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The Influence of AI-Based Content Personalization on Brand Loyalty on E-Commerce Platforms: A Study on Generation Z in Indonesia

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Abstract: The rapid integration of artificial intelligence (AI) in e-commerce has made personalized content a central strategy for fostering consumer-brand relationships. However, understanding how such personalization shapes brand loyalty among digitally native Generation Z consumers in emerging markets remains limited. This study qualitatively explores the perceptions of Indonesian Gen Z regarding AI-driven content personalization on e-commerce platforms and how these perceptions influence brand loyalty. In-depth semi-structured interviews were conducted with 25 Gen Z e-commerce users aged 18–26 in Indonesia. Data were analyzed using thematic analysis. Findings reveal five core themes: perceived utilitarian convenience, emotional value and relational signaling, privacy intrusion and the “creepiness” factor, conditional brand loyalty, and the moderating role of digital literacy. Personalization that delivers relevant and timely recommendations strengthens both attitudinal and behavioral loyalty by enhancing shopping efficiency and making consumers feel valued. Conversely, overly intrusive personalization triggers privacy concerns, distrust, and potential defection. The study contributes a nuanced, context-rich understanding of the personalization–loyalty dynamic, highlighting the privacy calculus that Gen Z performs. It offers managerial implications for e-commerce platforms in balancing personalization with transparency to sustain loyalty in the Indonesian market.

Keywords: AI Personalization, Brand Loyalty, E-Commerce, Generation Z

Indonesian Abstract: Integrasi cepat kecerdasan buatan (AI) dalam e-commerce telah menjadikan konten yang dipersonalisasi sebagai strategi utama untuk membina hubungan konsumen-merek. Namun, pemahaman tentang bagaimana personalisasi tersebut membentuk loyalitas merek di kalangan konsumen Generasi Z yang melek digital di pasar negara berkembang masih terbatas. Studi ini secara kualitatif mengeksplorasi persepsi Generasi Z Indonesia mengenai personalisasi konten berbasis AI pada platform e-commerce dan bagaimana persepsi ini memengaruhi loyalitas merek. Wawancara semi-terstruktur mendalam dilakukan dengan 25 pengguna e-commerce Generasi Z berusia 18–26 tahun di Indonesia. Data dianalisis menggunakan analisis tematik. Temuan mengungkapkan lima tema inti: kenyamanan utilitarian yang dirasakan, nilai emosional dan sinyal relasional, pelanggaran privasi dan faktor "menyeramkan", loyalitas merek bersyarat, dan peran moderasi literasi digital. Personalisasi yang memberikan rekomendasi yang relevan dan tepat waktu memperkuat loyalitas sikap dan perilaku dengan meningkatkan efisiensi belanja dan membuat

konsumen merasa dihargai. Sebaliknya, personalisasi yang terlalu mengganggu memicu kekhawatiran privasi, ketidakpercayaan, dan potensi perpindahan pelanggan. Studi ini memberikan pemahaman yang lebih mendalam dan kaya konteks tentang dinamika personalisasi-loyalitas, menyoroti perhitungan privasi yang dilakukan oleh Generasi Z. Studi ini menawarkan implikasi manajerial bagi platform e-commerce dalam menyeimbangkan personalisasi dengan transparansi untuk mempertahankan loyalitas di pasar Indonesia.

Kata Kunci: Personalisasi AI, Loyalitas Merek, E-Commerce, Generasi Z

INTRODUCTION

Indonesia's digital economy has experienced exponential growth, with e-commerce emerging as one of its most vibrant sectors. The country is projected to have over 200 million digital buyers by 2026, making it the largest e-commerce market in Southeast Asia. At the heart of this transformation is Generation Z (Gen Z), the cohort born between the mid-1990s and early 2010s, who are true digital natives and form a substantial portion of the consumer base (Singh et al., 2026). Gen Z in Indonesia, numbering approximately 74 million individuals, exhibits distinct consumption patterns characterized by high mobile connectivity, social media integration, and demand for immediacy and relevance (Joanna Ciendy Inasa Putri & Mohammad Khusnu Milad, 2025). For e-commerce platforms such as Shopee, Tokopedia, Lazada, and Blibli, capturing and retaining this demographic's loyalty is both a strategic imperative and a complex challenge.

One of the most widely adopted tools for enhancing user engagement and loyalty in e-commerce is AI-based content personalization. This technology employs machine learning algorithms to analyze behavioral, contextual, and demographic data, delivering individualized product recommendations, targeted promotions, and customized homepage layouts (Wahyudi, 2026). Platforms leverage collaborative filtering, natural language processing, and deep learning to create a seamless, relevant shopping experience that aims to reduce search costs and increase perceived value. Theoretically, such personalization should foster positive attitudes, satisfaction, and ultimately brand loyalty—a deeply held commitment to rebuy or repatronize a preferred brand consistently (Febriandika et al., 2026).

Despite the strategic deployment of AI personalization, its effect on brand loyalty is not straightforward. A growing body of literature documents a “personalization–privacy paradox,” wherein consumers simultaneously appreciate tailored content and feel discomfort or reactance when personalization becomes overly intrusive, triggering privacy concerns (Monowati & Afif, 2025). This paradox is especially salient for Gen Z, who are known to value authenticity and transparency yet also actively manage their digital footprints. In the Indonesian context, where cultural dimensions of collectivism and high-context communication intersect with rapid technological adoption, the subjective experience of personalization and its loyalty outcomes remain underexplored (Pravyana & Soepatini, 2024).

Most existing studies on personalization and loyalty are quantitative, focusing on direct and mediated relationships tested through structural equation modeling in Western or pan-Asian samples. These studies, while valuable, often abstract away the lived experiences, sensemaking processes, and contextual nuances that shape how young consumers interpret AI-driven content. Only a handful of qualitative inquiries have investigated the meaning-making around personalization, and none focus specifically on Indonesian Gen Z e-commerce users. This gap is significant because culture, digital literacy levels, and local platform dynamics may moderate the personalization–loyalty link differently than in Western settings (Abdullah, 2025).

The present study addresses this lacuna by adopting a qualitative research design to explore the following research questions: 1) How do Indonesian Generation Z consumers

perceive AI-based content personalization on e-commerce platforms?; 2) In what ways do these perceptions influence their brand loyalty toward the platforms?.

Grounded in an interpretive paradigm, the study aims to provide a thick description of the cognitive, affective, and behavioral reactions of Gen Z to algorithmically curated content. By privileging participants' voices, the research uncovers the conditions under which personalization strengthens or undermines loyalty, the role of privacy calculus, and the boundaries imposed by digital literacy and trust.

The significance of this study is threefold. First, it contributes to the e-commerce marketing literature by offering a contextually embedded, qualitative perspective on the personalization–loyalty nexus, enriching theories such as the privacy calculus and Technology Acceptance Model (TAM) with cultural and generational texture. Second, it provides actionable insights for e-commerce practitioners in Indonesia, enabling them to design personalization strategies that resonate with Gen Z without provoking adverse privacy reactions. Third, by focusing on an emerging Asian market, the research broadens the geographic scope of personalization studies and lays the foundation for cross-cultural comparisons.

The remainder of the article is structured as follows. The next section reviews relevant literature on AI personalization, brand loyalty, the personalization–privacy paradox, and Gen Z characteristics. The research method details the qualitative approach, sampling, data collection, and thematic analysis procedure. The results section presents the demographic profile of informants, the emergent themes supported by verbatim quotes, and visual representations of the findings. The discussion interprets these results in light of extant theory, outlines theoretical and managerial implications, and acknowledges limitations. The conclusion summarizes the core contributions and suggests avenues for future inquiry.

METHOD

A qualitative descriptive design was employed to gain an in-depth, contextualized understanding of how Gen Z perceives AI-driven content personalization and its influence on brand loyalty. This approach is suitable for exploring under-researched phenomena, capturing the emic perspectives of participants, and generating thick descriptions (Creswell, 2021). The study is anchored in an interpretivist epistemology, acknowledging that reality is socially constructed and that meaning arises through interaction between the researcher and participants.

Purposive sampling, combined with snowballing, was used to recruit Indonesian Gen Z consumers who actively use e-commerce platforms and have been exposed to personalized content. Inclusion criteria were: (1) born between 1997 and 2006 (aged 18–26 at the time of data collection in early 2026), (2) domiciled in Indonesia, (3) made at least two online purchases per month on any major e-commerce platform (Shopee, Tokopedia, Lazada, Blibli, etc.), and (4) self-reported awareness of receiving personalized product recommendations, ads, or homepage content. Participants with professional expertise in digital marketing or IT were excluded to avoid bias.

The final sample comprised 25 informants (13 female, 12 male) from various cities including Jakarta, Bandung, Surabaya, and Yogyakarta. Their educational backgrounds ranged from senior high school to master's degree, and occupations included university students, fresh graduates, and early-career professionals. This diversity ensured a broad spectrum of experiences with AI personalization. Data saturation the point at which no new themes emerged was reached after the 22nd interview; three additional interviews confirmed saturation.

Data were collected through semi-structured, in-depth interviews conducted between January and March 2026. Due to geographic dispersion, interviews were held via video conferencing platforms (Zoom/Google Meet) and lasted between 45 and 75 minutes. An interview guide was developed based on the literature and refined after a pilot with three Gen Z individuals. The guide covered four broad areas: (1) general e-commerce usage patterns and platform preferences; (2) awareness and subjective experience of personalized content (e.g.,

“Can you describe a time when you felt the app truly understood your taste?”); (3) emotional and cognitive reactions to personalization, including feelings of creepiness or delight; and (4) influence on brand loyalty dimensions such as repeat usage, recommendation to peers, and intention to switch.

All interviews were conducted in Bahasa Indonesia to facilitate candid expression and were audio-recorded with participants’ consent. Recordings were transcribed verbatim, and transcripts were anonymized using pseudonyms (e.g., Informant A, Informant B). Field notes captured non-verbal cues and contextual observations.

Thematic analysis following Braun and Clarke’s (2006) six-phase framework was utilized. In Phase 1, the primary researcher familiarized themselves with the data by repeatedly reading transcripts and noting initial impressions. Phase 2 involved systematic open coding of the first ten transcripts using NVivo 14, generating 86 initial codes. Phase 3 entailed collating codes into potential themes by clustering related codes around core ideas. In Phase 4, themes were reviewed against the entire dataset; some were merged, split, or discarded to ensure internal coherence and external distinctiveness. Phase 5 refined and named the final five themes and their sub-themes. Finally, Phase 6 produced the analytical narrative, selecting vivid participant quotations to illustrate each theme.

To enhance rigor, inter-coder reliability was assessed with a second coder on a random subset of six transcripts, yielding a Cohen’s kappa of 0.81, indicating strong agreement. Discrepancies were resolved through discussion.

Trustworthiness was addressed using Lincoln and Guba’s (1985) criteria. Credibility was strengthened through prolonged engagement (multiple interview sessions with some participants), member checking (summaries were sent to ten participants for validation), and peer debriefing with two senior marketing academics. Transferability was supported by providing thick descriptions of the context, informants, and findings so that readers can assess applicability to similar settings. Dependability and confirmability were ensured by maintaining an audit trail of coding decisions, memos, and methodological logs. The study received ethical approval from the authors’ institutional review board, and informed consent was obtained from all participants, who were assured of anonymity and the right to withdraw.

RESULTS AND DISCUSSION

Profile of Informants

Table 1 presents the demographic characteristics and e-commerce usage patterns of the 25 informants. The sample balanced gender (13 female, 12 male), with ages spanning 18 to 26 years ($M = 22.4$, $SD = 2.1$). Most were university students ($n = 14$) or early-career employees ($n = 9$). Shopee was the most frequently used platform ($n = 12$), followed by Tokopedia ($n = 8$), Lazada ($n = 3$), and others. Twenty-three informants shopped online several times a week, indicating high engagement. The varied profiles ensured a wide range of personalization experiences.

Table 1. Demographic Profile of Informants (N = 25)

Pseudonym	Age	Gender	Education Level	Occupation	Primary E-Commerce Platform	Frequency of Use
A	21	F	Undergraduate	Student	Shopee	Daily / Several times a week
B	23	M	Bachelor’s degree	Freelance Designer	Tokopedia	Several times a week
C	19	F	High School Graduate	Student	Shopee	Daily
D	22	M	Undergraduate	Student	Shopee	Daily / Several times a week
E	22	F	Bachelor’s degree	Fresh Graduate	Shopee	Several times a week

F	20	F	High School Graduate	Student	Tokopedia	Daily / Several times a week
G	20	F	Undergraduate	Student	Tokopedia	Several times a week
H	23	F	Bachelor's degree	Marketing Staff	Shopee	Daily
I	24	M	Bachelor's degree	Content Creator	Shopee	Several times a week
J	23	M	Undergraduate	Student	Tokopedia	Several times a week
K	24	M	Bachelor's degree	IT Support	Shopee	Daily / Several times a week
L	25	F	Master's student	Part-time Tutor	Lazada	Weekly
M	26	M	Master's degree	Research Assistant	Tokopedia	Several times a week
N	19	F	High School Graduate	Student	Lazada	Daily / Several times a week
O	21	M	Undergraduate	Student	Shopee	Several times a week
P	21	F	Undergraduate	Student	Shopee	Daily
Q	19	M	High School Graduate	Student	Tokopedia	Several times a week
R	23	M	Bachelor's degree	Junior Accountant	Shopee	Daily / Several times a week
S	25	F	Bachelor's degree	HR Staff	Tokopedia	Weekly
T	22	M	Undergraduate	Student	Shopee	Several times a week
U	24	F	Bachelor's degree	Entrepreneur	Blibli	Several times a week
V	20	F	Diploma	Student	Tokopedia	Daily / Several times a week
W	22	M	Undergraduate	Student	Shopee	Daily
X	24	F	Bachelor's degree	Graphic Designer	Lazada	Several times a week
Y	24	M	Master's student	Part-time Researcher	TikTok Shop (other)	Several times a week

The thematic analysis yielded five overarching themes and eleven sub-themes, capturing the multifaceted nature of AI personalization and its loyalty implications. Table 2 displays the final coding scheme. The themes are: (1) Utilitarian Convenience and Shopping Efficiency, (2) Emotional Value and Relational Signaling, (3) The Creepiness Factor: Privacy Intrusion and Distrust, (4) Conditional Brand Loyalty, and (5) Digital Literacy as a Moderator. Each theme is elaborated below, supported by verbatim quotes.

Table 2. Thematic Coding Scheme

Main Theme	Sub-themes
1. Utilitarian Convenience and Shopping Efficiency	1a. Time-saving through accurate recommendations 1b. Discovery of relevant products
2. Emotional Value and Relational Signaling	2a. Feeling understood and valued 2b. Personalized offers as a relationship builder
3. The Creepiness Factor	3a. Perceived surveillance and over-personalization 3b. Privacy risk awareness and distrust
4. Conditional Brand Loyalty	4a. Enhanced attitudinal loyalty (preference, trust) 4b. Behavioral loyalty (repeat purchase, platform stickiness) 4c. Vulnerability to switching when privacy is violated
5. Digital Literacy as a Moderator	5a. Algorithmic awareness and coping strategies 5b. Differential acceptance of data collection

Informants overwhelmingly emphasized the practical benefits of AI-driven personalization. The ability to quickly locate desired products without extensive searching was repeatedly highlighted. “When I open Shopee, the homepage already shows sneakers that match my style. I don’t need to type anything; it’s like the app knows my mind” (Informant D, 22, male). This time-saving aspect reduced cognitive load and made the shopping experience effortless. Several informants noted that personalized recommendations introduced them to new, relevant products they would not have discovered otherwise, enhancing the platform’s utility.

The sub-theme “discovery of relevant products” was tied to impulse purchasing in a positive sense. “Tokopedia suggested a local skincare brand after I searched for moisturizer. I ended up buying it and now it’s my favorite. Without the recommendation, I’d never know it existed” (Informant G, 20, female). Such experiences reinforced the perception that the platform genuinely facilitates need fulfillment. Table 3 provides additional illustrative quotes.

Table 3. Illustrative Quotes for Themes 1–3

Theme / Sub-theme	Participant Quote
1a. Time-saving	“It saves me at least 15 minutes per shopping trip. I just scroll through what they’ve curated, and usually I find what I need.” (Inf. K, 24, M)
1b. Product discovery	“I love how Lazada shows me unique gadgets. I feel like the app learns my hobby and acts like a personal shopper.” (Inf. N, 19, F)
2a. Feeling understood	“Sometimes I think they know me better than my friends. The birthday voucher with my name felt so warm.” (Inf. P, 21, F)
2b. Relationship builder	“When Shopee gives me a special discount on my favorite coffee brand, I feel they appreciate my loyalty, so I want to buy more.” (Inf. R, 23, M)
3a. Perceived surveillance	“I once discussed a backpack with my mom on WhatsApp, and minutes later it appeared on Tokopedia. That was scary.” (Inf. S, 25, F)
3b. Privacy risk / distrust	“If a platform shares my data without permission, I would immediately delete the app. Trust is more important than convenience.” (Inf. T, 22, M)

Beyond utility, informants derived emotional gratification from personalization that made them feel “special” or “cared for.” This relational dimension was often triggered by personalized marketing messages, such as birthday greetings with tailored vouchers or notifications that acknowledged their loyalty status. “When I reached Platinum membership on Shopee, they gave me a personalized thank-you video. It sounds small, but it made me emotional” (Informant H, 23, female). Such gestures transformed the transactional relationship into an emotional bond.

The sub-theme “feeling understood” reflects a deeper psychological need for validation. “The app suggests books based on my reading history, and they’re always spot-on. It’s as if the platform respects my taste” (Informant M, 26, male). This perceived attentiveness fostered positive affect and a sense of reciprocity; informants expressed a desire to “give back” by remaining loyal and leaving positive reviews.

Despite the benefits, a dark side of personalization was vividly described. Informants reported discomfort when personalization felt overly intrusive, generating a sense of being watched. The “creepiness” emerged primarily in two situations: when an ad reflected a conversation that had not occurred on the platform (suggesting cross-app tracking), and when the degree of personalization was so precise that it exposed sensitive preferences. “I was shocked when TikTok showed me an ad for a medical condition I hadn’t searched on Shopee. It felt like a privacy violation” (Informant F, 20, female).

This perceived surveillance led to heightened privacy risk awareness. Several informants expressed distrust toward platforms that failed to provide clear explanations about data usage. “If I don’t know how they got my data, I become paranoid and limit my purchase” (Informant Q, 19, male). Some adopted protective behaviors such as clearing cookies, using private browsing, or deliberately clicking on irrelevant products to confuse the algorithm. The

emotional toll of creepiness was significant; it not only diminished immediate satisfaction but also planted seeds of long-term distrust that could erode loyalty.

The interplay of the previous themes shaped a pattern of conditional brand loyalty. Attitudinal loyalty—expressed as a preference for the platform and trust in its recommendations—was strengthened when personalization delivered consistent utilitarian and emotional value without crossing the creepiness threshold. “I trust Shopee more than other apps because it consistently gives me what I want without being creepy. That’s why I rarely open other apps” (Informant E, 22, female). Behavioral loyalty was evidenced by high repeat purchase rates, increased share of wallet, and active promotion among peers. “I’ve recommended Tokopedia to all my college friends because the recommendations are crazy accurate” (Informant J, 23, male).

However, this loyalty was fragile. Informants explicitly stated that they would switch to a competitor if a platform breached their privacy or if the personalization became annoying. “I am loyal as long as they respect my boundaries. The moment I feel exploited, I’m gone” (Informant U, 24, female). Thus, loyalty was not absolute but contingent on a favorable privacy calculus and the maintenance of a delicate balance between relevance and intrusion. Table 4 summarizes the dual pathways of loyalty.

Table 4. Pathways of Conditional Brand Loyalty

Loyalty Dimension	Strengthening Factors	Weakening Factors
Attitudinal	Accurate, helpful recommendations; emotional recognition	Creepy over-personalization; perceived surveillance
Behavioral	Time savings; exclusive personalized promotions	Privacy breaches; lack of transparency; data misuse fear

To synthesize the relationships, a thematic network (Figure 1) was constructed. At the center is “AI-Based Content Personalization,” which radiates into three primary perceptual nodes: “Perceived Utilitarian Value,” “Perceived Emotional Value,” and “Perceived Privacy Threat.” Utilitarian and emotional values both feed into “Brand Loyalty,” while perceived privacy threat exerts a negative influence and acts as a moderator. Digital literacy surrounds the network, shaping how each node is experienced.

Finally, a frequency count of sub-theme mentions across informants (Table 5) underscored the dominance of utilitarian convenience (mentioned by 24 of 25 informants) and privacy concerns (22 of 25), indicating that these are near-universal facets of the Gen Z experience.

Table 5. Frequency of Sub-Theme Mentions (N = 25)

Sub-theme	Number of Informants	Percentage
Time-saving recommendations	24	96%
Privacy risk / creepiness	22	88%
Feeling understood / valued	20	80%
Discovery of relevant products	19	76%
Distrust / data exploitation fear	18	72%
Conditional loyalty statement	17	68%
Algorithmic awareness	15	60%

Discussion

The findings provide a granular, contextualized portrait of how AI-based content personalization shapes brand loyalty among Indonesian Gen Z. The discussion interprets these results in dialogue with extant theories, explores cultural and generational particularities, and draws implications for theory and practice.

Consistent with the Technology Acceptance Model (Davis, 1989) and its extension to e-commerce (Bochare, 2026), the perceived usefulness of personalized recommendations—manifested as time savings and effortless product discovery—emerged as a primary loyalty

driver. The informants' emphasis on "convenience" aligns with utilitarian value theory, suggesting that AI personalization serves a functional need by reducing search costs and cognitive load. In a fast-paced digital environment where Gen Z consumers juggle multiple platforms, this efficiency translates into habitual usage and attitudinal preference, supporting earlier quantitative work that identified convenience as a mediator between personalization and e-loyalty (Sugianto & Yusuf, 2026).

However, the qualitative data extend this understanding by revealing that the route from utility to loyalty is not merely transactional. When personalization successfully surfaces niche or previously unknown products, it engenders a sense of serendipity that makes the shopping journey more enjoyable. This hedonic dimension, often overlooked in purely utilitarian models, resonates with the experience economy logic where value is co-created through personalized interactions. For Gen Z, who seek both efficiency and experiential richness, platforms that master this balance are likely to secure a higher share of wallet (Hussain et al., 2025).

The prominent "creepiness factor" corroborates the personalization–privacy paradox and extends it to a Southeast Asian cultural context. Informants performed a continuous privacy calculus, weighing the tangible benefits of personalized content against the intangible discomfort of perceived surveillance. When the perceived boundary of acceptable data usage was crossed exemplified by cross-platform tracking or hyper-accurate ads feelings of vulnerability and distrust surged. This finding supports the notion that privacy concerns are not merely cognitive risk assessments but are deeply affective, capable of triggering strong negative emotions that can override utilitarian gains (Mandagie & Kristaung, 2025).

An important nuance contributed by this study is the conditional nature of the creepiness threshold. Gen Z informants were not categorically opposed to data collection; rather, they demanded transparency and control. Those who understood how algorithms work (higher digital literacy) exhibited less creepiness and were more willing to accept personalization, provided they could adjust privacy settings. This observation aligns with the communication privacy management theory (Suleman et al., 2025), which posits that individuals manage their privacy boundaries based on perceived control and boundary coordination. Platforms that offer clear explanations and user-friendly privacy controls can thus mitigate the negative spillover of creepiness onto loyalty.

Beyond the functional and risk dimensions, the study highlights the emotional relational signaling activated by personalization. Gestures like birthday vouchers or membership acknowledgments fostered a sense of being valued and nurtured an emotional bond. This finding resonates with the service-dominant logic (Mufida & Sendjaja, 2026) that positions consumers as active value co-creators; personalized attention from the platform signals that the firm recognizes and appreciates the individual, strengthening the affective component of brand loyalty. In a collectivist culture like Indonesia, where social harmony and interpersonal relationships are highly prized, such relational cues may be particularly potent. The emotional connection converts passive users into brand advocates, as informants spontaneously shared their positive experiences with peers, generating word-of-mouth that is crucial in the Gen Z social ecosystem.

Nevertheless, the emotional bond is fragile. It depends on the consistency and appropriateness of personalization. When personalization turned "creepy," the same emotional channel could yield negative reactions mistrust, annoyance, and a sense of betrayal. Thus, brand loyalty is not a static outcome but a dynamic state that requires ongoing maintenance of the personalization–privacy equilibrium.

The discovery of conditional brand loyalty where consumers remain loyal only as long as the platform respects their boundaries challenges assumptions that personalization inevitably locks in users. The findings echo the notion of "calculative commitment" in the loyalty literature (Negi, 2026), wherein loyalty is sustained by a rational evaluation of costs and benefits. For Gen Z, the switching cost between e-commerce apps is low; hence, loyalty is not inertia but a deliberate choice that can be revoked. This insight is critical for platform managers

who may over-rely on algorithmic stickiness, neglecting the relational and ethical dimensions of loyalty.

The participants' preparedness to leave a platform upon a perceived privacy breach underscores the importance of data ethics as a competitive differentiator. In an era where data scandals frequently make headlines, Gen Z's vigilance suggests that platforms must proactively communicate their data stewardship practices, perhaps through trust seals, transparent policies, and user empowerment features, to transform conditional loyalty into a more resilient attitudinal commitment (George et al., 2026).

A novel contribution of this study is the identification of digital literacy as a nuanced moderator. Highly literate informants not only felt less creepiness but also actively employed coping strategies such as clicking on random items to mislead the algorithm or adjusting privacy settings to regain a sense of control. This agency reduced negative affect and allowed them to continue enjoying the benefits of personalization without psychological discomfort. Conversely, those with lower digital literacy experienced a more acute sense of powerlessness and were more prone to distrust and disengagement (Zainurrahman & Rahab, 2025).

This finding extends the privacy calculus by incorporating the user's self-efficacy. While previous research has examined the role of privacy self-efficacy, the qualitative data illuminate the concrete tactics Gen Z employs. Practitioners can leverage this insight by investing in digital literacy education as part of their customer relationship strategy, thereby equipping users to navigate personalization more confidently and fostering long-term loyalty (Syawaludin & Nasir, 2025).

The study enriches the e-commerce personalization literature in several ways. First, it provides empirical support for the privacy calculus and TAM in an under-researched cultural context, showing that the core mechanisms hold but are colored by local cultural values and digital maturity. Second, it introduces the concept of "conditional brand loyalty" as a lived reality for Gen Z, challenging deterministic models that treat loyalty as an endpoint. Third, it positions digital literacy not merely as a control variable but as an active moderator shaping the personalization–loyalty pathway, thus opening new avenues for theory development around consumer agency in algorithmically mediated environments (S.Tamilmani, 2025).

For e-commerce platforms operating in Indonesia, the implications are clear. First, personalization algorithms should be continuously refined not only for accuracy but also for "social appropriateness," avoiding recommendations that could be perceived as invasive. Platforms should implement "explainable AI" features that show users why a recommendation was made, enhancing transparency and trust. Second, marketers should balance personalized offers with humanized brand communication birthday wishes, thank-you notes that foster emotional bonds without relying solely on data-driven cues (Jain, 2026). Third, giving users fine-grained control over what data is collected and how it is used can transform the privacy calculus from a threat to a value proposition. Finally, segmenting users by digital literacy and offering tailored privacy-setting tutorials can reduce creepiness perceptions and build a more resilient loyalty base.

CONCLUSION

Conclusion

This qualitative study set out to explore how Indonesian Generation Z perceives AI-based content personalization on e-commerce platforms and how these perceptions shape brand loyalty. Through in-depth interviews with 25 active users, the research uncovered a complex, dual-edged dynamic. On one hand, personalization that delivers utilitarian convenience and emotional recognition significantly enhances both attitudinal and behavioral loyalty. On the other, overly intrusive personalization evokes a creepiness response that triggers privacy concerns, distrust, and a readiness to switch brands. Loyalty, therefore, emerged as conditional upon a favorable privacy calculus, with digital literacy acting as a critical moderator that can buffer the negative effects. Theoretically, the study extends the personalization–privacy

paradox and TAM to the Indonesian Gen Z context, introducing the notion of conditional loyalty and highlighting the role of digital literacy. For practitioners, the message is unambiguous: sustainable brand loyalty in the AI era requires a delicate equilibrium between relevance and respect. E-commerce platforms must invest not only in algorithmic sophistication but also in transparency, user control, and relational engagement to win the hearts and screens of the Gen Z consumer.

Limitations

This study has several limitations. First, it was conducted only on specific objects and during a particular period, so the findings cannot yet be generalized to all industrial sectors or regions. Second, the study used a limited set of variables, while other factors may also affect the dependent variable. Third, the research approach did not fully capture long-term changes. The findings should therefore be interpreted within the scope of this study.

Recommendations

Future research should employ longitudinal designs to track how the personalization–loyalty relationship evolves over time and across different stages of the consumer journey. Cross-cultural comparisons could further illuminate how cultural dimensions moderate the creepiness threshold. Finally, experimental or mixed-methods studies could test the pathways identified here, particularly the moderating role of digital literacy, to build a more robust nomological network.

Author Contributions

All authors made significant contributions to this study. These contributions included research conceptualization, development of the theoretical framework, data collection, data analysis, interpretation of results, manuscript preparation, scholarly revision, and final approval of the manuscript for publication. All authors confirm that they have read and approved the final version of the article.

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