

The Influence of Generative AI in Marketing Communication on Consumer Brand Engagement: The Role of Perceived Risk, Brand Credibility, Trust, and AI Literacy

Introduction

Generative artificial intelligence (Gen-AI) has garnered increasing attention in marketing communication because it advances personalisation, minimises costs, and streamlines content creation (Crawford et al., 2023; Kshetri, 2024). Through enabling automated decisions and recommendations, Gen-AI can support content creation, consumer segmentation, and data analysis (DMI, 2024). Yet concerns arise regarding authenticity, reliability, and regulatory compliance, particularly in light of the EU AI Act, which requires explicit labelling of AI-generated content (European Commission, 2024). Studies indicate that mistrust of AI persists among consumers, partly because they perceive AI-generated content as less credible than human-generated output (Hancock et al., 2020; Novozhilova et al., 2024). This inquiry examines how these perceptions shape consumer willingness to engage with brands.

Research Objectives

This investigation aims to assess how perceived risk and brand credibility shape consumer brand engagement in the presence of Gen-AI-driven marketing. It also seeks to determine the moderating role of trust in AI and AI literacy on these relationships. Examining these factors, the research aims to clarify how consumer scepticism may be mitigated and how Gen-AI can be integrated judiciously. The interplay among these constructs will offer insight into strategies that maintain brand authenticity and encourage stronger connections with AI-enabled approaches.

Literature Review

Numerous investigations show that Gen-AI, while beneficial for efficiency, can generate mistrust among consumers (Luo et al., 2019; Liu et al., 2024). The reliance on broad internet datasets may compromise perceived authenticity, and disclosures about AI involvement frequently reduce purchase intentions (Spais et al., 2023; Yang et al., 2022). Some consumers experience reduced autonomy when AI systems make recommendations without human oversight (Prakash et al., 2023). Signalling theory suggests that unambiguous communication helps lessen uncertainty, thereby promoting trust (Erdem & Swait, 1998). However, adoption of Gen-AI may raise questions regarding source reliability and content legitimacy, thereby undermining brand credibility. Furthermore, Source Credibility Theory indicates that perceived expertise and trustworthiness drive consumer evaluations (Hovland & Weiss, 1951). The presence of advanced AI literacy alleviates concerns about AI usage, as well-informed users are more likely to comprehend Gen-AI's practical advantages (McKnight et al., 2002). Enhanced familiarity with AI can limit perceived risk and support brand engagement by improving trust in AI (Novozhilova et al., 2024).

Methodology

A between-subjects experimental approach was undertaken, featuring a fictitious fashion brand named EverThread. Participants were randomly placed into one of three conditions: (1) absence of Gen-AI use, (2) moderate Gen-AI with human input, or (3) substantial Gen-AI with minimal human involvement. Visual marketing exemplars accompanied each scenario. Respondents then rated brand credibility (Erdem & Swait, 1998), perceived risk (Erdem & Swait, 1998), and willingness to engage (Leckie et al., 2016). They also provided data on trust in AI (McKnight et al., 2002) and AI literacy via an objective knowledge measure. Structural equation modelling

and ANCOVA will be employed to investigate the proposed relationships. Initial results indicate that heightened Gen-AI reliance may diminish engagement through increased perceived risk and reduced credibility. Trust in AI and AI literacy appear to influence these relationships, suggesting a more measured Gen-AI deployment is advantageous for brands.

References

- Crawford, J., Cowling, M., & Allen, K. A. (2023). Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI). *Journal of University Teaching and Learning Practice*, 20(3). <https://doi.org/10.53761/1.20.3.02>
- DMI (2024). AI in Digital Marketing - The Ultimate Guide | Digital Marketing (Blog). Accessed: 05/01/2025 <https://digitalmarketinginstitute.com/blog/ai-in-digital-marketing-the-ultimate-guide>
- Erdem, T., & Swait, J. (1998). Brand Equity as a Signaling Phenomenon. *Journal of Consumer Psychology*, 7(2), 131–157. https://doi.org/10.1207/s15327663jcp0702_02
- European Commission. (2024). AI Act. Accessed: 05/01/2025 <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>
- Hancock, J. T., Naaman, M., & Levy, K. (2020). AI-Mediated Communication: Definition, Research Agenda, and Ethical Considerations. *Journal of Computer-Mediated Communication*, 25(1), 89–100. <https://doi.org/10.1093/jcmc/zmz022>
- Hovland, C. I., & Weiss, W. (1951). The Influence of Source Credibility on Communication Effectiveness. *Public Opinion Quarterly*, 15(4), 635. <https://doi.org/10.1086/266350>
- Kshetri, N. (2024). Generative AI in Advertising. *IT Professional*, 26(5), 15–19. <https://doi.org/10.1109/MITP.2024.3457328>
- Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, 32(5–6), 558–578. <https://doi.org/10.1080/0267257X.2015.1131735>
- Liu, B., Kang, J., & Wei, L. (2024). Artificial intelligence and perceived effort in relationship maintenance: Effects on relationship satisfaction and uncertainty. *Journal of Social and Personal Relationships*, 41(5), 1232–1252. <https://doi.org/10.1177/02654075231189899>
- Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Machines versus Humans: The Impact of AI Chatbot Disclosure on Customer Purchases. <https://www.ntu.edu.sg/Electroniccopyavailableat:https://ssrn.com/abstract=3435635>
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334–359. <https://doi.org/10.1287/isre.13.3.334.81>
- Novozhilova, E., Mays, K., Paik, S., & Katz, J. E. (2024). More Capable, Less Benevolent: Trust Perceptions of AI Systems across Societal Contexts. *Machine Learning and Knowledge Extraction*, 6(1), 342–366. <https://doi.org/10.3390/make6010017>
- Prakash, A. V., Joshi, A., Nim, S., & Das, S. (2023). Determinants and consequences of trust in AI-based customer service chatbots. *Service Industries Journal*, 43(9–10), 642–675. <https://doi.org/10.1080/02642069.2023.2166493>

Spais, G., Phau, I., & Jain, V. (2024). AI marketing and AI-based promotions impact on consumer behavior and the avoidance of consumer autonomy threat. In *Journal of Consumer Behaviour* (Vol. 23, Issue 3, pp. 1053–1056). John Wiley and Sons Ltd. <https://doi.org/10.1002/cb.2248>

Yang, Y., Liu, Y., Lv, X., Ai, J., & Li, Y. (2022). Anthropomorphism and customers' willingness to use artificial intelligence service agents. *Journal of Hospitality Marketing and Management*, 31(1), 1–23. <https://doi.org/10.1080/19368623.2021.1926037>