

Keynote Abstract - 1

AI in Action: Shaping Consumer Decisions in Global Commerce

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Abstract

Artificial Intelligence (AI) is fundamentally transforming global commerce by reshaping how organizations understand, influence, and predict consumer decision-making. Global investment in AI-driven systems continues to rise as firms embed machine learning, generative AI, predictive analytics, and intelligent automation into marketing, retail, finance, and service ecosystems (Brynjolfsson & McAfee, 2017; Davenport, Guha, Grewal, & Bressgott, 2020). AI-driven transformation is no longer experimental; it is operational, strategic, and central to competitive advantage.

While algorithmic systems enhance efficiency and personalization, the more profound transformation lies in how AI mediates consumer cognition, perception, and trust. AI now curates product recommendations, determines dynamic pricing, automates customer interactions through chatbots, predicts purchase intent, and optimizes cross-border digital campaigns (Huang & Rust, 2018; Verhoef et al., 2021). In global markets, these technologies reduce information asymmetry and enable hyper-personalization at scale. However, they also introduce new challenges related to algorithmic bias, transparency, consumer autonomy, and ethical governance (Martin, 2019; Zuboff, 2019).

This keynote explores the central research question:

- How does AI-driven transformation influence consumer decision-making processes across diverse global markets?

The first theme examines AI-enabled personalization and predictive decision models. Research demonstrates that AI-based recommendation systems significantly influence choice architecture, nudging consumers toward algorithmically optimized options (Davenport et al., 2020). Generative AI tools and conversational agents increasingly act as digital advisors, shaping pre-purchase evaluation and post-purchase engagement. Yet the effectiveness of these systems depends heavily on perceived fairness, accuracy, and trustworthiness.

The second theme focuses on consumer trust and algorithmic transparency. Studies indicate that perceived transparency and explainability of AI systems strengthen trust and adoption intentions (Grewal, Hulland, Kopalle, & Karahanna, 2020). However, trust formation varies across cultural and institutional contexts. In high-uncertainty or emerging economies, trust in AI systems may depend more strongly on institutional credibility and regulatory assurance.

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Therefore, global commerce strategies must consider contextual differences rather than assuming universal acceptance of AI-driven systems.

The third theme addresses ethical AI and sustainable commerce. As AI systems increasingly influence purchasing behavior, concerns about surveillance capitalism, data privacy, and algorithmic discrimination become central governance issues (Martin, 2019; Zuboff, 2019). Responsible AI frameworks that incorporate fairness, accountability, and transparency are essential for long-term sustainability in global commerce. Ethical AI is not merely a compliance requirement but a strategic differentiator that strengthens brand legitimacy and consumer loyalty.

The address concludes by arguing that AI-driven transformation in global commerce is not purely technological but socio-technical. AI shapes consumer decisions through data ecosystems, institutional trust structures, and cultural norms. Understanding these multidimensional influences is critical for businesses, policymakers, and researchers.

As AI continues to evolve, particularly with the rise of generative AI and autonomous decision systems, future research must examine cross-cultural differences in AI acceptance, the boundary between human and machine agency in commerce, and mechanisms for safeguarding consumer autonomy. AI in action is reshaping global commerce; the challenge is ensuring that this transformation remains ethical, inclusive, and consumer centered.

References

- Brynjolfsson, E., & McAfee, A. N. D. R. E. W. (2017). The business of artificial intelligence. *Harvard business review*, 7(1), 1-2.
- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the academy of marketing science*, 48(1), 24-42.
- Grewal, D., Hulland, J., Kopalle, P. K., & Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. *Journal of the Academy of Marketing Science*, 48(1), 1-8.
- Huang, M. H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of service research*, 21(2), 155-172.
- Martin, K. (2019). Ethical Implications and Accountability of Algorithms: K. Martin. *Journal of business ethics*, 160(4), 835-850.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of business research*, 122, 889-901.
- Zuboff, S. (2023). The age of surveillance capitalism. In *Social theory re-wired* (pp. 203-213). Routledge.