

A Scoping and Rapid Representation of Autonomy, Engagement, Ethics, And Transparency in Artificial Intelligence with Driven Personalization

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Abstract—Artificial intelligence (AI) with driven personalization has become central to digital marketing, media, healthcare, and creative industries. While personalization promises enhanced engagement and efficiency, it simultaneously raises concerns regarding autonomy, privacy, transparency, and ethical governance. This study combines a scoping review with a rapid review approach to synthesize recent empirical, conceptual, and systematic literature (2023–2025) on AI-powered personalization. Eleven studies were analyzed, encompassing qualitative interviews, mixed-method experiments, conceptual reviews, and systematic literature reviews. Findings reveal four dominant themes: (1) personalization–autonomy tension, (2) customer engagement and experiential outcomes, (3) ethical and societal risks, and (4) transparency and user control. Results indicate that AI personalization improves engagement and operational efficiency but often constrains user autonomy, amplifies privacy risks, and lacks adequate transparency. The review highlights significant methodological gaps, including limited human-centered evaluations and overreliance on secondary data. Practical recommendations and research implications are proposed to support responsible, human-centered AI deployment.

Index Terms—Artificial intelligence; personalization; autonomy; transparency; digital marketing; ethics

I. INTRODUCTION

AI-driven personalization increasingly shapes consumer journeys, media consumption, mental health support, and creative work. Techniques such as

machine learning, collaborative filtering, and predictive analytics enable hyper-personalized experiences but also introduce challenges related to algorithmic bias, data surveillance, and diminished user agency. Despite rapid adoption, scholarly evidence remains fragmented across disciplines. This study aims to map existing evidence and rapidly synthesize key findings to inform researchers, practitioners, and policymakers.

II. METHOD: SCOPING AND RAPID REVIEW APPROACH

2.1 Review Design

A combined scoping and rapid review approach was adopted to map the breadth of current research and synthesize core findings within a compressed timeframe. The scoping component identified major themes and study designs, while the rapid review emphasized recent, high-relevance publications (2023–2025).

2.2 Data Sources and Selection

The dataset comprised 11 peer-reviewed studies including qualitative interviews, mixed-method experiments, conceptual analyses, and systematic literature reviews. Domains covered digital marketing, journalism, psychotherapy, creative industries, and AI ethics.

2.3 Data Extraction and Synthesis

Key characteristics extracted included objectives, design, methods, samples, variables, results, and limitations. A thematic synthesis was conducted, aggregating findings into higher-order analytical themes: autonomy, engagement, ethics, and transparency.

III. RESULTS

3.1 Personalization and Human Autonomy

Multiple studies demonstrate that personalization simultaneously empowers and constrains users. Media professionals and consumers report increased relevance and convenience but reduced freedom of choice due to opaque algorithmic mediation. Users often accept data trade-offs in early engagement stages yet become more privacy-sensitive during later decision phases. In AI-based psychotherapy, personalization supported short-term coping but failed to meet deeper emotional needs, highlighting limits of algorithmic empathy.

3.2 Customer Engagement and Experiential Outcomes

AI-driven personalization consistently enhances customer engagement, predictive accuracy, and marketing efficiency. Machine learning models improve customer lifetime value prediction and adaptive content delivery. Creative professionals using AI-assisted workflows reported gains in productivity and satisfaction, though agency varied by task design.

3.3 Ethical, Privacy, and Societal Risks

Across conceptual and systematic reviews, dominant concerns include large-scale data extraction, algorithmic bias, manipulation, labor displacement, and insufficient accountability. Several studies emphasize that personalization systems can reinforce existing inequalities and nudge consumer behavior in non-transparent ways.

3.4 Transparency and User Control

Transparency remains uneven across AI systems. Input and output explanations are more accessible than processing logic or user-control mechanisms. Subjective transparency assessments show that users struggle to form accurate mental models of

personalization processes, weakening trust and informed consent.

IV. DISCUSSION

This review confirms that AI personalization delivers measurable performance and engagement benefits but introduces structural risks to autonomy, privacy, and fairness. Evidence is dominated by qualitative studies and secondary literature, with relatively few large-scale human-centered experiments. Context-specific findings further limit generalizability. Collectively, results suggest a growing misalignment between technical optimization goals and human-centered values.

V. RECOMMENDATIONS

5.1 Practice

1. Adopt transparency-by-design: Implement clear disclosures, explanation interfaces, and user-adjustable personalization controls.
2. Prioritize human-in-the-loop systems: Maintain meaningful human oversight, especially in sensitive domains such as mental health and media.
3. Minimize data exploitation: Shift from maximal data extraction toward privacy-preserving personalization (e.g., federated or on-device learning).
4. Audit for bias and manipulation: Conduct routine fairness and impact assessments across demographic groups.
5. Context-aware personalization: Balance automation with situational sensitivity, cultural factors, and user intent.

5.2 Policy

1. Establish enforceable standards for algorithmic transparency and explainability.
2. Mandate impact assessments for high-risk personalization applications.
3. Strengthen consent mechanisms and data rights for users.

VI. IMPLICATIONS

6.1 Theoretical Implications

Future research should integrate autonomy theory, human–AI interaction, and ethical design frameworks to move beyond performance-centric models.

6.2 Methodological Implications

There is a need for longitudinal, mixed-method, and experimental studies with diverse human samples. Overreliance on conceptual and secondary reviews limits empirical grounding.

6.3 Practical Implications

Organizations deploying AI personalization must recognize that engagement gains may come at the cost of trust and autonomy unless governance, transparency, and user agency are embedded from design through deployment.

VII. CONCLUSION

AI-driven personalization represents a powerful but double-edged transformation. While it enhances engagement and efficiency, it simultaneously threatens autonomy, privacy, and fairness. This scoping and rapid review highlights the urgency of shifting toward responsible, human-centered personalization ecosystems supported by transparent design, ethical governance, and robust empirical evaluation.

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