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EDITORIAL

Hybrid intelligence: human–AI collaboration in marketing analytics

Maria Petrescu[1] · **Anjala S. Krishen**[2]

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Hybrid intelligence, also known as human–AI (artificial intelligence) collaboration, is a concept that combines the strengths of both human intelligence and artificial intelligence to achieve better outcomes than either could achieve alone (Andonians 2023; Chowdhury 2022; Huang and Rust 2022). In marketing, hybrid intelligence can bring numerous benefits and is even more essential in the context of modern advancements in generative AI (Davenport and Mittal 2022). One way hybrid intelligence can benefit marketing is by enhancing customer experience and personalization. AI can analyze customer data, preferences, and behavior to provide insights, while human judgment can be used to create relevant and engaging content, offers, and interactions (Verhoef et al. 2015). This combination allows for a more personalized and tailored approach to marketing.

Another benefit of hybrid intelligence in marketing is the improvement of campaign management and analytics (Andonians 2023). AI can automate tasks, optimize decisions, and provide insights, while human expertise is crucial in designing strategies, interpreting results, and taking action. This collaboration allows for more efficient and effective campaign management (Davenport 2018; Huang and Rust 2022). Hybrid intelligence also plays a role in addressing data privacy and ethical issues in marketing and advancing the marketing analytics field (SAS 2020). AI can be used to comply with regulations, protect customer data, and detect fraud, while human values should ensure transparency, accountability, and trust. This combination ensures that marketing practices aim to be ethical and in line with privacy regulations.

✉ Anjala S. Krishen
anjala.krishen@unlv.edu

Maria Petrescu
petrescm@erau.edu

[1] Department of Business Administration, Embry-Riddle Aeronautical University, Daytona Beach, USA

[2] Mel Larson Endowed Chair of Marketing, Lee Business School, University of Nevada, Las Vegas, Las Vegas, USA

The collaboration between human intelligence and AI brings significant advantages to the marketing domain. By combining human intuition and creativity with AI's computational capabilities, marketing strategies can be driven, campaign performances can be improved, and customer experiences can be personalized (Davenport 2018; Huang and Rust 2018). Hybrid intelligence is a powerful concept that can revolutionize the field of marketing, making it essential to explore its benefits and challenges for marketing strategy and analytics.

Bibliometric analysis

For this purpose, we performed a bibliometric analysis to evaluate the current state of knowledge regarding hybrid intelligence in marketing. We incorporated in the analysis marketing-related studies discovered through Web of Science by searching for the following keywords: hybrid intelligence, human–machine, human–robot, robot–human, retail, advertising, marketing, consumer, customer, and sales. After eliminating unrelated topics, the final dataset included 134 studies from ABDC, ABS, and Scimago ranked journals ("Appendix"). The results of the bibliometric analysis in VOSViewer are presented in Fig. 1.

As reflected in Fig. 1, cluster 1 focuses on AI acceptance, interaction, and responses. Terms such as "acceptance," "chatbot," "consumers," and "human–machine interaction" dominate the studies examined. This cluster is especially dominant in the literature and reflects the significant focus on robots, human–robot interaction, and specific areas of marketing research, especially services. Cluster 2 appears to revolve around behavior, emotions, and the broader service sector, including "hospitality" and "tourism." The inclusion of "big data" and "machine learning" suggests an emphasis on data-driven approaches in these sectors. Cluster 3 is about technology adoption and its implications. This is evident from terms like "adoption," "attitudes," "information technology,"

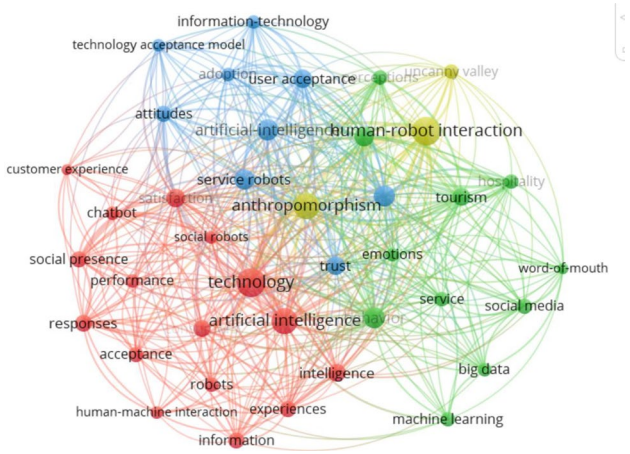

Fig. 1 Key research themes regarding hybrid intelligence

"technology acceptance model," and "user acceptance." Cluster 4 includes terms that focus on anthropomorphic aspects of technology, such as "anthropomorphism" and "human–robot interaction," highlighting studies about human-like AI and robots.

The quantitative results of the analysis in Table 1 include term weights (total link strength represents how strongly a term is associated with other terms) and keyword co-occurrences (the frequency of the term). High occurrence and link strength for terms like "artificial intelligence," "technology," and "anthropomorphism" showcase their central role in the discourse. Also, terms such as "machine learning" and "robots" have very high average citations, suggesting that research discussing these topics are both seminal and influential. With significant concepts such as "customer experience," "experience," "service robot," and "social presence," it is evident that there is a considerable focus on understanding the user or customer's experience and feelings when interacting with AI-driven systems or robots.

Future research

Considering these findings, the convergence of human cognition and AI capabilities in the field of marketing presents a promising area for both academic and practitioner research. This fusion of human–AI collaboration in marketing encompasses various aspects that warrant investigation, offering insights into optimal strategies, obstacles, and prospects for the industry. We therefore propose the following research topics as a starting point for future research in the realm of hybrid intelligence in marketing:

- The evolution of marketing roles with AI integration: How are job profiles, responsibilities, and requisite skills of marketing professionals evolving due to AI augmentation?
- Ethical considerations in hybrid intelligence: What are the ethical implications of using AI in marketing, particularly in data collection, personalization, and targeting? How does the human role intersect with these ethical considerations?
- Human–AI collaboration in marketing decision-making: How effective is collaborative decision-making between AI and humans versus purely human or AI-driven decisions?
- Consumer perceptions of AI-driven marketing: How do consumers perceive and react to marketing initiatives that AI visibly drives? Is there a difference in trust or engagement when they are aware of AI involvement?
- Hybrid intelligence in creativity and content generation: How does human creativity and innovation balance with AI-driven content? In what ways can this combination maximize engagement and relevance?
- Emotion recognition and hybrid intelligence: How do AI's emotion recognition capabilities and human intuition enhance marketing strategies?
- AI's role in global marketing strategies: How can hybrid intelligence aid businesses in tailoring their marketing strategies for different cultures and regions?
- Hybrid intelligence in crisis management: How can AI provide real-time assistance to predict, monitor, and manage public relations crises, and how humans can leverage these data to develop strategic and timely responses?
- Optimizing consumer journeys with hybrid intelligence: What is the role of AI in mapping and predicting customer journeys and how can human insights augment these pathways?
- Hybrid intelligence in predictive analytics versus actual outcomes: How accurate are AI-driven predictive models in marketing when combined with human intuition? How often do these predictions align with actual outcomes?
- The role of hybrid intelligence in building brand loyalty: How can AI-driven insights, when combined with human-driven brand strategies, influence brand loyalty and customer lifetime value?
- Training needs for marketers in a hybrid intelligence environment: What skills and training are required for modern marketers to effectively collaborate with AI tools?

Table 1 Bibliometric results

Cluster	Label	Total link strength	Occurrences	Avg. citations
1	Acceptance	34	9	50
1	Artificial intelligence	86	26	68
1	Chatbot	28	7	18
1	Consumers	38	11	20
1	Customer experience	18	5	17
1	Experiences	44	10	44
1	Human–machine interaction	19	6	13
1	Information	29	10	53
1	Intelligence	33	12	29
1	Performance	16	7	29
1	Responses	40	11	26
1	Robots	29	8	123
1	Satisfaction	54	13	21
1	Social presence	44	10	8
1	Social robots	28	6	46
1	Technology	114	31	60
2	Behavior	75	17	47
2	Big data	29	7	23
2	Emotions	31	7	66
2	Experience	73	14	37
2	Hospitality	50	8	40
2	Machine learning	20	8	112
2	Perceptions	39	8	64
2	Service	34	8	41
2	Social media	32	9	36
2	Tourism	66	12	57
2	Word-of-mouth	27	5	55
3	Adoption	35	7	56
3	Artificial intelligence	56	17	26
3	Attitudes	44	10	10
3	Information-technology	31	7	14
3	Service robot	74	17	22
3	Service robots	61	15	43
3	Technology acceptance model	30	6	80
3	Trust	50	13	30
3	User acceptance	54	13	23
4	Anthropomorphism	103	25	60
4	Human–robot interaction	102	31	40
4	Uncanny valley	32	8	53

- The impact of hybrid intelligence on return on marketing investment: How does the synergy between humans and AI impact marketing return on investment (ROI) across various industries and campaigns.
- Challenges in integrating AI in traditional marketing firms: What types of problems do traditional marketing agencies face when integrating AI?

Given this list of potential topics, *Journal of Marketing Analytics* welcomes cutting-edge, interdisciplinary, and data-driven research on hybrid intelligence.

Appendix

Author	Title	Journal	Year
Lehner, OM; Ittonen, K; Silvola, H; Strom, E; Wuhrleitner, A	Artificial intelligence based decision-making in accounting and auditing: ethical challenges and normative thinking	Account. Audit Account.	2022
Tsvetkova, M; Yasseri, T; Meyer, ET; Pickering, JB; Engen, V; Walland, P; Luders, M; Folstad, A; Bravos, G	Understanding Human–Machine Networks: A Cross-Disciplinary Survey	ACM Comput. Surv.	2017
Frey, S	Mixed human/entity games and the anomalous effects of misattributing strategic agency	Adapt. Behav.	2014
Wu, Y; Ma, LS; Yuan, XF; Li, QN	Human–machine hybrid intelligence for the generation of car frontal forms	Adv. Eng. Inform.	2023
El Hafi, L; Isobe, S; Tabuchi, Y; Katsumata, Y; Nakamura, H; Fukui, T; Matsuo, T; Ricardez, GAG; Yannanno to, M; Taniguchi, A; Hagiwara, Y; Taniguchi, T	System for augmented human–robot interaction through mixed reality and robot training by non-experts in customer service environments	Adv. Robot.	2020
Venkatesh, A; Karababa, E; Ger, G	The emergence of the posthuman consumer and the fusion of the virtual and the real: A critical analysis of Sony's ad for memory Stick (TM)		2002
Mirabi, M	A novel hybrid genetic algorithm for the multi-depot periodic vehicle routing problem	AI EDAM-Artif. Intell. Eng. Des. Anal. Manuf	2015
Chien, CF; Kuo, CJ; Yu, CM	Tool allocation to smooth work-in-process for cycle time reduction and an empirical study	Ann. Oper. Res.	2020
Chinthapalli, UR; Bommisetti, RK; Kondamudi, BR; Bagale, G; Satyanarayana, R	Isolated stakeholders' behavior towards fintech assisted by artificial intelligence technology	Ann. Oper. Res.	2021
Pande, S; Gupta, KP	Indian customers' acceptance of service robots in restaurant services	Behav. Inf. Technol.	2022
Bertacchini, F; Bilotta, E; Pantano, P	Shopping with a robotic companion	Comput. Hum. Behav.	2017
Delgosha, MS; Hajiheydari, N	How human users engage with consumer robots? A dual model of psychological ownership and trust to explain post-adoption behaviours	Comput. Hum. Behav.	2021
Leo, X; Huh, YE	Who gets the blame for service failures? Attribution of responsibility toward robot versus human service providers and service firms	Comput. Hum. Behav.	2020
Liu, BJ; Wei, LW	Machine gaze in online behavioral targeting: The effects of algorithmic human likeness on social presence and social influence	Comput. Hum. Behav.	2021
Lu, L; McDonald, C; Kelleher, T; Lee, S; Chung, YJ; Mueller, S; Vielledent, M; Yue, CA	Measuring consumer-perceived humanness of online organizational agents	Comput. Hum. Behav.	2022
Mara, M; Appel, M	Effects of lateral head tilt on user perceptions of humanoid and android robots	Comput. Hum. Behav.	2015

Author	Title	Journal	Year
Maya, BM; Reichling, DB; Lunardini, F; Geminiani, A; Antonietti, A; Ruijten, PAM; Levitan, CA; Nave, G; Manfredi, D; Bessette-Symons, B; Szuts, A; Aczel, B	Uncanny but not confusing: Multisite study of perceptual category confusion in the Uncanny Valley	Comput. Hum. Behav.	2020
Reinares-Lara, E; Olarte-Pascual, C; Pelegrin-Borondo, J	Do you want to be a cyborg? The moderating effect of ethics on neural implant acceptance	Comput. Hum. Behav.	2018
Yam, KC; Bigman, Y; Gray, K	Reducing the uncanny valley by dehumanizing humanoid robots	Comput. Hum. Behav.	2021
Bell, G	Making life: a brief history of human–robot interaction	Consump. Mark. Cult.	2018
Fang, SJ; Han, XY; Chen, SP	The Impact of Tourist–Robot Interaction on Tourist Engagement in the Hospitality Industry: A Mixed-Method Study	Cornell Hosp. Q.	2023
Tsaih, R; Hsu, YS; Lai, CC	Forecasting S & P 500 stock index futures with a hybrid AI system	Decis. Support Syst.	1998
Dinh, CM; Park, S	How to increase consumer intention to use Chatbots? An empirical analysis of hedonic and utilitarian motivations on social presence and the moderating effects of fear across generations	Electron. Commer. Res.	2023
Dong, L; Zheng, HC; Li, LT; Hao, LN	Human–machine hybrid prediction market: A promising sales forecasting solution for E-commerce enterprises	Electron. Commer. Res. Appl.	2022
Zhang, J; Lu, XC; Liu, DA	Deriving customer preferences for hotels based on aspect-level sentiment analysis of online reviews	Electron. Commer. Res. Appl.	2021
Graef, R; Klier, M; Kluge, K; Zolitschka, JF	Human–machine collaboration in online customer service—a long-term feedback-based approach	Electron. Mark.	2021
Li, L; Lee, KY; Emokpae, E; Yang, SB	What makes you continuously use chatbot services? Evidence from Chinese online travel agencies	Electron. Mark.	2021
Meyer, N; Schwede, M; Hammerschmidt, M; Weiger, WH	Users taking the blame? How service failure, recovery, and robot design affect user attributions and retention	Electron. Mark.	2022
Zhang, SL; Lin, XF; Li, XD; Ren, A	Service robots' anthropomorphism: dimensions, factors and internal relationships	Electron. Mark.	2022
Normann, HT; Sternberg, M	Human-algorithm interaction: Algorithmic pricing in hybrid laboratory markets	Eur. Econ. Rev.	2023
Vassilakopoulou, P; Haug, A; Salvesen, LM; Pappas, IO	Developing human/AI interactions for chat-based customer services: lessons learned from the Norwegian government	Eur. J. Inform. Syst.	2023
Yoruk, T; Akar, N; Ozmen, NV	Research trends on guest experience with service robots in the hospitality industry: a bibliometric analysis	Eur. J. Innov. Manag.	2023
Grazzini, L; Viglia, G; Nunan, D	Dashed expectations in service experiences. Effects of robots human-likeness on customers' responses	Eur. J. Market.	2023

Author	Title	Journal	Year
Paschen, J; Wilson, M; Robson, K	#BuyNothingDay: investigating consumer restraint using hybrid content analysis of Twitter data	Eur. J. Market.	2020
Chen, ZY; Fan, ZP; Sun, MH	Behavior-aware user response modeling in social media: Learning from diverse heterogeneous data	Eur. J. Oper. Res.	2015
Kumar, N; Krovi, R; Rajagopalan, B	Financial decision support with hybrid genetic and neural based modeling tools	Eur. J. Oper. Res.	1997
Ren, JT; Hao, JK; Wu, F; Fu, ZH	An effective hybrid search algorithm for the multiple traveling repairman problem with profits	Eur. J. Oper. Res.	2023
Kumar, H; Martin, A	Artificial Emotional Intelligence: Conventional and deep learning approach	Expert Syst. Appl.	2023
Chang, C; Shao, BJ; Li, Y; Zhang, Y	Factors influencing consumers' willingness to accept service robots: Based on online reviews of Chinese hotels	Front. Psychol.	2022
Li, MJ; Peng, HM	How Cues of Being Watched Promote Risk Seeking in Fund Investment in Older Adults	Front. Psychol.	2022
Li, YJ	Investigating the differences between females perceive same-gender and heterogender sex robots regarding adoption and intentions	Front. Psychol.	2022
Loth, S; Jettka, K; Giuliani, M; de Ruiter, JP	Ghost-in-the-Machine reveals human social signals for human–robot interaction	Front. Psychol.	2015
Mara, M; Stein, JP; Latoschik, ME; Lugrin, B; Schreiner, C; Hostettler, R; Appel, M	User Responses to a Humanoid Robot Observed in Real Life, Virtual Reality, 3D and 2D	Front. Psychol.	2021
Wang, T; Sun, YQ; Liao, SW	Physical Self Matters: How the Dual Nature of Body Image Influences Smart Watch Purchase Intention	Front. Psychol.	2022
Zhang, Y; Tsang, IW; Duan, LX	Collaborative Generative Hashing for Marketing and Fast Cold-Start Recommendation	IEEE Intell. Syst.	2020
Jia, JW; Chung, N; Hwang, J	Assessing the hotel service robot interaction on tourists' behaviour: the role of anthropomorphism	Ind. Manage. Data Syst.	2021
Kumar, A; Adlakha, A; Mukherjee, K	Modeling of product sales promotion and price discounting strategy using fuzzy logic in a retail organization	Ind. Manage. Data Syst.	2016
Yang, X	The effects of AI service quality and AI function-customer ability fit on customer's overall co-creation experience	Ind. Manage. Data Syst.	2023
Chou, SY; Lin, CW; Chen, YC; Chiou, JS	The complementary effects of bank intangible value binding in customer robo-advisory adoption	Int. J. Bank Mark.	2023
Blaurock, M; Caic, M; Okan, M; Henkel, AP	A transdisciplinary review and framework of consumer interactions with embodied social robots: Design, delegate, and deploy	Int. J. Consum. Stud.	2022

Author	Title	Journal	Year
Modlinski, A; Fortuna, P; Roznowski, B	Human–machine trans roles conflict in the organization: How sensitive are customers to intelligent robots replacing the human workforce?	Int. J. Consum. Stud.	2023
Choi, M; Choi, Y; Kim, S; Badu-Baiden, F	Human vs robot baristas during the COVID-19 pandemic: effects of masks and vaccines on perceived safety and visit intention	Int. J. Contemp. Hosp. Manag.	2023
Jimenez-Barreto, J; Rubio, N; Molinillo, S	Find a flight for me, Oscar! Motivational customer experiences with chatbots	Int. J. Contemp. Hosp. Manag.	2021
Pillai, R; Sivathanu, B	Adoption of AI-based chatbots for hospitality and tourism	Int. J. Contemp. Hosp. Manag.	2020
Ruiz-Equihua, D; Romero, J; Loureiro, SMC; Ali, M	Human–robot interactions in the restaurant setting: the role of social cognition, psychological ownership and anthropomorphism	Int. J. Contemp. Hosp. Manag.	2023
Tung, VWS; Au, NM	Exploring customer experiences with robotics in hospitality	Int. J. Contemp. Hosp. Manag.	2018
Tung, VWS; Law, R	The potential for tourism and hospitality experience research in human–robot interactions	Int. J. Contemp. Hosp. Manag.	2017
Fan, H; Han, B; Gao, W; Li, WQ	How AI chatbots have reshaped the frontline interface in China: examining the role of sales-service ambidexterity and the personalization-privacy paradox	Int. J. Emerg. Mark.	2022
Le, TH; Arcodia, C; Novais, MA; Kralj, A	How consumers perceive authenticity in restaurants: A study of online reviews	Int. J. Hosp. Manag.	2022
Lu, L; Zhang, P; Zhang, TT	Leveraging "human-likeness" of robotic service at restaurants	Int. J. Hosp. Manag.	2021
Song, B; Zhang, M; Wu, PP	Driven by technology or sociality? Use intention of service robots in hospitality from the human–robot interaction perspective	Int. J. Hosp. Manag.	2022
Zhang, JM; Zhu, YM; Wu, JF; Yu-Buck, GF	A natural apology is sincere: Understanding chatbots? performance in symbolic recovery	Int. J. Hosp. Manag.	2023
Brinkley, J; Posadas, B; Sherman, I; Daily, SB; Gilbert, JE	An Open Road Evaluation of a Self-Driving Vehicle Human–Machine Interface Designed for Visually Impaired Users	Int. J. Hum.-Comput. Interact.	2019
Celozzi, C; Lamberti, F; Paravati, G; Sanna, A	Enabling Human–Machine Interaction in Projected Virtual Environments Through Camera Tracking of Imperceptible Markers	Int. J. Hum.-Comput. Interact.	2013
Favaro, FM; Eurich, SO; Rizvi, SS	Human Problems in Semi-Autonomous Vehicles: Understanding Drivers' Reactions to Off-Nominal Scenarios	Int. J. Hum.-Comput. Interact.	2019
Ross, T; Burnett, G	Evaluating the human–machine interface to vehicle navigation systems as an example of ubiquitous computing	Int. J. Hum.-Comput. Stud.	2001

Author	Title	Journal	Year
Park, E; Del Pobil, AP	AN ACCEPTANCE MODEL FOR SERVICE ROBOTS IN GLOBAL MARKETS	Int. J. Humanoid Robot.	2012
Chi, OH; Chi, CG; Gursoy, D; Nunkoo, R	Customers? acceptance of artificially intelligent service robots: The influence of trust and culture	Int. J. Inf. Manage.	2023
Nguyen, HD; Tran, KP; Thomassey, S; Hamad, M	Forecasting and Anomaly Detection approaches using LSTM and LSTM Autoencoder techniques with the applications in supply chain management	Int. J. Inf. Manage.	2021
Pitardi, V; Bartikowski, B; Osburg, VS; Yoganathan, V	Effects of gender congruity in human–robot service interactions: The moderating role of masculinity	Int. J. Inf. Manage.	2023
Sinha, N; Singh, P; Gupta, M; Singh, P	Robotics at workplace: An integrated Twitter analytics—SEM based approach for behavioral intention to accept	Int. J. Inf. Manage.	2020
Arslan, A; Cooper, C; Khan, Z; Golgeci, I; Ali, I	Artificial intelligence and human workers interaction at team level: a conceptual assessment of the challenges and potential HRM strategies	Int. J. Manpow.	2022
Wirth, N	Hello marketing, what can artificial intelligence help you with?	Int. J. Market Res.	2018
Kopalle, PK; Gangwar, M; Kaplan, A; Ramachandran, D; Reinartz, W; Rindfleisch, A	Examining artificial intelligence (AI) technologies in marketing via a global lens: Current trends and future research opportunities	Int. J. Res. Mark.	2022
Seeber, I; Waizenegger, L; Seidel, S; Morana, S; Benbasat, I; Lowry, PB	Collaborating with technology-based autonomous agents Issues and research opportunities	Internet Res.	2020
Sun, JP; Fernandez, KV; Frethey-Bentham, C	Unraveling hybrid exchange: virtual tipping on live-streaming platforms	Internet Res.	2023
Giroux, M; Kim, J; Lee, JC; Park, J	Artificial Intelligence and Declined Guilt: Retailing Morality Comparison Between Human and AI	J. Bus. Ethics.	2022
Christou, P; Hadjielias, E; Simillidou, A; Kvasova, O	The use of intelligent automation as a form of digital transformation in tourism: Towards a hybrid experiential offering	J. Bus. Res.	2023
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Kaiser, C; Ahuvia, A; Rauschnabel, PA; Wimble, M	Social media monitoring: What can marketers learn from Facebook brand photos?	J. Bus. Res.	2020
Murtarelli, G; Gregory, A; Romenti, S	A conversation-based perspective for shaping ethical human–machine interactions: The particular challenge of chatbots	J. Bus. Res.	2021
Ngai, EWT; Wu, YY	Machine learning in marketing: A literature review, conceptual framework, and research agenda	J. Bus. Res.	2022

Author	Title	Journal	Year
Rizomyliotis, I; Kastanakis, MN; Giovanis, A; Konstantoulaki, K; Kostopoulos, I	How mAy I help you today? The use of AI chatbots in small family businesses and the moderating role of customer affective commitment	J. Bus. Res.	2022
Song, CS; Kim, YK	The role of the human–robot interaction in consumers? acceptance of humanoid retail service robots	J. Bus. Res.	2022
Song, CS; Kim, YK; Jo, BW; Park, SH	Trust in humanoid robots in footwear stores: A large-N crisp-set qualitative comparative analysis (csQCA) model	J. Bus. Res.	2022
Tsiotsou, RH; Boukis, A	In-home service consumption: A systematic review, integrative framework and future research agenda	J. Bus. Res.	2022
Xi, NN; Hamari, J	Shopping in virtual reality: A literature review and future agenda	J. Bus. Res.	2021
Cheng, LK	Effects of service robots' anthropomorphism on consumers' attribution toward and forgiveness of service failure	J. Consum. Behav.	2023
Kao, WK; Huang, YS	Service robots in full- and limited-service restaurants: Extending technology acceptance model	J. Hosp. Tour. Manag.	2023
Leung, XY; Wen, H	Chatbot usage in restaurant takeout orders: A comparison study of three ordering methods	J. Hosp. Tour. Manag.	2020
Choi, Y; Choi, M; Oh, M; Kim, S	Service robots in hotels: understanding the service quality perceptions of human–robot interaction	J. Hosp. Market. Manag.	2020
Yang, Y; Liu, Y; Lv, XY; Ai, J; Li, YF	Anthropomorphism and customers' willingness to use artificial intelligence service agents	J. Hosp. Market. Manag.	2022
Yu, CE	Human-like robots as employees in the hotel industry: Thematic content analysis of online reviews	J. Hosp. Market. Manag.	2020
Lepratti, R	Advanced human–machine system for intelligent manufacturing—Some issues in employing ontologies for natural language processing	J. Intell. Manuf.	2006
Grewal, D; Kroschke, M; Mende, M; Roggeveen, AL; Scott, ML	Frontline Cyborgs at Your Service: How Human Enhancement Technologies Affect Customer Experiences in Retail, Sales, and Service Settings	J. Interact. Mark.	2020
Zhang, JM; Li, XH; Tong, TY	A Tale of Two Types of Standard Setting: Evidence From Artificial Intelligence in China	J. Manag.	2023
Longoni, C; Cian, L	Artificial Intelligence in Utilitarian vs. Hedonic Contexts: The "Word-of-Machine" Effect	J. Mark.	2022
de Bellis, E; Johar, GV	Autonomous Shopping Systems: Identifying and Overcoming Barriers to Consumer Adoption	J. Retail.	2020
Noble, SM; Mende, M; Grewal, D; Parasuraman, A	The Fifth Industrial Revolution: How Harmonious Human–Machine Collaboration is Triggering a Retail and Service [R]evolution	J. Retail.	2022

Author	Title	Journal	Year
Chuah, SHW; Yu, J	The future of service: The power of emotion in human–robot interaction	J. Retail. Consum. Serv.	2021
Foroughi, B; Nhan, PV; Iranmanesh, M; Ghobakhloo, M; Nilashi, M; Yadegaridehkordi, E	Determinants of intention to use autonomous vehicles: Findings from PLS-SEM and ANFIS	J. Retail. Consum. Serv.	2023
Meyer, P; Roth, A; Gutknecht, K	Service robots in organisational frontlines—A retail managers' perspective	J. Retail. Consum. Serv.	2023
Salminen, J; Kandpal, C; Kamel, AM; Jung, SG; Jansen, BJ	Creating and detecting fake reviews of online products	J. Retail. Consum. Serv.	2022
Tran, AD; Pallant, JI; Johnson, LW	Exploring the impact of chatbots on consumer sentiment and expectations in retail	J. Retail. Consum. Serv.	2021
Amelia, A; Mathies, C; Patterson, PG	Customer acceptance of frontline service robots in retail banking: A qualitative approach	J. Serv. Manage.	2022
Blaurock, M; Caic, M; Okan, M; Henkel, AP	Robotic role theory: an integrative review of human–robot service interaction to advance role theory in the age of social robots	J. Serv. Manage.	2022
Le, KBQ; Sajtos, L; Fernandez, KV	Employee-(ro)bot collaboration in service: an interdependence perspective	J. Serv. Manage.	2023
Paluch, S; Tuzovic, S; Holz, HF; Kies, A; Jorling, M	My colleague is a robot—exploring frontline employees' willingness to work with collaborative service robots	J. Serv. Manage.	2022
Choi, S; Mattila, AS; Bolton, LE	To Err Is Human(-oid): How Do Consumers React to Robot Service Failure and Recovery?	J. Serv. Res.	2021
Filieri, R; Lin, ZB; Li, YL; Lu, XQ; Yang, XW	Customer Emotions in Service Robot Encounters: A Hybrid Machine-Human Intelligence Approach	J. Serv. Res.	2022
Han, B; Deng, X; Fan, H	Partners or Opponents? How Mindset Shapes Consumers' Attitude Toward Anthropomorphic Artificial Intelligence Service Robots	J. Serv. Res.	2023
Huang, MH; Rust, RT	Artificial Intelligence in Service	J. Serv. Res.	2018
Lu, VN; Wirtz, J; Kunz, WH; Paluch, S; Gruber, T; Martins, A; Patterson, PG	Service robots, customers and service employees: what can we learn from the academic literature and where are the gaps?	J. Serv. Theory Pract.	2020
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Maria Petrescu is an Assistant Professor of Marketing at Embry-Riddle Aeronautical University. Her main research areas include Marketing Analytics, Digital Marketing, and Research Methods. She has published articles in journals such as *Industrial Marketing Management, Psychology & Marketing, Journal of Marketing Management, Journal of Product and Brand Management, Journal of Promotion Management, Journal of Retailing and Consumer Services, Journal of Marketing Analytics,* and *Journal of Internet Commerce.*

Anjala S. Krishen is the Mel Larson Endowed Chair of Marketing, and Professor and Department Chair of Marketing and International Business at University of Nevada, Las Vegas (UNLV). She has a B.S. in Electrical Engineering from Rice University, and a M.S. Marketing, MBA, and Ph.D. from Virginia Polytechnic Institute and State University (Virginia Tech). She has held management positions for 13 years before pursuing a doctorate. To date, she has published interdisciplinary research in journals including *Industrial Marketing Management, Psychology & MarketingJournal of Services MarketingEuropean Journal of Marketing*, and *Journal of Marketing Education*. She has received numerous awards including the UNLV Foundation Distinguished Teaching (2015), the Barrick Scholar (2016), the Harold and Muriel Berkman Research Grant (2016), the UNLV Alumni Association Outstanding Faculty (2019), and the Scholarship of Teaching and Learning Award (2022).