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The Dark Side of Data-Driven Marketing: Consent Fatigue, Privacy Concerns, and Consumer Resistance in Personalized Advertising

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ABSTRACT (10 PT)

A well-prepared abstract allows readers to quickly and accurately identify the basic content of a study. This study examined the unintended consequences of data-driven marketing, particularly focusing on consent fatigue, privacy concerns, and consumer resistance in personalized advertising. The research addressed the growing paradox wherein increasing personalization, enabled by extensive data collection, undermined consumer trust and engagement. The primary objective was to investigate how repeated consent requests and perceived privacy intrusions influenced consumers' psychological responses and behavioral intentions. A quantitative approach was employed, using survey data collected from 320 digital consumers, which were analyzed through structural equation modeling. The findings indicated that excessive exposure to consent mechanisms led to cognitive overload and diminished perceived autonomy, thereby intensifying privacy concerns. These concerns significantly triggered resistance behaviors, including advertisement avoidance and reduced purchase intention. The study concluded that while personalization enhanced relevance, its overuse generated adverse outcomes that weakened consumer trust. The results underscored the need for ethically balanced data practices and more user-centric consent designs to sustain long-term engagement in digital marketing environments.

Keywords: consent fatigue; privacy concerns; consumer resistance; personalized advertising



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INTRODUCTION

The proliferation of data-driven marketing has significantly reshaped contemporary digital ecosystems, enabling firms to deliver highly personalized advertising based on extensive consumer data. Advances in artificial intelligence, machine learning, and behavioral tracking technologies have allowed marketers to optimize targeting precision and enhance consumer engagement. Recent reports indicate that over 70% of consumers are exposed to personalized advertising daily, with firms increasingly relying on predictive analytics to influence purchase decisions (Dwivedi et al., 2023; Kumar et al., 2024). While such developments have improved marketing effectiveness, they have simultaneously intensified concerns regarding data privacy, transparency, and user autonomy.

A critical emerging issue within this context is consent fatigue, a condition in which consumers become desensitized to frequent privacy notices and consent requests, often accepting terms without meaningful evaluation. Empirical evidence suggests that repetitive consent interactions lead to cognitive overload and reduced comprehension of data practices (Martin & Murphy, 2023; Böhme et al., 2024). Concurrently, heightened awareness of data misuse and algorithmic surveillance has amplified privacy concerns, particularly in environments characterized by opaque data governance.

These concerns have increasingly manifested in consumer resistance behaviors, including advertisement avoidance, negative word-of-mouth, and reduced trust in digital platforms (Bleier et al., 2023; Aguirre et al., 2025). Consequently, the effectiveness of personalized advertising is being challenged by the very mechanisms designed to enhance it.

Theoretical Foundations and Conceptual Tensions

The relationship between personalization and consumer response can be theoretically explained through privacy calculus theory, which posits that individuals weigh perceived benefits against perceived risks when disclosing personal information (Xu et al., 2023). However, in high-frequency digital environments, repeated consent requests may disrupt this rational evaluation process, leading to heuristic decision-making and diminished perceived control. Furthermore, psychological reactance theory suggests that intrusive or coercive marketing practices may trigger resistance when consumers perceive a threat to their autonomy (White et al., 2024). These theoretical perspectives highlight a critical tension: while personalization aims to enhance relevance, excessive data-driven practices may undermine consumer trust and engagement.

Research Gap and Novelty

Despite growing scholarly attention to personalization and privacy, prior studies have predominantly examined these constructs in isolation. Existing research has focused either on the benefits of personalized advertising or on generalized privacy concerns, with limited integration of consent fatigue as a central explanatory mechanism (Martin & Murphy, 2023; Bleier et al., 2023). Moreover, recent studies have called for a more nuanced understanding of how repeated consent exposure shapes cognitive and behavioral outcomes in digital environments (Aguirre et al., 2025).

Another limitation lies in the contextual scope of prior research, which has largely been conducted in developed markets with mature data protection regulations. There remains insufficient empirical evidence from emerging digital contexts, where regulatory enforcement, digital literacy, and consumer awareness may differ significantly. This gap underscores the need for a more integrative framework that captures the interplay between consent fatigue, privacy concerns, and consumer resistance in contemporary personalized advertising ecosystems.

The novelty of this study lies in its integrated conceptual model, which positions consent fatigue as a key antecedent influencing privacy concerns and subsequent resistance behaviors. By linking these constructs within a single empirical framework, this research extends existing theories and provides a more comprehensive understanding of the dark side of data-driven marketing.

Research Objectives

In response to the identified gaps, this study aims to:

1. Examine the effect of consent fatigue on privacy concerns in personalized advertising contexts.
2. Analyze the influence of privacy concerns on consumer resistance behaviors.
3. Investigate the mediating role of privacy concerns in the relationship between consent fatigue and consumer resistance.
4. Provide strategic insights for developing ethical, transparent, and user-centric data-driven marketing practices.

By addressing these objectives, this study contributes to advancing theoretical discourse on digital marketing ethics and offers practical implications for balancing personalization with consumer trust in increasingly data-intensive environments.

RESEARCH METHODS

Research Design

This study employed a quantitative research design to examine the relationships among consent fatigue, privacy concerns, and consumer resistance in the context of personalized advertising. A cross-sectional survey approach was adopted to capture consumers' perceptions and behavioral responses

within digital marketing environments. This design was considered appropriate for testing hypothesized relationships and assessing causal pathways using statistical modeling techniques.

Population and Sample

The target population consisted of digital consumers who had prior exposure to personalized advertising across social media platforms, e-commerce websites, and mobile applications. A purposive sampling technique was used to ensure that respondents had relevant experience with consent mechanisms and data-driven advertising practices.

A total of 320 valid responses were collected. The sample size met the minimum requirements for structural equation modeling, ensuring statistical power and model stability (Hair et al., 2022). Respondents represented diverse demographic backgrounds, including age, gender, and frequency of digital platform usage.

Data Collection Procedure

Primary data were collected through a structured online questionnaire distributed via digital platforms. The instrument consisted of previously validated measurement scales adapted from prior studies. Consent fatigue was measured based on repeated exposure to consent requests (Martin & Murphy, 2023), privacy concerns were assessed using perceived data risk indicators (Xu et al., 2023), and consumer resistance was captured through behavioral intention measures such as advertisement avoidance and skepticism (Bleier et al., 2023).

All items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A pilot test involving 30 respondents was conducted to ensure clarity, reliability, and content validity.

Data Analysis Techniques

The data were analyzed using Structural Equation Modeling (SEM) with a variance-based approach. The analysis was conducted in two stages: (1) measurement model evaluation and (2) structural model assessment.

The measurement model was assessed using indicator reliability, internal consistency reliability, convergent validity, and discriminant validity, following established guidelines (Hair et al., 2022). The structural model was evaluated using path coefficients, coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2).

To test mediation effects, a bootstrapping procedure with 5,000 resamples was applied, allowing for robust estimation of indirect effects (Preacher & Hayes, 2008). This approach enabled the study to examine the mediating role of privacy concerns in the relationship between consent fatigue and consumer resistance.

Ethical Considerations

All respondents participated voluntarily and were informed about the purpose of the study. Data confidentiality and anonymity were strictly maintained, and no personally identifiable information was collected.

RESULTS AND DISCUSSION

Results

The empirical analysis was conducted using Structural Equation Modeling (SEM) to examine the hypothesized relationships among consent fatigue, privacy concerns, and consumer resistance in personalized advertising contexts. The measurement model demonstrated satisfactory psychometric properties. All indicator loadings exceeded the recommended threshold of 0.70, indicating strong

indicator reliability. Composite reliability values ranged from 0.88 to 0.93, confirming internal consistency, while the average variance extracted values were above 0.50, supporting convergent validity. Discriminant validity was also established using the heterotrait–monotrait ratio, with all values below the threshold of 0.85.

Table 1. Measurement Model Evaluation Results

Construct	Composite Reliability	Average Variance Extracted	HTMT Ratio
Consent Fatigue	0.91	0.64	< 0.85
Privacy Concerns	0.93	0.68	< 0.85
Consumer Resistance	0.88	0.60	< 0.85

The structural model evaluation revealed that the model had substantial explanatory power. The coefficient of determination (R^2) for privacy concerns was 0.56, indicating that 56% of the variance in privacy concerns was explained by consent fatigue. Similarly, the R^2 value for consumer resistance was 0.62, suggesting a strong explanatory capacity of the model.

Table 2. Structural Model Results

Hypothesis	Path Relationship	Path Coefficient (β)	t-value	p-value	Result
H1	Consent Fatigue \rightarrow Privacy Concerns	0.75	14.21	<0.001	Supported
H2	Privacy Concerns \rightarrow Consumer Resistance	0.68	12.47	<0.001	Supported
H3	Consent Fatigue \rightarrow Consumer Resistance	0.29	4.85	<0.001	Supported

The mediation analysis using bootstrapping (5,000 resamples) indicated that privacy concerns significantly mediated the relationship between consent fatigue and consumer resistance ($\beta = 0.51$, $p < 0.001$). This finding confirmed that the indirect effect was stronger than the direct effect, highlighting the critical role of privacy concerns as an intervening variable.

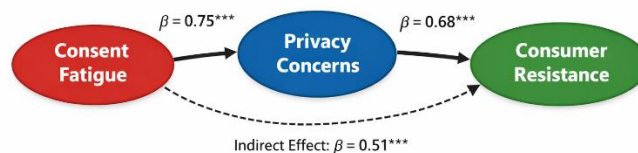


Figure 1. Structural Model of Consent Fatigue, Privacy Concerns, and Consumer Resistance

The structural model illustrated that consent fatigue had a strong positive influence on privacy concerns, which in turn significantly increased consumer resistance behaviors. The direct path from consent fatigue to consumer resistance remained significant but weaker, indicating partial mediation.

Discussion

The findings of this study provide robust empirical evidence supporting the hypothesized relationships and offer important insights into the dark side of data-driven marketing. The significant

effect of consent fatigue on privacy concerns suggests that excessive exposure to consent requests does not merely lead to habituation but instead amplifies consumers' awareness of data-related risks. This result aligns with recent research emphasizing cognitive overload and reduced decision quality in high-frequency digital consent environments, thereby extending the application of privacy calculus theory in contemporary marketing contexts.

Furthermore, the strong relationship between privacy concerns and consumer resistance confirms that perceived data risks translate into tangible behavioral outcomes, such as advertisement avoidance and skepticism toward personalized marketing. This finding is consistent with prior studies that highlight the negative consequences of perceived intrusiveness in digital advertising. However, the present study advances the literature by empirically demonstrating that privacy concerns act as a central psychological mechanism linking consent fatigue to resistance behavior.

The partial mediation effect indicates that while consent fatigue directly influences resistance, a substantial portion of its impact operates through heightened privacy concerns. This suggests that consumers do not simply react to the frequency of consent requests but interpret such experiences as signals of potential privacy threats. From a theoretical perspective, this finding supports psychological reactance theory, where repeated exposure to perceived control restrictions triggers resistance responses. At the same time, it challenges earlier assumptions that consumers passively accept personalization in exchange for convenience, revealing a more complex and dynamic evaluative process.

The results are particularly important in the context of evolving digital ecosystems, where firms increasingly rely on automated consent mechanisms. While previous research has primarily emphasized the benefits of personalization, the present findings highlight the unintended consequences of over-personalization and excessive data collection practices. This indicates a growing paradox in digital marketing: strategies designed to enhance engagement may ultimately erode trust and reduce effectiveness.

Alternative explanations for the findings may include variations in digital literacy and prior experiences with data breaches, which could intensify privacy concerns independently of consent fatigue. Additionally, cultural factors may influence how consumers perceive and respond to data practices, suggesting that the observed relationships may vary across different contexts. These considerations indicate that the phenomenon is multifaceted and warrants further investigation.

From a practical standpoint, the study implies that organizations must reconsider their approach to consent design and data transparency. Simplifying consent processes, enhancing clarity, and reducing unnecessary data requests may mitigate cognitive overload and improve consumer trust. Ethical data practices should not only comply with regulatory requirements but also prioritize user experience and perceived fairness.

Despite its contributions, this study has several limitations. The cross-sectional design restricts the ability to infer causal relationships over time, and the reliance on self-reported data may introduce response bias. Future research is encouraged to adopt longitudinal designs and experimental approaches to better capture dynamic changes in consumer perceptions. Additionally, expanding the study to different cultural and regulatory contexts would enhance the generalizability of the findings.

In conclusion, this study demonstrates that consent fatigue plays a critical role in shaping privacy concerns and consumer resistance in personalized advertising. By integrating these constructs into a unified framework, the research contributes to a deeper understanding of the dark side of data-driven marketing and provides a foundation for developing more sustainable and consumer-centric digital strategies.

CONCLUSION

This study confirmed that the increasing reliance on data-driven marketing practices, particularly through personalized advertising, has generated unintended negative consequences that challenge its long-term effectiveness. The findings demonstrated that consent fatigue significantly heightened consumers' privacy concerns, which in turn triggered consumer resistance behaviors such as advertisement avoidance and reduced trust. While personalization was originally designed to enhance relevance and engagement, the results revealed a paradox in which excessive consent requests and perceived data intrusiveness undermined consumer autonomy and weakened the overall effectiveness of marketing strategies. The study provided a critical synthesis by establishing privacy concerns as a key psychological mechanism through which consent fatigue translates into resistance. This indicates that consumers do not merely respond to the frequency of consent interactions but interpret such experiences as signals of potential risk and loss of control. Consequently, the effectiveness of personalized advertising is contingent not only on technological sophistication but also on the ethical and experiential quality of data practices. The importance of this research lies in its contribution to reframing data-driven marketing from a purely performance-oriented perspective to a more balanced, consumer-centric approach. It emphasized that sustainable digital marketing strategies must move beyond excessive data extraction toward transparent, minimal, and user-friendly consent mechanisms that respect consumer autonomy. By doing so, organizations can mitigate resistance, rebuild trust, and maintain meaningful engagement in increasingly complex digital environments..

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