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When AI Serves a Purpose:

How Virtuous Goals Foster Empowerment, Delight, and AI Adoption

Veronica Gabrielli*

University of Modena and Reggio Emilia
Department of Communication and Economics
veronica.gabrielli@unimore.it

Ilaria Baghi,

University of Modena and Reggio Emilia
Department of Communication and Economics
ilaria.baghi@unimore.it

Silvia Grappi,

University of Modena and Reggio Emilia
Department of Communication and Economics
silvia.grappi@unimore.it

Giacomo Gistri,

University of Macerata
Department of Political Science, Communication and International Relations
giacomo.gistri@unicm.it

Lorenzo Federici,

Polytechnic University of Marche
Department of Information Engineering
l.federici@univpm.it

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***Corresponding author:**

Veronica Gabrielli, Dipartimento di Comunicazione ed Economia
Viale Allegri, 9
Reggio Emilia (RE)
veronica.gabrielli@unimore.it; Tel. +39 (0)522-523233

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1- Introduction

Artificial Intelligence (AI) has emerged as a transformative force in marketing reshaping how firms generate insights, design offerings, and interact with customers. AI refers to computational systems capable of learning from data, adapting to their environment, and autonomously pursuing predefined goals (Russell & Norvig, 2009). In marketing, AI supports a wide range of activities, including segmentation, recommendation, pricing, and customer relationship management, while increasingly mediating consumer–firm interactions (Davenport et al., 2020; Huang & Rust, 2021). Beyond its role as a decision-support and interactional technology, AI is also increasingly embedded as a product attribute. Smart products and AI-enabled features, such as adaptive interfaces, predictive recommendations, and autonomous functionalities, become salient cues that shape consumers' quality perceptions, innovativeness judgments, and willingness to buy and pay. However, research suggests that consumer reactions to AI as a product attribute are contingent on contextual factors, including task domain, perceived risk, and beliefs about machine versus human capabilities (Longoni et al., 2019; Castelo et al., 2019).

A growing stream of marketing and consumer research has examined how consumers perceive and respond to AI-based service and product. On the positive side, AI-driven applications can enhance efficiency, accuracy, and convenience, improving consumer outcomes by reducing search costs and cognitive effort (Agrawal et al., 2018; Huang & Rust, 2021). However, research also highlights important psychological barriers to AI acceptance. Hermann and Puntoni (2024) emphasize that consumers often experience ambivalence toward AI, as its superior performance may simultaneously trigger concerns related to autonomy, control, and dehumanization, particularly when AI is perceived as replacing rather than augmenting human capabilities. Several studies underscore the role of perceived agency and control in shaping consumer responses to AI. Longoni et al. (2019) show that consumers may resist algorithmic decision-making in sensitive domains when they perceive a loss of human judgment and personal agency. Similarly, Castelo et al. (2019) demonstrate that consumers' trust in AI varies systematically depending on whether the task is perceived as objective or subjective, highlighting the importance of contextual and motivational factors in AI acceptance. These findings suggest that consumer reactions to AI are deeply influenced by whether AI systems are perceived as empowering or constraining consumers' decision-making autonomy.

From an experiential and relational perspective, Novak et al. (2018) conceptualize AI-enabled interactions as dynamic experiences in which intelligent systems act as interactive partners rather than passive tools. This shift redefines consumer–technology relationships, making affective and experiential outcomes increasingly central. Finally, recent work by Huang and Rust (2021) highlights the strategic role of AI in augmenting different forms of intelligence (i.e., mechanical, thinking, and feeling) within service and marketing contexts. Their

framework suggests that AI systems capable of supporting emotional and relational dimensions of the consumer experience may be particularly effective in generating positive affective responses (Sahut and Laroche, 2025). Building on this perspective, recent research has begun to conceptualize *delight* in AI-mediated interactions as a distinct and intensified positive emotional state that goes beyond mere satisfaction. In particular, Grappi et al. (2026) argue that AI systems endowed with feeling intelligence (i.e., the ability to recognize, interpret, and appropriately respond to users' cues) can elicit delight by exceeding users' expectations in relational and experiential terms. Delight emerges when AI interactions are perceived as unexpectedly personalized and contextually attuned, thereby fostering a sense of being understood and valued (Grappi et al., 2026). This emotional amplification is especially relevant in digital service encounters, where the absence of human contact can be compensated by emotionally responsive AI, ultimately strengthening user engagement, trust, and long-term relationship quality (Huang & Rust, 2024; Juquelier et al., 2025).

Despite these advances, extant research has predominantly focused on AI performance and task characteristics, paying limited attention to the goals pursued by AI systems and their implications for consumer experience. While prior studies have primarily focused on functional outcomes such as efficiency and accuracy (Sahut et al., 2025; Huang & Rust, 2024; Longoni et al., 2019) limited attention has been devoted to examining how the goals pursued by AI systems, particularly when oriented toward virtuous or prosocial outcomes, shape consumer empowerment, emotional responses such as delight, and downstream behavioural intentions. In particular, little is known about how AI systems designed to pursue virtuous goals, such as promoting environmentally responsible behaviour, influence consumer empowerment and emotional responses beyond functional performance. Addressing this gap, the present study investigates how AI virtuous goals shape consumer empowerment, delight, and downstream behavioral intentions in the context of AI-powered applications. We address this gap by conducting a field study based on the development of an actual, AI-powered service app (see Appendix A), measuring participants' responses after interacting with it. By moving beyond hypothetical scenarios and experimental vignettes, our approach captures consumer reactions in a realistic usage context, thereby enhancing the external validity of our findings.

2- Hypotheses Development

2.1 AI Goals and Consumer Empowerment

The goals pursued by AI systems represent a critical yet underexplored dimension shaping consumer responses to AI-based solutions. Prior research suggests that consumers do not evaluate AI solely based on its technical performance, but also based on the purpose it serves and the outcomes it promotes (Puntoni et al., 2021). AI systems may be designed to achieve primarily functional goals, such as efficiency, convenience, or accuracy, or virtuous goals, such as promoting environmentally sustainable or socially responsible behaviours.

Prior research in consumer behaviour emphasizes that consumer reactions to AI are strongly shaped not only by the technological features of AI systems, but also by the goals these systems are designed to pursue (Puntoni et al., 2021, Puntoni 2024). AI solutions may be oriented toward functional goals, such as improving efficiency, convenience, or accuracy (Longoni et al., 2019), or toward virtuous goals, such as promoting environmentally responsible or socially beneficial behaviours. These goals provide an interpretative frame through which consumers evaluate AI-driven interactions and experience (Ubal et al. 2024).

Virtuous AI, defined as AI designed to generate positive environmental or social outcomes, may be particularly effective in enhancing consumer empowerment. Compared to purely functional AI goals (e.g., efficiency, optimization, accuracy), virtuous goals frame the AI system as an enabler of meaningful, value-consistent action rather than as a purely instrumental decision-maker (Tran, 2026). This framing can increase consumers' perceived ability to act responsibly through the technology, thereby strengthening empowerment.

The emerging literature on virtuous AI emphasizes that AI systems are not value-neutral artifacts but socio-technical systems embedded with normative orientations and moral consequences (Hagendorff, 2022; Hermann, 2022). Hagendorff (2022) argues that ethical AI should move beyond formal compliance toward the promotion of prosocial outcomes, while Hermann (2022) highlights the importance of embedding sustainability and responsibility into AI design and governance. Together, this literature suggests that AI systems can be intentionally designed to support higher-order social goals rather than merely improve performance and product functionality.

Linking this perspective to empowerment theory, empowerment can be understood as an enhanced sense of perceived competence, and meaningful impact in achieving personally or socially valued goals (Zimmerman, 1995; Spreitzer, 1995). Drawing from psychological empowerment and self-determination theory, individuals feel empowered when they experience autonomy (volitional choice), competence (effectiveness), and impact (the ability to produce valued outcomes) (Thomas & Velthouse, 1990; Deci & Ryan, 2000).

Virtuous AI may reinforce these empowerment mechanisms. By aligning technological functionality with consumers' moral and environmental values, virtuous AI can enhance perceived autonomy (supporting value-consistent decisions), competence (providing actionable insights that facilitate responsible behaviour), and impact (making the consequences of one's actions more visible and effective). In this sense, virtuous AI does not merely automate decisions but extends consumers' moral agency, fostering a perception of technology as a partner that amplifies, rather than substitutes, their capacity to act responsibly. Accordingly, AI systems explicitly oriented toward social or environmental good may generate stronger empowerment perceptions than purely efficiency-driven systems, because they connect technological assistance with consumers' goals and prosocial motivations. Thus, we hypothesize that:

H1: AI systems pursuing virtuous goals enhance consumer empowerment more than AI systems pursuing functional goals.

2.2 The role of Consumer Empowerment as a driver of delight in Virtuous AI interaction

Consumer empowerment is not only a cognitive state but also a powerful antecedent of affective responses within consumption experiences (Deci & Ryan, 2000). Prior research suggests that when consumers feel empowered (i.e., when they perceive choice and alignment with personal values) they experience more positive emotions during interactions with technologies (Novak et al., 2018). In the context of AI-based products, empowerment induced by AI virtuous goals may translate into heightened emotional responses, particularly delight. Delight emerges when consumers experience unexpected positive outcomes that exceed their expectations, often accompanied by feelings of pleasure, surprise, and appreciation. Grappi et al. (2026) demonstrate that delight is especially likely when consumers perceive that a system not only performs effectively but also supports them in a proactive and meaningful way. When AI goals

foster empowerment, by enabling consumers to contribute to virtuous outcomes such as environmental sustainability, consumers may experience a dual benefit: support in reaching their goals and moral gratification. This combination is likely to intensify positive emotional responses, leading to higher levels of delight. In contrast, AI systems that focus exclusively on functional goals may enhance efficiency without necessarily eliciting strong emotional engagement. Thus, empowerment induced by AI virtuous goals represents a key mechanism through which AI-driven experiences generate delight. We hypothesize that:

H2: *The stronger the consumer empowerment induced by AI virtuous goals, the greater the delight experienced by consumers.*

2.3 Delight as a Driver of AI Adoption and Positive Word of Mouth

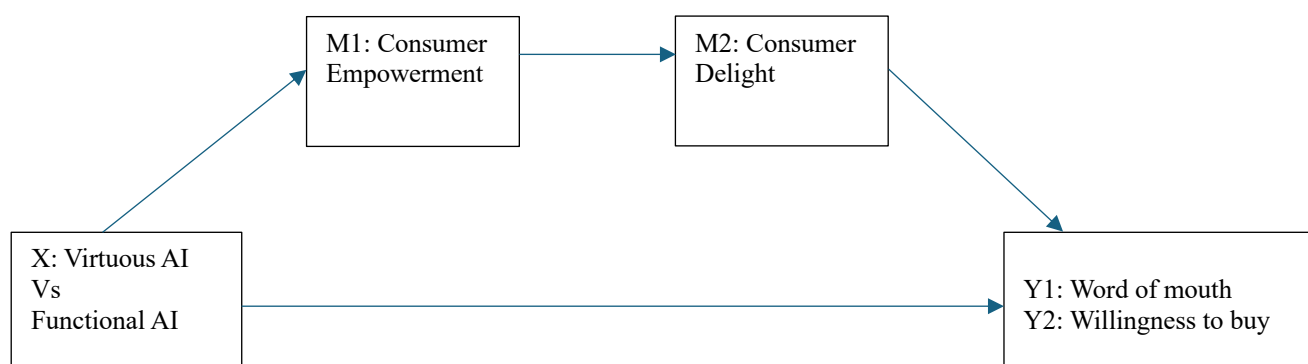
Delight has been widely recognized as a critical driver of favourable post-consumption behaviours (Zou et al., 2022). Delight exerts a stronger influence on behavioural intentions because it involves intense positive affect and memorable experiences. In technology adoption contexts, delight can reduce resistance to innovation and increase openness toward continued use of technology (Agrawal et al., 2018). In AI-powered applications, delight may play a pivotal role in shaping consumers' intention to adopt the technology. When interactions with AI generate delight, consumers are more likely to perceive the technology as valuable, engaging, and worth integrating into their daily routines (Grappi et al., 2026). Moreover, delight-driven experiences tend to motivate consumers to share their positive experiences with others. In case of AI products that increasingly operate in socially visible and socially evaluable domains, delighted consumers may be particularly inclined to engage in positive word of mouth, reinforcing the diffusion of AI-powered solutions. In the context of Virtuous AI, delight may be further amplified by the perception that the technology enables morally positive behavior. This moral-emotional reinforcement strengthens both personal adoption intentions and social advocacy behaviors, such as recommending the AI-powered app to others.

H3a: *The greater the delight experienced by consumers, the higher their intention to spread positive word of mouth toward the AI-powered application.*

H3b: *The greater the delight experienced by consumers, the higher their intention to buy and adopt the AI-powered application.*

Finally, we propose and test a sequential mediation positing that virtuous AI goals, compared to functional AI goals, exerts a stronger positive effect on consumer empowerment. Consumer empowerment is conceptualized as a key psychological mechanism through which AI goals influence consumers' emotional responses, leading to higher levels of delight. In turn, delight drives favourable behavioural outcomes, namely intention to adopt the AI-powered application and intention to engage in positive word of mouth. Together, the model highlights the central role of empowerment and delight in explaining how and why consumers respond differently to AI systems depending on the goals they pursue.

Fig. 1 The sequential mediation model hypothesized



3- Method and procedure

120 respondents were recruited via Prolific to complete an online survey. Each respondent was asked to open a link in order to use an app named MyPantry, truly functional. Initially a few questions were posed relating to traits of the consumer (healthy lifestyle, cooking familiarity, environmental concern, need for control) that would later be scrutinized in the overall model as control variables. Next, the consumer had to indicate 10 ingredients present in their pantry (both fresh and dried foods). After a few seconds, the application, thanks to the use of artificial intelligence, was able to generate three recipes. Respondents were randomly assigned to two different modes of the application's operation. For half of them, the app proposed three recipes that aimed to maximize the number of matches with the ingredients provided by the respondent (manipulated set — virtuous AI). In this case the recipes were introduced by a sentence explicitly stating the number of matches, thereby making the app's virtuous anti-waste purpose clear. The other half of the sample were shown three recipes with no anti-waste purpose (control set — functional AI). Those recipes were introduced by a sentence presenting them simply as delicious. Although the two sets had different underlying functionality (virtuous versus functional), respondents saw exactly the same interaction interface with the app. Each respondent was assigned to only one condition (between-subjects design): virtuous AI or functional AI.

After viewing the recipes, the respondent had to complete a questionnaire containing the questions related to the dependent variables (positive word of mouth and willingness to buy the app), the variables hypothesized as mediators (consumer empowerment and consumer delight), the manipulation checks, and the socio-demographic variables (age and gender).

Positive word of mouth was measured through a 4-item scale adapted from Romani et al. (2013) (“I would say positive things to other people about MyPantry”, “I would recommend MyPantry to other people”, “I would speak positively about MyPantry to others”, “I would encourage friends and relatives to use MyPantry”). Willingness to buy was measured through a 3-item scale (“It is likely that I will buy MyPantry in the future”, “In the future, I will probably use MyPantry”, “In the future, I plan to buy and download MyPantry”). Consumer empowerment was measured through a 4-item Likert scale adapted from Balderjahn et al. (2020) (“MyPantry improves my decision-making behavior”, “MyPantry helps me compensate for my weaknesses”, “MyPantry helps me further develop myself”, “MyPantry improved my performances”). Consumer delight was measured by a 4-item scale adapted by Grappi et al. (2026) (“Using MyPantry would make me feel: Delighted; Enthusiastic, Excited; Gleeeful”). We checked the manipulation by asking respondents: “Regarding the recipes selected by My Pantry for you, they were: (a) presented as “delicious”; (b) detailed in the number of matched ingredients; ...addressed to reduce food waste”.

4- Results

We conducted a preliminary analysis by which exploring the direct effect of manipulation on each mediator and dependent variable. The independent variables has a significant and positive effect on each variable. Table 1 shows the detailed results.

Tab.1 Mean values and test on differences

	no virtuous AI	virtuous AI	F	t	Mean difference	p
Consumer empowerment	4.05	5.12	1.56	-4.73	-1.06	< 0.01
Consumer delight	4.22	5.06	0.25	-3.68	-0.83	< 0.01
Word of mouth	4.24	5.35	0.30	-4.10	-1.11	< 0.01
Willingness to buy	3.58	4.56	0.25	-3.17	-0.98	< 0.01

In order to test each hypothesis, we performed separate serial mediation analysis by PROCESS Model 6 (Hayes, 2022) for each dependent variable (word of mouth and willingness to buy). Results showed a positive significant effect of Virtuous AI on consumer empowerment: consumers interacting with the app addressed to generate anti-waste recipes assigned an higher mean value to their empowerment (5.12 vs 4.05 $p < .001$), thus **H1 is confirmed**. Then, consumer empowerment exerted a positive and significant effect on consumer delight ($\beta = .74$ $p = .000$), **consistently with H2**. The presence of the first mediator (consumer empowerment) is essential, as the independent variable (virtuous AI) would not be able to directly influence consumer delight. Then, consumer delight significantly increased Y1, *positive word of mouth* ($\beta = 0.45$; $p = 0.000$), **supporting H3a**. These effects composed a sequential mediation process, confirmed by the serial mediation analysis. The effect of *Virtuous AI* on *Positive Word of mouth (Wom)* is fully mediated by the two mediators. The indirect effect of *Virtuous AI* on *Wom* via *Consumer empowerment* was significant (Ind1 = 0.78; $SE = 0.21$; 95%; CI [0.39, 1.20]), while the indirect effect of *Virtuous AI* on *Wom* via *Consumer delight* was not significant (Ind2 = 0.04; $SE = 0.95$; 95%; CI [-0.17, 0.21]). As a result of a serial mediating effect, the indirect effect of *Virtuous AI* on *Wom* via *Consumer empowerment* and *Consumer delight* was significant (Ind3 = 0.41; $SE = 0.15$; 95%; CI [0.16, 0.73]). The sequential mediation model (total effect = 1.19; $SE = 0.26$; 95%; CI [0.69, 1.71]) is adequate to explain the total effect ($R^2 = .75$; $MSE = .61$; $F = 34.50$ $p = .000$) of *Virtuous AI* on consumers' intention to spread *Positive word of mouth*. Potential covariates (age, gender, environmental concern, healthy lifestyle, cooking and need for control) did not show any significant effect.

Tab. 2 Sequential mediation model for Y1: Positive Word of mouth

	Coeff.	se	t	p	LLCI	ULCI
X1- (non virtuous vs virtuous).----- Y1	-.00	.18	-.01	.99	-.37	.37
X1- (non virtuous vs virtuous). ----- M1	1.22	.23	5.27	.00	.76	1.68
X1- (non virtuous vs virtuous).----- M2	.01	.19	.05	.96	-.36	.38
M1- consumer empowerment. -----M2	.74	.07	10.48	.00	.60	.88
M2- consumer delight. -----Y1	.45	.10	4.72	.00	.26	.65
C- age	.00	.01	.63	.53	-.01	.01

C- gender	.04	.16	.22	.82	-.29	.36
C- environmental concern	-.06	.08	-.71	.48	-.22	.10
C- healthy lifestyle	.03	.10	.27	.79	-.18	.23
C- cooking familiarity	-.02	.08	-.21	.83	-.18	.14
C- need for control	.10	.11	.83	.41	-.13	.32

The serial model on Y2, *Willingness to Buy*, confirmed the path above discussed: the positive effect of *Virtuous AI* on *Consumer empowerment* and then on *Consumer delight* exerted a significant positive effect on the consumer *Willingness to buy* and adopt the app ($\beta = 0.58$; $p = 0.000$), **supporting H3b**.

Tab. 3 Sequential mediation model for Y2: Willingness to buy

	Coeff.	se	t	p	LLCI	ULCI
X1- (non virtuous vs virtuous).----- Y2	-.07	.26	-.27	.79	-.58	.44
X1- (non virtuous vs virtuous). ----- M1	1.22	.23	5.27	.00	.76	1.68
X1- (non virtuous vs virtuous).----- M2	.01	.19	.05	.96	-.36	.38
M1- consumer empowerment. -----M2	.74	.07	10.48	.00	.60	.88
M2- consumer delight. -----Y2	.58	.13	4.35	.00	.32	.85
C- age	-.00	.01	-.04	.97	-.02	.02
C- gender	.08	.23	.34	.74	-.37	.52
C- environmental concern	-.16	.11	-1.44	.15	-.38	.06
C- healthy lifestyle	.30	.14	2.11	.04	.02	.58
C- cooking familiarity	.04	.11	.35	.73	-.18	.26
C- need for control	.01	.16	.04	.97	-.31	.32

As for the first dependent variable, the effect of *Virtuous AI* on *Willingness to buy* (*WtB*) is fully mediated by the two mediators. The indirect effect of *Virtuous AI* on *WtB* via *Consumer empowerment* was significant (Ind1 = 0.65; $SE = 0.23$; 95%; CI [0.24, 1.12]), while the indirect effect of *Virtuous AI* on *WtB* via *Consumer delight* was not significant (Ind2 = 0.01; $SE = 0.12$; 95%; CI [-0.23, 0.25]). As a result of a sequential mediating effect, the indirect effect of *Virtuous AI* on *WtB* via *Consumer empowerment* and *Consumer delight* was significant (Ind3 = 0.53; $SE = 0.15$; 95%; CI [0.26, 0.87]). The sequential mediation model (*total effect* = 1.18; $SE = 0.25$; 95%; CI [0.69, 1.69]) is adequate to explain that the total effect ($R^2 = .62$; $MSE = 1.19$; $F = 18.93$ $p = .000$) of *Virtuous AI* on consumers' *Willingness to buy*. As for the previous dependent variables, potential covariates did not have any significant effect.

1- Conclusions and implications

This research offers results gathered through an in-field study using a real, functioning app. The app version with virtuous goals (reducing food waste) excelled in boosting purchase willingness and positive word of mouth over the purely functional version. The effect on behavioural intentions is fully mediated by consumer empowerment and consumer delight. These effects persist across personal traits (healthy lifestyle, cooking habits, environmental concern, need for control) and are amplified in younger consumers.

This study demonstrates that consumers consider AI-powered services not merely for their functional aspects but rather by adopting a holistic approach. AI is not simply a task executor but a tool for higher purposes surpassing mere efficiency in terms of interaction or results. It corroborates the paradigm of technology as both a performance enabler and a catalyst for individual self-expression and potential development across functional and value dimensions. Thus, AI yields not only efficient outcomes (computation speed, choice optimization, decision simplification) but also effective ones. This holds at both the individual and collective levels, producing results (in this case, the reduction of food waste) that yield better outcomes for the individual consumer as well as for society as a whole (in a win-win perspective).

Throughout an in-field study, this work makes several important theoretical contributions to the literature on AI in marketing and consumer behaviour, overcoming the limitations of many studies that rely on experimental designs only described to respondents or represented via photographs or vignettes.

First, the study extends prior research on consumer responses to AI by shifting the focus from AI performance and task characteristics to the goals pursued by AI systems. While existing work has primarily examined efficiency, accuracy, and task fit (e.g., Longoni et al., 2019), this research demonstrates that AI goals represent a critical and previously underexplored dimension shaping consumer empowerment and emotional responses.

Second, the study contributes to the growing literature on human-AI interaction by identifying consumer empowerment as a key psychological mechanism linking AI goals to affective outcomes. By showing that virtuous AI goals enhance empowerment, which in turn drives delight, the findings integrate cognitive and emotional perspectives on AI adoption, responding to calls for greater attention to experiential and relational processes in AI-based interactions (Novak et al., 2018; Puntoni et al., 2021).

Third, this research advances the emerging concept of Virtuous AI by demonstrating its relevance for consumer experience and behaviour. The results suggest that AI systems designed to promote environmentally positive outcomes can generate not only functional value but also emotional and relational benefits, thereby enriching existing frameworks on ethical and responsible AI in marketing.

Finally, by establishing delight as a key driver of both adoption intentions and positive word of mouth in AI-powered applications, this study contributes to the literature on technology adoption and customer experience. It highlights the importance of affective responses in explaining how AI systems diffuse and gain acceptance among consumers.

The research also offers interesting managerial insights. The results suggest that pursuing collective and virtuous goals can facilitate AI acceptance among consumers. This can be decisive for those consumers who believe that new technologies conflict with individuals' deepest values and produce overall negative long-term effects, promoting a win-win perspective.

From this emerges the advice for companies and institutions to use communication strategies for promoting AI-powered products and services not always focused on its functioning and on functional benefits but also, where present, on benefits related to the individual's sense of self. Using emotional language rather than a rational one, focused on computational performance, execution, and decision-making efficacy, is another suggestion emerging from this research.

References

- Agrawal, A., Gans, J., & Goldfarb, A. (2018). *Prediction machines: The simple economics of artificial intelligence*. Harvard Business Press.
- Balderjahn, I., Peyer, M., Seegebarth, B., Wiedmann, K. P., & Weber, A. (2020). The many faces of sustainability-conscious consumers: A category-independent typology. *Journal of Business Research*, 91, 83-93.
- Castelo, N., Bos, M. W., & Lehmann, D. R. (2019). Task dependency of consumer trust in algorithmic decision making. *Journal of Marketing Research*, 56(5), 834-849.
- 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.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Grappi, S., Romani, S., & Bagozzi, R. P. (2026). *Consumer psychology of AI-driven interactions*. *Journal of Consumer Behavior*.
- Hagendorff, T. (2022). A virtue-based approach to individual ethics in artificial intelligence. *AI and Ethics*, 2(3), 445-458.
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.
- Hermann, E. (2022). Leveraging artificial intelligence in marketing for social good—An ethical perspective. *Journal of Business Ethics*, 179(1), 43-61.
- Hermann, E., & Puntoni, S. (2024). The ethics of AI in consumer markets. *Current Opinion in Psychology*, 54, 101-118.
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49(1), 30-50.
- Huang, M.-H., & Rust, R. T. (2024). The Caring Machine: Feeling AI for Customer Care. *Journal of Marketing*.
- Juquelier, A., Poncin, I., & Hazée, S. (2025). Empathic chatbots: A double-edged sword in customer experiences. *Journal of Business Research*, 188, 115074. <https://doi.org/10.1016/j.jbusres.2024.115074>
- Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to medical artificial intelligence. *Journal of Consumer Research*, 46(4), 629-650.
- Novak, T. P., Hoffman, D. L., & Li, Y. (2018). The role of consumer interaction in the IoT ecosystem. *Journal of Marketing Practice*.

Puntoni, S., Reczek, R. W., Giesler, M., & Simonson, I. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, 85(1), 131-151.

Romani, S., Grappi, S., & Bagozzi, R. P. (2013). My company is bad, I feel mixed emotions: The impact of corporate social irresponsibility on consumer reactions. *Journal of Business Ethics*, 114(2), 229-239.

Russell, S. J., & Norvig, P. (2009). *Artificial intelligence: A modern approach* (3rd ed.). Prentice Hall.

Sahut, J. M., & Laroche, M. (2025). Digital transformation and consumer well-being in the age of AI. *Journal of Retailing and Consumer Services*.

Sahut, J. M., et al. (2025). Innovations in financial technology: An ethical review. *International Journal of Information Management*.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666-681.

Tran, A. T. (2026). *Human-AI collaboration in the modern era*. Springer Nature.

Ubal, V., Lisjak, M., & Mende, M. (2024). Cracking the consumers' code: A framework for understanding the artificial intelligence–consumer interface. *Current Opinion in Psychology*, (58).

Wathieu, L., Brenner, L., Carmon, Z., Chattopadhyay, A., Wertenbroch, K., Drolet, A., ... & Wu, G. (2002). Consumer control and empowerment: a primer. *Marketing Letters*, 13(3), 297-305.

Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23(5), 581-599.

Zou, W., et al. (2022). Understanding AI ethics from a consumer perspective. *Computers in Human Behavior*, 130, 107-119.