosun & Sezgin, 2021). Digital coupon adoption studies similarly show that rewards and perceived value motivate uptake when incentives are perceived as fair and easy to redeem (Anirvinna et al., 2025). However, urgency and scarcity cues can increase unplanned purchasing and may trigger regret or resistance when consumers later perceive manipulation (Vardikou et al., 2025; Yan et al., 2022; Zhang et al., 2022).

Table 6. Mechanisms of Frictionless Transactions and Gamified Journeys

Lever	Mechanism	Mediators	Moderators	Behavioral outcome
Mobile payments	Ease of use and reliability	Trust, convenience	Risk perception	Adoption, continuance
Gamification	Enjoyment, reward, flow	Motivation, habit	Fairness, clarity	Loyalty, repeat purchase
Pricing transparency	Perceived fairness	Trust	Market maturity	Satisfaction, resistance reduction

Frictionless design and gamification support conversion and habit formation, but they also create welfare risks when platforms rely on opaque reward rules or high pressure nudges. The evidence base in this theme is mostly correlational, so future work should test boundary conditions using field experiments and longitudinal designs.

4.5 Social Commercial Convergence and Governance

Sixteen studies examine contexts where commerce is embedded in social interaction, including social commerce, livestream shopping, influencer advertising, and community marketplaces. Social features shape behavior through social proof, norms, and relationship based trust. In livestream settings, persuasive cues can intensify impulse buying by combining entertainment, scarcity framing, and peer validation (Yan et al., 2022). Community dynamics guide purchase pathways through information sharing and social comparison, shaping adoption and repeat purchasing (Ramos & Rodrigues, 2023).

Governance is a key boundary condition. Perceived unethical platform behavior reduces trust and increases switching intentions (Ahn & Kim, 2025). Transparency mechanisms should be designed to deliver accountability and harm reduction rather than symbolic compliance (Geng, 2023). In AI mediated commerce, trust mediates the effect of AI enabled features on repurchase intention, which elevates the role of verification, moderation, complaint handling, and disclosure standards (Nazir et al., 2023). Because most evidence is cross sectional, claims should remain cautious and be strengthened by quasi experimental and longitudinal designs.

5. Discussions

Across all themes, the evidence indicates that algorithmic design levers operate through intertwined cognitive, affective, and social pathways that are moderated by governance and cultural context. Signals and personalization enhance trust, perceived usefulness, and enjoyment, while frictionless transactions and gamification improve ease and habit formation. Governance mechanisms align these design choices with fairness and long term welfare, but trade offs remain. Efforts to maximize engagement can conflict with transparency, privacy, or consumer autonomy.

Governance-bounded layered model. The layered governance bounded model proposed in this review clarifies how platform interventions translate into consumer outcomes by separating (i) algorithmic design levers (signals, personalization and recommender systems, frictionless transactions and payments with gamification, and governance), (ii) consumer mechanisms (trust, enjoyment, fairness, social proof, norms, and perceived control), and (iii) behavioral and welfare outcomes (adoption, continuance, purchase intention, loyalty, resistance, and welfare-related perceptions such as transparency, privacy, and agency). Governance and culture bound these links by shaping when the same lever is interpreted as supportive (acceptance) versus manipulative (resistance), particularly in high risk or misinformation prone contexts.

Theoretical integration. Theoretically, these findings extend models such as TAM, UTAUT, and ECT by integrating emerging constructs including transparency, fairness, serendipity, and agency. Value based frameworks such as TCV and CAB combine with signaling theory, social proof, priming, and TPB to explain how design cues translate into adoption, continuance, and resistance (Hoang & Khoa, 2024; Lishobrina et al., 2023; Permana et al., 2024; Rhue & Sundararajan, 2019). Switching cost perspectives further clarify why, in some cases, consumers remain loyal despite dissatisfaction due to social or transactional inertia (Bany Mohammed et al., 2025; Macías Urrego et al., 2024). Together, these perspectives support the layered logic of the governance bounded model: levers influence outcomes through trust based, affective, and normative pathways, while governance integrity and cultural expectations condition the strength and direction of effects. Figure 4 integrates the governance-bounded framework with the main evidence gaps by linking algorithmic levers, psychological mechanisms, and consumer outcomes to priorities for future research. The figure highlights three recurring gaps: (i) limited standardization of welfare, fairness, and agency indicators, (ii) underexplored interaction effects among multiple levers implemented simultaneously, and (iii) insufficient cross cultural and longitudinal tests to validate boundary conditions.

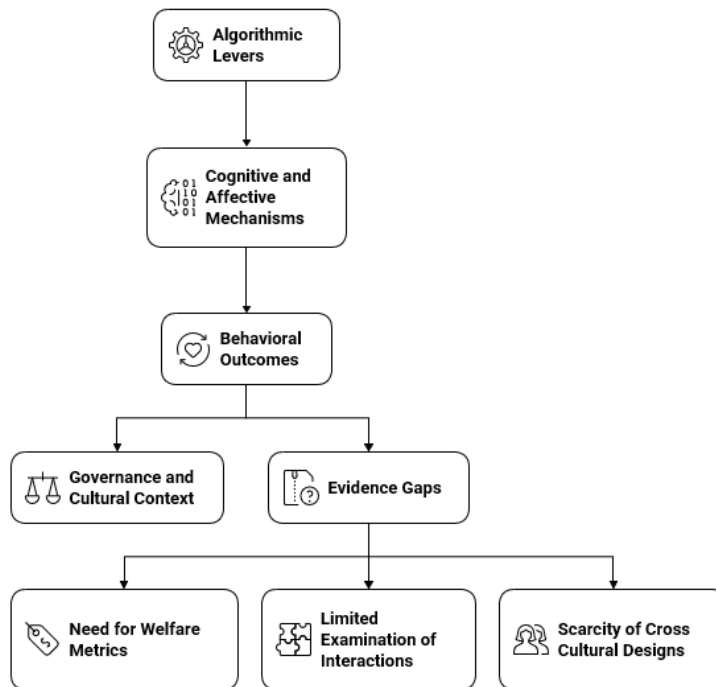


Figure 4. Integrated governance bounded framework linking algorithmic design levers to consumer welfare and research gaps.

Causality and evidence strength (correlational vs causal). The evidence base is still dominated by cross-sectional surveys and single platform contexts, which provide broad insights into attitudes and perceptions but are limited for establishing causal relationships between algorithmic interventions and behavioral outcomes. Only a small number of studies employ preregistered field or natural experiments that can capture real world behavioral effects of algorithmic changes (Lambrecht et al., 2024). In addition, inconsistencies in how transparency, fairness, and consumer welfare are defined and operationalized reduce cross study comparability and hinder effect size aggregation. Accordingly, this review interprets most survey based findings as association evidence and uses stronger causal language only when supported by experimental or quasi experimental designs.

Integrating quantitative and qualitative evidence. This review combines thematic synthesis with vote counting to integrate heterogeneous designs. Vote counting summarizes the direction and frequency of reported lever–outcome relationships when meta analysis is infeasible, while thematic synthesis explains why effects differ across governance regimes, risk settings, and cultures by tracing mechanisms such as trust, fairness, transparency, and perceived control. Quantitative studies typically map relationships among levers, mediators, and outcomes, whereas qualitative and mixed method studies provide contextual explanations for interpretation, resistance, and boundary conditions. To keep the main text concise and auditable, a study level evidence matrix (method, platform context, lever, mechanism, outcome, and appraisal notes) should be reported as supplementary material.

Scope limitations and publication bias. Reliance on Scopus and predominantly English language publications may underrepresent regional outlets, non indexed venues,

and non English scholarship, which can introduce coverage and language bias. Although translated Indonesian studies were included where available, the corpus may still skew toward contexts most visible in Scopus. Future reviews can mitigate this limitation through multi database searches, structured inclusion of high quality non English studies, and expanded citation chasing. Excluding grey literature prioritizes peer reviewed quality, but it may also increase publication bias if studies with null findings are less likely to appear in journals.

Managerial implications and future research. Practically, the results imply that platform managers should balance algorithmic relevance with diversity, provide clear and consistent explanations for algorithmic outcomes, calibrate pricing and reward mechanisms to avoid perceptions of manipulation, and strengthen verification, disclosure, and moderation to prevent bias and misinformation (Mohammadkazemi & Falahat, 2024; Ramos & Rodrigues, 2023). Cultural and demographic tailoring is essential, since design cues resonate differently across markets and user segments (Apetrei et al., 2024; Sang, 2024; Zegleń et al., 2024).

Future research should employ longitudinal and field designs to evaluate long-term outcomes and strengthen causal inference in AI-personalized platform contexts (Lambrecht et al., 2024; Turki, 2025). It should also develop and validate clearer constructs and standardized indicators to improve measurement rigor and comparability across studies (Hollebeek et al., 2023). Overall, the findings affirm that algorithmic design levers are sociotechnical forces that shape trust, fairness, and welfare. Sustainable digital platform success requires balancing optimization objectives with fairness, transparency, and cultural sensitivity.

6. Conclusions

This systematic review synthesizes 70 peer reviewed studies to explain how algorithmic design levers shape consumer behavior on digital platforms. Across the four domains (signal architecture; personalization and recommender systems; frictionless transactions and gamified journeys; and social commercial convergence with governance), the evidence shows that design levers influence behavior through interconnected cognitive, affective, and social mechanisms. Governance and cultural context bound these relationships. The review extends core adoption and continuance models (e.g., TAM, UTAUT, and ECT) by incorporating constructs that have become central in algorithmic environments, including transparency, fairness, agency, serendipity, and perceived control. It also positions governance as a moderator that connects engagement optimization with trust and welfare outcomes. Platforms should strengthen signal credibility through verification, disclosure, and quality control; design personalization to be explainable, configurable, and diverse; keep payments, pricing, and gamification transparent to reduce perceptions of manipulation; and invest in governance mechanisms (identity verification, moderation, and enforceable rules) that align with cultural expectations of fairness and accountability.

The evidence base remains dominated by cross-sectional surveys and single platform contexts, which limits causal inference and generalizability. Future research should prioritize preregistered field or natural experiments, longitudinal designs, and cross cultural

comparative studies; develop standardized measures of welfare, fairness, and agency; and test interaction effects among multiple levers operating simultaneously. This review relied on Scopus and English language studies (with translated Indonesian studies where available), which may introduce database, publication, and language bias. Future reviews can mitigate these limitations by triangulating additional databases (e.g., Web of Science), widening language coverage, and applying meta analytic or qualitative comparative approaches when study designs permit.

7. References

- Ahn, J., & Kim, S. (2025). Do digital platform's unethical behaviors influence users' trust and intention to use alternative platforms? *Telecommunications Policy*. <https://doi.org/10.1016/j.telpol.2025.102996>
- Almunawar, M. N., & Anshari, M. (2024). Customer acceptance of online delivery platform during the COVID-19 pandemic: the case of Brunei Darussalam. *Journal of Science and Technology Policy Management*, 15(2), 288–310. <https://doi.org/10.1108/JSTPM-04-2022-0073>
- Anirvinna, C., Jha, D., Goodwin, R. D., & Pokhriyal, D. (2025). Consumer willingness to adopt digital coupons in post-demonetization and COVID-19 in India. *Innovative Marketing*, 21(1), 157–169. [https://doi.org/10.21511/im.21\(1\).2025.13](https://doi.org/10.21511/im.21(1).2025.13)
- Apetrei, A., Constantin, M., Deaconu, E.-M., Dinu, M., Pătărlăgeanu, S. R., & Petrescu, I.-E. (2024). Eco-chic or trendy-chic? Decoding consumer preferences in sustainable and fast fashion across the EU. *Management and Marketing*, 19(2), 179–210. <https://doi.org/10.2478/mmcks-2024-0009>
- Bany Mohammed, A., Al-Okaily, M., Qasim, D., Ur Rehman, S., & Abdalla, L. (2025). Digital activism and public opinion: understanding the role of social media during the Gaza Conflict. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-03-2024-0101>
- Blackburn, O., Ritala, P., Keränen, J., & Bocken, N. (2025). Circular Economy Platforms: A Systematic Review. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.70307>
- Choi, A. A., Cho, D., Yim, D., Moon, J. Y., & Oh, W. (2019). When seeing helps believing: The interactive effects of previews and reviews on e-book purchases. *Information Systems Research*, 30(4), 1164–1183. <https://doi.org/10.1287/isre.2019.0857>
- Dorokhova, L., Dorokhov, O., & Kuusik, A. (2024). Fuzzy Methods in Marketing Research: Brief Literature Review. In *Studies in Business and Economics* (Vol. 19, Issue 3, pp. 67–86). Sciendo. <https://doi.org/10.2478/sbe-2024-0044>
- Fares, O., Butt, I., & Lee, S. (2022). Utilization of artificial intelligence in the banking sector: a systematic literature review. *Journal of Financial Services Marketing*, 28(4), 835–852. <https://doi.org/10.1057/s41264-022-00176-7>
- Ferreira, V., Almeida, L., & Moutinho, V. (2025). Review of Research on Determinants of Stock Profitability: A Bibliometric Analysis. *Studies in Business and Economics*, 20(2), 113–136. <https://doi.org/10.2478/sbe-2025-0027>
- Geng, Y. (2023). Transparency for what purpose?: designing outcomes-focused transparency tactics for digital platforms. *Policy & Internet*, 16(1), 83–103. <https://doi.org/10.1002/poi3.362>
- Ghorbani, M., Karampela, M., & Tonner, A. (2022). Consumers' brand personality perceptions in a digital world: a systematic literature review and research agenda. *International Journal of Consumer Studies*, 46(5), 1960–1991. <https://doi.org/10.1111/ijcs.12791>
- Gupta, P., Singh, S., Ghosh, R., Kumar, S., & Jain, C. (2024). Regulatory framework on governing equity crowdfunding: a systematic literature review and future directions. *Journal of Financial Regulation and Compliance*, 32(4), 421–444. <https://doi.org/10.1108/jfrc-10-2023-0160>

- Hoang, C. C., & Khoa, B. T. (2024). The impact of review and rating on customer experience in electronic marketplaces. *Business Management*, 2024(2), 5–21. <https://doi.org/10.58861/tae.bm.2024.2.01>
- Hollebeek, L., Sarstedt, M., Menidjel, C., Sprott, D., & Urbonavičius, S. (2023). Hallmarks and potential pitfalls of customer- and consumer engagement scales: a systematic review. *Psychology and Marketing*, 40(6), 1074–1088. <https://doi.org/10.1002/mar.21797>
- Hong, Q. N., Gonzalez-Reyes, A., & Pluye, P. (2018). Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool (MMAT). *Journal of Evaluation in Clinical Practice*, 24(3), 459–467. <https://doi.org/10.1111/jep.12884>
- Inoue, S., Ayedoun, E., Takenouchi, H., & Tokumaru, M. (2024). Leveraging interactive evolutionary computation to induce serendipity in informal learning. *Multimodal Technologies and Interaction*, 8(11), 103. <https://doi.org/10.3390/mti8110103>
- Jain, V., Wadhvani, K., & Eastman, J. (2023). Artificial intelligence consumer behavior: a hybrid review and research agenda. *Journal of Consumer Behaviour*, 23(2), 676–697. <https://doi.org/10.1002/cb.2233>
- Juanim, J., Alghifari, E. S., & Setia, B. I. (2024). Exploring advertising stimulus, hedonic motives, and impulse buying behavior in Indonesia's digital context: demographics implications. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2428779>
- Katyal, P., & Sehgal, R. (2025). Unraveling the impact of online consumer reviews on consumer buying behavior. *International Journal of System Assurance Engineering and Management*, 16(1), 330–345. <https://doi.org/10.1007/s13198-024-02618-y>
- Ke, Y., & Wisaeng, K. (2025). Factors Influencing Consumers' Behavior Towards Chinese Products on E-Commerce Platforms in Thailand. *International Journal of Analysis and Applications*, 23. <https://doi.org/10.28924/2291-8639-23-2025-108>
- Ki, C.-W. C., Chong, S. M., Aw, E. C.-X., Lam, M. M.-L., & Wong, C. W. Y. (2025). Metaverse consumer behavior: Investigating factors driving consumer participation in the transitory metaverse, avatar personalization, and digital fashion adoption. *Journal of Retailing and Consumer Services*, 82. <https://doi.org/10.1016/j.jretconser.2024.104094>
- Ki, C.-W. C., Li, C., Chenn, A. S., Chong, S. M., & Cho, E. (2024). Wise consumer choices in online secondhand luxury (OSHL) shopping: An integrated model of motivations, attitudes, and purchase intentions for OSHL as wise, conspicuous, and sustainable consumption. *Journal of Retailing and Consumer Services*, 76. <https://doi.org/10.1016/j.jretconser.2023.103571>
- Lambrecht, A., Tucker, C., & Zhang, X. (2024). TV Advertising and Online Sales: A Case Study of Intertemporal Substitution Effects for an Online Travel Platform. *Journal of Marketing Research*, 61(2), 248–270. <https://doi.org/10.1177/00222437231180171>
- Liao, S., Widowati, R., & Liao, S. (2024). Two stages data mining analytics for food intentional and behavioral recommendations. *Intelligent Data Analysis*, 29(3), 631–653. <https://doi.org/10.3233/ida-240664>
- Lishobrina, L., Handriadma, H., & Zebua, A. (2023). Analisis minat penggunaan e-wallet gopay dengan pendekatan model utaut2. *Expert Jurnal Manajemen Sistem Informasi Dan Teknologi*, 13(1), 07. <https://doi.org/10.36448/expert.v13i1.2977>
- Lv, L., Kang, Q., & Liu, G. (2024). Prick “filter bubbles” by enhancing consumers’ novelty-seeking: the role of personalized recommendations of unmentionable products. *Psychology and Marketing*, 41(10), 2355–2367. <https://doi.org/10.1002/mar.22057>
- Ma, Z., Guo, G., & Lei, J. (2023). Consumer behavior research in the 21st century: clusters, themes, and future research agenda. *International Journal of Consumer Studies*, 48(1). <https://doi.org/10.1111/ijcs.12980>

- Macías Urrego, J. A., García Pineda, V., & Montoya Restrepo, L. A. (2024). The power of social media in the decision-making of current and future professionals: a crucial analysis in the digital era. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2421411>
- Mohammadkazemi, R., & Falahat, M. (2024). Leveraging social media for business development: an empirical analysis of fan loyalty and fan expansion. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2393739>
- Müller-Pérez, J., Acevedo-Duque, Á., Becerra, R. M. Á., & Verges, I. Y. (2025). A SVoD Platforms: A Comprehensive Analysis Through Technology Adoption Models. *Revista Venezolana De Gerencia*, 30(109), 335–350. <https://doi.org/10.52080/rvgluz.30.109.22>
- Murugappan, M., Nair, R., & Krishnan, S. (2023). Global Market Perceptions of Cryptocurrency and the Use of Cryptocurrency by Consumers: A Pilot Study. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(4), 1955–1970. <https://doi.org/10.3390/jtaer18040098>
- Nazir, S., Khadim, S., Ali Asadullah, M., & Syed, N. (2023). Exploring the influence of artificial intelligence technology on consumer repurchase intention: The mediation and moderation approach. *Technology in Society*, 72. <https://doi.org/10.1016/j.techsoc.2022.102190>
- Pappu, S., Kotni, V. V., Prasanna, I. L., & Jaya Sankar Krishna, S. V. (2025). Digital Marketing Influence Research in Consumer Behavior: A Systematic Literature Review Using TCCM and Future Research Agenda. *Indian Journal of Marketing*, 55(6), 9–28. <https://doi.org/10.17010/ijom/2025/v55/i6/175108>
- Permana, D., Sayidah, N., & Adi, S. (2024). The unified theory of acceptance and use of technology (utaut) used on mobile application: literature review. *Eduvest - Journal of Universal Studies*, 4(1), 120–141. <https://doi.org/10.59188/eduvest.v4i1.1003>
- Poltanee, I. (2025). Corporate governance and consumer behavior strategy: The impact of digital food delivery platforms on purchasing decisions and stakeholder value. *Corporate and Business Strategy Review*, 6(3), 17–25. <https://doi.org/10.22495/cbsrv6i3art2>
- Putra, A. H. P. K. (2024). Learning from the Past Bridging Digital and Physical Markets: A Guidelines for Future Research Agenda of Online-to-Offline (O2O) Marketing Strategy. *International Review of Management and Marketing*, 14(3), 82–96. <https://doi.org/10.32479/irmm.16145>
- Qian, K., & Jain, S. (2024). Digital Content Creation: An Analysis of the Impact of Recommendation Systems. *Management Science*, 70(12), 8668–8684. <https://doi.org/10.1287/mnsc.2022.03655>
- Ramos, C., & Rodrigues, J. (2023). SNUX2.0: A Social Network Model for Cohort Behavior Analysis as Support for Purchasing Tourism Products and Services. *Journal of Relationship Marketing*, 22(2), 132–151. <https://doi.org/10.1080/15332667.2023.2191245>
- Rawangngam, N., Pongsakornrungrasit, P., Siriwong, C., Ketkaew, K., Tonsakunthaweeteam, S., & Kumar, V. (2025). Social media and consumer engagement: A bibliometric analysis and future research directions. *Innovative Marketing*, 21(3), 197–214. [https://doi.org/10.21511/im.21\(3\).2025.15](https://doi.org/10.21511/im.21(3).2025.15)
- Redondo, I., & Serrano, D. (2023). Giants with Feet of Clay? An Inquiry into User Payment Patterns for Subscription Video-on-Demand Services. *Administrative Sciences*, 13(5). <https://doi.org/10.3390/admsci13050122>
- Rhue, L., & Sundararajan, A. (2019). Playing to the crowd? Digital visibility and the social dynamics of purchase disclosure. *MIS Quarterly: Management Information Systems*, 43(4), 1127–1141. <https://doi.org/10.25300/MISQ/2019/12745>
- Rozenkowska, K. (2023). Theory of planned behavior in consumer behavior research: a systematic literature review. *International Journal of Consumer Studies*, 47(6), 2670–2700. <https://doi.org/10.1111/ijcs.12970>
- Sang, N. M. (2024). Examining the adoption of Apple Pay among generation Z in Vietnam. *Banks and Bank Systems*, 19(1), 34–47. [https://doi.org/10.21511/bbs.19\(1\).2024.04](https://doi.org/10.21511/bbs.19(1).2024.04)

- Sarwar-A Alam, M. D., Wang, D., & Waheed, A. (2019). Impact of digital marketing on consumers' impulsive online buying tendencies with intervening effect of gender and education: B2C emerging promotional tools. *International Journal of Enterprise Information Systems*, 15(3), 44–59. <https://doi.org/10.4018/IJEIS.2019070103>
- Singh, P., Khoshaim, L., Nuwisser, B., & Alhassan, I. (2024). How information technology (IT) is shaping consumer behavior in the digital age: a systematic review and future research directions. *Sustainability*, 16(4), 1556. <https://doi.org/10.3390/su16041556>
- Šola, H. M., Qureshi, F. H., & Khawaja, S. (2024). AI-Powered Eye Tracking for Bias Detection in Online Course Reviews: A Udemy Case Study. *Big Data and Cognitive Computing*, 8(11). <https://doi.org/10.3390/bdcc8110144>
- Srivastava, A., & Thaichon, P. (2022). What motivates consumers to be in line with online shopping?: a systematic literature review and discussion of future research perspectives. *Asia Pacific Journal of Marketing and Logistics*, 35(3), 687–725. <https://doi.org/10.1108/apjml-10-2021-0777>
- Ștefan, S. C., Popa, I., & Breazu, A. (2025). Managerial Perspective of Sharing Economy. A Bibliometric approach. *Studies in Business and Economics*, 20(2), 341–355. <https://doi.org/10.2478/sbe-2025-0038>
- Su, J., Sun, X., & Wang, J. (2024). Expanding the psychological domain of technological acceptance: the use of smart wearable devices in leisure. *Applied Sciences*, 14(12), 5316. <https://doi.org/10.3390/app14125316>
- Tosun, P., & Sezgin, S. (2021). Voluntary simplicity: a content analysis of consumer comments. *Journal of Consumer Marketing*, 38(5), 484–494. <https://doi.org/10.1108/JCM-04-2020-3749>
- Turki, H. (2025). AI-powered personalization in e-commerce: Governance, consumer behavior, and exploratory insights from big data analytics. *Technology in Society*, 83, 103033. <https://doi.org/10.1016/j.techsoc.2025.103033>
- Vardikou, C., Konidaris, A., & Kavoura, A. (2025). Nudges in email marketing campaigns: The role of the authority principle and time-sensitive dynamics. *Electronic Commerce Research and Applications*, 73. <https://doi.org/10.1016/j.elerap.2025.101534>
- Visconti-Caparrós, J. M., & Campos-Blázquez, J. R. (2022). The development of alternate payment methods and their impact on customer behavior: The Bizum case in Spain. *Technological Forecasting and Social Change*, 175. <https://doi.org/10.1016/j.techfore.2021.121330>
- Wang, C., Shi, Y., Guo, X., & Chen, G. (2025). Probing Digital Footprints and Reaching for Inherent Preferences: A Cause-Disentanglement Approach to Personalized Recommendations. *Information Systems Research*, 36(3), 1314–1332. <https://doi.org/10.1287/isre.2023.0181>
- Xu, Y., Ghose, A., & Xiao, B. (2024). Mobile Payment Adoption: An Empirical Investigation of Alipay. *Information Systems Research*, 35(2), 807–828. <https://doi.org/10.1287/isre.2021.0156>
- Yan, M., Kwok, A., Chan, A., Zhuang, Y., Wen, K., & Zhang, K. (2022). An empirical investigation of the impact of influencer live-streaming ads in e-commerce platforms on consumers' buying impulse. *Internet Research*, 33(4), 1633–1663. <https://doi.org/10.1108/intr-11-2020-0625>
- Żegleń, P., Kluczek, A., & Šambronská, K. (2024). Understanding the Sharing Economy: Exploring Consumer Behaviour, Drivers, and Changes Influenced by COVID-19. *Management and Production Engineering Review*, 15(4). <https://doi.org/10.24425/mper.2024.153120>
- Zhang, L., Shao, Z., Zhang, J., & Li, X. (2022). The situational nature of impulse buying on mobile platforms: A cross-temporal investigation. *Electronic Commerce Research and Applications*, 56. <https://doi.org/10.1016/j.elerap.2022.101204>
- Zhang, Q., Wang, Y., & Ariffin, S. K. (2024). Keep scrolling: An investigation of short video users' continuous watching behavior. *Information and Management*, 61(6). <https://doi.org/10.1016/j.im.2024.104014>

- Zhao, H., & Wagner, C. (2022). How tiktok leads users to flow experience: investigating the effects of technology affordances with user experience level and video length as moderators. *Internet Research*, 33(2), 820–849. <https://doi.org/10.1108/intr-08-2021-0595>
- Zhao, L., Xu, Y., & Xu, X. (2023). The effects of trust and platform innovation characteristics on consumer behaviors in social commerce: A social influence perspective. *Electronic Commerce Research and Applications*, 60. <https://doi.org/10.1016/j.eierap.2023.101284>