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AI-DRIVEN PERSONALIZATION AND USER ENGAGEMENT: THE TRUST ROLES, PERCEIVED VALUE, AND PRIVACY TRANSPARENCY

SUN'IY INTELLEKT ASOSIDAGI SHAXSIYLASHTIRISH VA FOYDALANUVCHILAR FAOLLIGI: ISHONCH, QABUL QILINADIGAN QIYMAT VA MAXFIYLIK SHAFFOFLIGINING ROLI

ИСКУССТВЕННЫЙ ИНТЕЛЛЕКТ И ПЕРСОНАЛИЗАЦИЯ ПОЛЬЗОВАТЕЛЬСКОЙ АКТИВНОСТИ: РОЛЬ ДОВЕРИЯ, ВОСПРИНИМАЕМОЙ ЦЕННОСТИ И ПРОЗРАЧНОСТИ КОНФИДЕНЦИАЛЬНОСТИ

Kilichova Elmira Ozodovna
"Yangi O'zbekiston" University, Uzbekistan
e.klichova@newuu.uz
08.00.11 — Marketing
DOI:https://doi.org/10.5281/zenodo.23160454

ANNOTATION

This study examines the relationship between AI-driven personalization and user engagement by focusing on trust, perceived value, and privacy transparency as central mechanisms and boundary conditions. The rapid integration of artificial intelligence into digital platforms has enabled organizations to provide highly individualized recommendations, content, services, and communication. However, personalization does not automatically result in sustained user engagement. Its effectiveness depends on whether users perceive AI-based interactions as useful, trustworthy, relevant, and sufficiently transparent regarding the collection and use of personal data. Based on a critical synthesis of recent scholarly literature, the study develops an integrated conceptual framework in which AI-driven personalization influences user engagement through trust and perceived value, while privacy transparency is positioned as a boundary condition that strengthens users' positive responses to personalization. The proposed framework connects personalization research with trust theory, perceived value logic, and the personalization–privacy paradox. The study contributes to the literature by explaining not only whether AI personalization affects engagement, but also why and under what conditions this relationship becomes stronger. The framework provides a theoretical basis for future quantitative testing in both educational and business contexts.

Keywords: artificial intelligence, personalization, user engagement, trust, perceived value, privacy transparency, digital marketing.

АННОТАЦИЯ

В статье исследуется взаимосвязь между персонализацией на основе искусственного интеллекта и активностью пользователей с акцентом на доверие, воспринимаемую ценность и прозрачность политики конфиденциальности. Современные цифровые платформы активно используют искусственный интеллект для формирования индивидуальных рекомендаций, контента, услуг и коммуникаций. Однако сама по себе персонализация не гарантирует устойчивой пользовательской активности. Ее эффективность зависит от того, воспринимают ли пользователи взаимодействие с системой искусственного интеллекта как полезное, релевантное, надежное и прозрачное в отношении сбора и использования персональных данных. На основе критического анализа современных научных исследований разработана

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концептуальная модель, согласно которой персонализация на основе искусственного интеллекта воздействует на пользовательскую активность через доверие и воспринимаемую ценность, тогда как прозрачность политики конфиденциальности выступает условием, усиливающим положительный эффект персонализации. Предложенная модель объединяет исследования персонализации, теорию доверия, концепцию воспринимаемой ценности и парадокс персонализации и конфиденциальности. Научная значимость исследования заключается в объяснении не только того, влияет ли AI-персонализация на активность пользователей, но и почему и при каких условиях данный эффект усиливается.

Ключевые слова: искусственный интеллект, персонализация, активность пользователей, доверие, воспринимаемая ценность, прозрачность конфиденциальности, цифровой маркетинг.

ANNOTATSIYA

Mazkur maqolada sun’iy intellekt asosida amalga oshiriladigan shaxsiylashtirish va foydalanuvchilar faolligi o‘rtasidagi bog‘liqlik ishonch, qabul qilinadigan qiymat hamda maxfiylik siyosatining shaffofligi nuqtayi nazaridan tadqiq etiladi. Raqamli platformalarda sun’iy intellektdan foydalanish individual tavsiyalar, kontent, xizmatlar va kommunikatsiyalarni shakllantirish imkoniyatlarini sezilarli darajada kengaytirmoqda. Biroq shaxsiylashtirishning o‘zi foydalanuvchilarning barqaror faolligini ta’minlamaydi. Uning samaradorligi foydalanuvchining AI tizimi bilan o‘zaro aloqani qanchalik foydali, ishonchli, relevant va shaxsiy ma’lumotlardan foydalanish nuqtayi nazaridan shaffof deb qabul qilishiga bog‘liq. Zamonaviy ilmiy adabiyotlarning tanqidiy tahlili asosida AI-personalizatsiyaning foydalanuvchilar faolligiga ta’sirini tushuntiruvchi konseptual model ishlab chiqildi. Modelda ishonch va qabul qilinadigan qiymat asosiy vositachi mexanizmlar, maxfiylik shaffofligi esa ushbu munosabatni kuchaytiruvchi shart sifatida qaraladi. Tadqiqotning ilmiy yangiligi AI asosidagi shaxsiylashtirish foydalanuvchilar faolligiga faqat ta’sir qilishi yoki qilmasligini emas, balki ushbu ta’sir qanday mexanizmlar orqali va qaysi sharoitlarda kuchayishini izohlashdan iborat.

Kalit so‘zlar: sun’iy intellekt, shaxsiylashtirish, foydalanuvchilar faolligi, ishonch, qabul qilinadigan qiymat, maxfiylik shaffofligi, raqamli marketing.

INTRODUCTION

Artificial intelligence has fundamentally changed the logic of digital personalization. Instead of treating users as relatively homogeneous market segments, AI-enabled systems can continuously process behavioral, contextual, and interaction data to generate individualized recommendations, content, advertisements, and services. This development has made personalization one of the most important mechanisms through which digital organizations attempt to increase relevance and strengthen user engagement.

Recent empirical evidence demonstrates that AI-driven personalization can positively influence users’ perceptions of trust and usefulness and, consequently, engagement. Teepapal’s study, for example, develops a Stimulus–Organism–Response framework in which AI-enabled personalization influences trust, privacy perceptions, and perceived usefulness, which subsequently shape consumer engagement [1].

Nevertheless, the relationship between personalization and engagement is not inherently positive. The same technologies that make digital experiences more relevant also require access to increasingly detailed information about users. Consequently, personalization creates a fundamental tension: users may appreciate relevance and convenience while simultaneously becoming concerned about

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surveillance, data misuse, or insufficient control over personal information. Recent research on AI personalization therefore increasingly emphasizes the personalization–privacy paradox and the importance of transparency and user control [2].

The problem becomes particularly important in education and business. In educational environments, AI systems can personalize learning materials, recommendations, feedback, and communication. In business environments, personalization can influence product recommendations, advertising, customer service, and purchasing decisions. Although the contexts differ, both depend on the user's willingness to interact with an AI-mediated system.

The central argument of this study is that AI-driven personalization should not be considered a direct technological determinant of engagement alone. Rather, personalization creates an initial stimulus whose effectiveness depends on psychological evaluations formed by the user. Trust answers the question of whether the system can be relied upon; perceived value reflects whether the benefits of personalization justify the user's effort and data contribution; and privacy transparency determines whether the personalization process is understandable and sufficiently controllable.

Accordingly, the purpose of this study is to develop an integrated conceptual framework explaining how AI-driven personalization influences user engagement through trust and perceived value and how privacy transparency conditions this relationship.

THEORETICAL BACKGROUND

AI-driven personalization refers to the use of artificial intelligence and data-driven analytical techniques to adapt digital content, recommendations, services, or interactions to individual users. Unlike traditional segmentation, AI personalization can operate dynamically by continuously incorporating new behavioral information.

The literature indicates that personalization can increase perceived relevance and usefulness. Teepapal [1] demonstrates that AI-driven personalization can strengthen trust and usefulness perceptions, while these perceptions subsequently contribute to engagement. Similarly, Srivastava and Gurme [2] identify perceived personalization and consumer trust as important positive factors in digital consumer relationships, while privacy concerns can undermine these effects.

However, personalization generates value only when users perceive the resulting experience as beneficial. Perceived value can be understood as the user's overall assessment of the benefits received relative to the costs, risks, effort, or sacrifices associated with an interaction. In AI environments, these costs may include privacy risks, cognitive effort, uncertainty, and concerns about algorithmic control.

This distinction is theoretically important. A recommendation can be technically accurate but still fail to generate engagement if users do not consider the system trustworthy. Conversely, users may tolerate some uncertainty concerning data collection if the personalized service provides substantial and clearly understood value.

Trust therefore represents a central psychological mechanism linking AI personalization with subsequent user behavior. When users trust an AI system, they are more likely to perceive its recommendations as credible, interact with the system repeatedly, and accept its personalization logic. Recent research confirms that trust is a significant component of AI-mediated consumer responses [1–3].

Privacy transparency introduces a further dimension. Transparency does not simply mean providing a lengthy privacy policy. From the perspective of AI personalization, transparency concerns the clarity with which users can understand why particular recommendations are generated, what information is collected, how that information is used, and what degree of control users retain.

Recent research on AI-driven advertising demonstrates that privacy and transparency are not peripheral ethical issues but important conditions influencing the effectiveness of personalization.

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Qadri, Moustafa and Waqas show that the relationship between AI personalization and perceived relevance is shaped by privacy-related factors and transparency practices [3].

The literature therefore suggests that personalization should be conceptualized as a multidimensional process rather than as a simple technological input. Its behavioral consequences depend on psychological and ethical mechanisms that determine whether users interpret personalization as helpful or intrusive.

METHODOLOGY

The study adopts a quantitative-oriented conceptual research design based on a systematic analytical synthesis of recent literature concerning AI personalization, trust, perceived value, privacy, transparency, and user engagement. The primary purpose is to construct a theoretically coherent model that can subsequently be empirically tested in educational and business environments.

The literature selection prioritizes recent peer-reviewed studies published between 2024 and 2026, while foundational theoretical concepts are retained where necessary to establish conceptual continuity. The analytical procedure consists of four stages.

First, studies addressing AI-driven personalization and behavioral outcomes were examined to identify the principal direct and indirect relationships. Second, evidence concerning trust and perceived value was analyzed to determine their potential mediating functions. Third, research on privacy concerns, transparency, and user control was reviewed to identify relevant boundary conditions. Fourth, the findings were integrated into a unified conceptual framework applicable to both educational and business contexts.

The proposed empirical model can be represented as follows:

AI-Driven Personalization → Trust → Perceived Value → User Engagement

with **Privacy Transparency** functioning as a moderating condition, particularly in the relationship between AI-driven personalization and trust and between perceived value and engagement.

For future empirical validation, the model can be operationalized through multi-item Likert scales and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This approach would enable simultaneous assessment of measurement reliability, construct validity, direct effects, mediation, moderation, and potential differences between education and business contexts.

RESULTS AND DISCUSSION

The synthesis of the literature leads to a central theoretical proposition: AI personalization does not generate sustained engagement simply because it is technologically sophisticated. Its effect depends on the psychological value users assign to the personalized experience.

The first proposed relationship is between AI-driven personalization and trust. Personalization can signal that a digital system understands the user's needs and preferences. When recommendations appear relevant rather than arbitrary, users may perceive the system as more competent and responsive. This creates the basis for trust. Empirical research supports this direction by showing positive associations between AI-enabled personalization and trust-related perceptions [1,2].

H1: AI-driven personalization positively influences user trust.

The second relationship concerns perceived value. Personalization can reduce search costs, increase relevance, save time, and simplify decision-making. These benefits increase the functional value of digital interaction. In education, personalized recommendations may help users identify relevant learning materials more efficiently; in business, personalized product or service recommendations can reduce information overload.

H2: AI-driven personalization positively influences perceived value.

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Trust and perceived value are not independent constructs. A user who considers an AI system trustworthy is more likely to accept its recommendations and recognize the benefits of personalization. Conversely, low trust may lead users to question whether personalization is genuinely designed to benefit them or primarily serves organizational interests.

H3: User trust positively influences perceived value.

Perceived value, in turn, provides a direct behavioral mechanism. Users are more likely to continue interacting with a system when the perceived benefits of that interaction exceed its perceived costs and risks. Consequently, perceived value should be considered a central determinant of sustained engagement rather than merely an outcome of personalization.

H4: Perceived value positively influences user engagement.

Trust may also have a direct relationship with engagement. In digital environments characterized by uncertainty, trust reduces psychological barriers to repeated interaction. Users who trust an AI-enabled platform are more likely to continue using it, respond to recommendations, and participate in platform activities.

H5: User trust positively influences user engagement.

These relationships imply two potential mediation mechanisms. First, AI personalization can influence engagement through trust. Second, personalization can increase engagement by increasing perceived value. Teepapal's findings are particularly relevant because they demonstrate that trust and usefulness operate as mechanisms connecting AI-driven personalization with consumer engagement [1].

H6: Trust mediates the relationship between AI-driven personalization and user engagement.

H7: Perceived value mediates the relationship between AI-driven personalization and user engagement.

The most important boundary condition in the proposed model is privacy transparency. Personalization requires data, and the collection of data can create uncertainty concerning privacy. If users understand why data are collected, how they are used, and what controls are available, personalization is more likely to be interpreted as legitimate and beneficial.

Recent research confirms the strategic importance of transparency and data governance in AI-mediated personalization. Qadri et al. emphasize the role of transparency and privacy-related factors in shaping the effectiveness of AI personalization, while newer research on AI-driven digital environments similarly highlights transparency and privacy assurance as important components of trust formation [3,4].

H8: Privacy transparency positively moderates the relationship between AI-driven personalization and user trust.

The final relationship concerns the transition from perceived value to engagement. Even when users perceive personalization as valuable, uncertainty concerning the use of their personal data can reduce their willingness to maintain long-term interaction. Therefore, transparency should also strengthen the behavioral conversion of perceived value into engagement.

H9: Privacy transparency positively moderates the relationship between perceived value and user engagement.

The resulting conceptual model is therefore more comprehensive than a simple personalization–engagement relationship. It proposes that the effectiveness of AI personalization depends on a sequence of psychological evaluations:

Personalization → Trust → Perceived Value → Engagement

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while **Privacy Transparency** functions as an ethical and informational condition that can strengthen this sequence.

This framework also helps explain why apparently similar AI personalization systems may produce different user responses. Two platforms may provide equally accurate recommendations, yet users may respond differently because they differ in their perceptions of trust, value, transparency, and control. Thus, technological performance alone is insufficient to explain engagement.

The model has particular relevance for educational institutions. AI-supported learning platforms increasingly depend on personalization to recommend learning resources and adapt educational interactions. However, educational personalization involves sensitive user data and therefore requires especially clear communication regarding data use. In such settings, perceived value may relate not only to convenience but also to learning relevance and efficiency.

In business environments, personalization can influence product discovery, customer service, advertising responses, and purchase-related behavior. Recent evidence from digital commerce indicates that AI personalization, trust, privacy perceptions, and transparency are closely interconnected [3,4].

The cross-context perspective is therefore a major contribution of the proposed framework. Instead of treating educational and business personalization as completely separate phenomena, the model identifies common psychological mechanisms while allowing the strength of individual relationships to vary across contexts.

THEORETICAL CONTRIBUTION

The proposed framework makes three principal theoretical contributions.

First, it moves beyond a direct-effect interpretation of AI personalization. Instead of assuming that personalization automatically generates engagement, it identifies trust and perceived value as mechanisms through which personalization becomes behaviorally meaningful.

Second, the model integrates privacy transparency into the personalization process. Privacy is frequently treated as a negative consequence of personalization, but the present framework conceptualizes transparency as an active mechanism capable of strengthening trust and supporting beneficial personalization.

Third, the framework connects educational and business contexts. This cross-domain perspective provides an opportunity to examine whether the same psychological mechanisms operate across different types of AI-mediated user experiences.

The framework consequently contributes to the emerging literature by shifting the analytical question from “Does AI personalization increase engagement?” toward the more theoretically informative question: “Through which psychological mechanisms, and under what transparency conditions, does AI personalization generate sustained engagement?”

MANAGERIAL IMPLICATIONS

Organizations implementing AI personalization should avoid treating personalization accuracy as the sole measure of success. A technically sophisticated recommendation system may fail if users do not trust the system or perceive sufficient value in the interaction.

First, organizations should make personalization understandable. Users should be able to recognize why particular recommendations or content are being presented.

Second, organizations should communicate data practices clearly and provide meaningful user control. Transparency should be designed as an interactive component of the user experience rather than hidden within lengthy legal documents.

Third, organizations should evaluate personalization through trust and perceived value indicators in addition to conventional engagement metrics. Click-through rates, usage frequency, and conversion rates provide behavioral information but do not fully explain why users remain engaged.

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Finally, educational institutions and businesses should develop AI personalization strategies that balance relevance with user autonomy. Sustainable personalization is not simply the process of predicting what users want; it is the process of creating personalized experiences that users consider useful, trustworthy, and legitimate.

CONCLUSION

AI-driven personalization represents a major transformation in the way organizations interact with users. Nevertheless, personalization should not be understood as an automatic driver of engagement. Its effectiveness depends on the psychological interpretation of the personalized experience.

This study develops an integrated conceptual framework in which AI-driven personalization influences user engagement through trust and perceived value, while privacy transparency functions as a boundary condition. The framework synthesizes recent evidence showing that personalization can strengthen trust and usefulness, while privacy concerns and insufficient transparency may weaken positive outcomes [1–5].

The principal theoretical proposition is that sustainable engagement emerges when users perceive AI personalization as simultaneously **relevant, valuable, trustworthy, and transparent**. This proposition provides a foundation for subsequent empirical testing through PLS-SEM in education and business settings.

Future empirical research should test the proposed hypotheses using comparable measurement instruments across educational and commercial contexts and examine whether the strength of trust, perceived value, and privacy transparency differs according to users' digital experience, data sensitivity, and institutional context. Such research would allow the conceptual model to move from theoretical explanation toward evidence-based strategies for responsible and effective AI personalization.

REFERENCES

1. **Teepapal, T.** (2025). AI-driven personalization: Unraveling consumer perceptions in social media engagement. Computers in Human Behavior, 165, 108549. https://doi.org/10.1016/j.chb.2024.108549.
2. **Srivastava, R. K., & Gurme, V.** (2026). Artificial intelligence and consumer behaviour on social media: A study of personalization, trust, and privacy. Measurement: Digitalization, 5, 100021. https://doi.org/10.1016/j.meadig.2025.100021.
3. **Qadri, U. A., Ahmed Moustafa, A. M., & Waqas, M.** (2026). When and how AI personalization drives sustainable purchases: The roles of relevance, privacy, and transparency in eco-friendly advertising. Journal of Retailing and Consumer Services, 89, 104592. https://doi.org/10.1016/j.jretconser.2025.104592.
4. **Vu, C. B., Ozuem, W., Willis, M., & Katz, J.** (2026). Navigating trust and the personalization-privacy paradox in AI-driven e-commerce: A consumer pathway framework. Journal of Retailing and Consumer Services, 93, 104938. https://doi.org/10.1016/j.jretconser.2026.104938.
5. **The Impact of Privacy Intrusiveness on Individuals' Responses and Engagement Toward Personalization in Online Interactive Advertising.** (2025). Journal of Interactive Advertising, 25? [online publication; pp. 38–60]. https://doi.org/10.1080/15252019.2024.2440318.
6. **Ethical AI personalization in digital retail: The roles of transparency, privacy, and consumer trust.** (2026). Sustainable Business and Society, 2(1), 100020. https://doi.org/10.1016/j.sbr.2025.100020.