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# AI POWERED SOCIAL COMMERCE TECHNOLOGY AND CUSTOMER EXPERIENCE: A SYSTEMATIC LITERATURE REVIEW

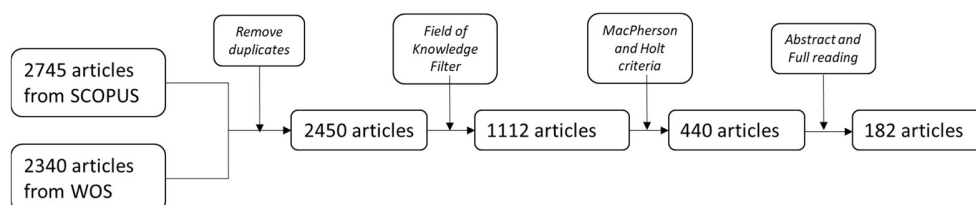
**Keywords:** *Artificial Intelligence, Customer Experience, Customer Journey, Social Commerce, Conversational Commerce, Loyalty, Impulse Buying, Augmented Reality, Virtual Reality.*

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## ABSTRACT

Over the last 3 decades, the digital revolution has drastically transformed customer/user experience. Negroponte (1995) described this transformation as a shift from atoms to bits. Schmitt (2019) supported that, in the context of marketing atoms are fast moving consumer goods and their brands, made in factories, advertised through mass media, and sold in stores; bits are information, entertainment and interactive products, often produced instantaneously, promoted through social media and sold online. Artificial Intelligence (AI) powered technologies such as social commerce, Internet of things (IoT), Augmented reality (AR), Virtual Reality (VR), Smart technology, or digital payments technologies have the potential to revolutionize customer or user experience. Artificial intelligence (AI) is reshaping business, economy, and society by transforming consumers experiences and relationships amongst stakeholders and citizens (Loureiro, Guerreiro and Tussyadiah, 2020).

This research makes an overview of the current state of art about AI powered social commerce technology and customer experience. This systematic review employs the research articles published in the most relevant journals since 1993. As observed in literature, a long trail of theories tries to explain the relationships between the main constructs of customer experience and AI and its impacts on customer journey, impulse buying and loyalty (Loureiro, Guerreiro, Eloy, Langaro, and Panchapakesan, 2019). The objective of this study is to contribute towards a better understanding of the impact of AI powered social technologies on customer experience by (i) gathering a collection of impactful contributions from literature, (ii) discussing emerging trends and constructs, (iii) synthesizing the main findings, antecedents, constructs, and gaps in literature.



**Figure 1. Process for Selecting final papers for analysis**

Database search for peer- reviewed articles in English language was done across all related fields of Business, Marketing, Psychology, Technology and Social Sciences on Scopus/Web of Science and this was not restricted to any publication period. A total of 2450 articles were selected after merging databases and removing duplicates. For quality assessments, we matched each paper with the Academic Journal Guide 2018 from the Chartered Association of Business Schools (ABS) ranking so that only papers featuring in ABS 4, ABS3 and ABS2 were considered, 182 papers resulted through abstract screening and full text reading. We adopted the following selection criteria from Literature (Loureiro et al., 2021): (i) article alignment with the research objectives; (ii) Optimal use and development of theory within current literature; (iii) reasonable theory-methods-data flow; (iv) significance of practical and theoretical contributions (see Table 1).

**Table 1: Some selected studies on applications of AI**

Study	Context/Method	Theory Base	Key findings
Huang and Rust (2018)	AI for Online retailing	TAM/Experiential Value	Presence predicts technology acceptance
Rese et.al (2014)	User acceptance of AI applications: online	TAM/UTAUT	TAM predicts acceptance of AI applications. Online reviews can be used to model Tam constructs.
Yaoyuneyong et.al (2016)	AI hypermedia print ads. Online and lab experiments.	Relationship and Experiential marketing	AI prints add are rated positively in terms of preference, informativeness and Novelty over traditional print ads.
Hopp and Gangadharbatla (2016)	AI advertising in automobile industry. Effects, Self-Efficacy beliefs	Novelty effects.	Novelty is negatively related to attitude towards AI
Dacko (2016)	Mobile AR applications for smart retail	Experiential value	AI is expected to lead to positive behavioral intentions in retailing: purchase intention & loyalty
Beck & Crie (2016)	AI virtual rooms for online and offline retail	Intrinsic and Extrinsic motivation	AI use increases offline and online purchase intentions
Poushneh & Vasquez- Parr- Aga (2017)	Impact of AI on retail customer experience	User Experience	AI positively influences the user experience.
Hoyer et.al (2020)	Impact of AI on customer experience and customer journey	Experiential value/User Experience	AI positively influences customer experience

In terms of theoretical foundations, the Technology Acceptance Model (TAM), Novelty theory (CLT), Intrinsic and Extrinsic Motivations, and Use of Technology theory (UTAUT) were widely used mainly via quantitative and qualitative methods. A trail of studies in literature examined the relevance of artificial intelligence to customer experience, customer journey evolution and customer dynamics. For instance, the effects of AI powered technologies such as chatbots on customer online shopping journey (Hoyer et. al 2020) was well documented (see Table 1). Also, other technologies such as AR, VR and IoT have impact on how consumers search for products, evaluate alternatives, and make choices (Libai et al., 2020; Hollebeek, Glynn, & Brodie, 2014; Pucinelli et al., 2009) and on how customers interact with brands (Loureiro, Guerreiro &

Tussyadiah, 2020). Two main types of concepts or typologies were identified as drivers of AI powered new technologies, in terms of customer journey and experience dimensions: Behavioural and Cognitive (based on two task areas: Repetitive and Non-Repetitive) (Hoyer et.al 2020). Various experience dimensions were also discussed in literature (Brakus, Schmitt & Zarantonello, 2009) established that brand experience can evoke different experience dimensions arising from brand related stimuli. Schmitt (1999) came up with five distinguished experiential modules called sense, feel, think, act and relate. The impact of AI powered technologies was conceptualized in literature as influencing the Customer/Shopper Journey as a transaction cycle (Lemon & Verhoef, 2016) three stages: Pre-transaction, Transaction and Post-Transaction and the accompanying AI Powered technologies (see Table 1).

With this research we aim to serve as a resource for both academic researchers and managers seeking to further understand the impact of AI powered technologies on customer experience and customer journeys. Technology plays a significant role in deepening every aspect of human existence, including the ways that brands market products and services to consumers. With more innovations, greater computing capacity, mobile devices and applications, and social media, more radical innovations are emerging that will shape current and future relationships with consumers and their brands.

### **References (additional references upon request)**

- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty?. *Journal of marketing*, 73(3), 52-68.
- Dacko, S. G. (2016). Enabling smart retail settings via mobile augmented reality shopping apps. *Technological Forecasting and Social Change*. Available online 14 October 2016, In press. doi:10.1016/j.techfore.2016.09.032.
- Hollebeek, L. D., Conduit, J., & Brodie, R. J. (2016). Strategic drivers, anticipated and unanticipated outcomes of customer engagement.
- Hopp, T., & Gangadharbatla, H. (2016). Novelty effects in augmented reality advertising environments: The influence of exposure time and self-efficacy. *Journal of Current Issues & Research in Advertising*, 37(2), 113-130.
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of Interactive Marketing*, 51, 57-71.
- Huang, M. H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research*, 21(2), 155-172.
- Libai, B., Bart, Y., Gensler, S., Hofacker, C. F., Kaplan, A., Kötterheinrich, K., & Kroll, E. B. (2020). Brave new world? On AI and the management of customer relationships. *Journal of Interactive Marketing*, 51, 44-56.
- Loureiro, S. M. C., Guerreiro, J., & Tussyadiah, I. (2020). Artificial intelligence in business: State of the art and future research agenda. *Journal of business research*.
- Loureiro, S. M. C., Guerreiro, J., Eloy, S., Langaro, D., & Panchapakesan, P. (2019). Understanding the use of Virtual Reality in Marketing: A text mining-based review. *Journal of Business Research*, 100, 514-530.
- Negroponte, N. (1995). The digital revolution: Reasons for optimism. *The Futurist*, 29(6), 68.
- Poushneh, A., & Vasquez-Parraga, A. Z. (2017). Discernible impact of augmented reality on retail customer's experience, satisfaction and willingness to buy. *Journal of Retailing and Consumer Services*, 34, 229-234.
- Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghubir, P., & Stewart, D. (2009). Customer experience management in retailing: understanding the buying process. *Journal of retailing*, 85(1), 15-30.
- Rese, A., Schreiber, S., & Baier, D. (2014). Technology acceptance modeling of augmented reality at the point of sale: Can surveys be replaced by an analysis of online reviews?. *Journal of Retailing and Consumer Services*, 21(5), 869-876.
- Schmitt, B. (1999). Experiential marketing. *Journal of marketing management*, 15(1-3), 53-67.