

## From Clicks to Conversions: Exploring How AI Redefines Trust, Experience, and Online Consumer Decisions

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### ABSTRACT

Artificial intelligence is transforming the digital marketplace by reshaping how consumers perceive trust, interact with online environments, and make purchase decisions. This study examines how AI-driven personalization, predictive analytics, recommendation engines, and conversational interfaces collectively influence the journey from initial click to final conversion. While traditional digital marketing relies on static segmentation and rule-based logic, modern AI systems dynamically interpret user intent, emotional tone, browsing patterns, and contextual cues in real time. These capabilities not only streamline user experience but also reconstruct psychological drivers of trust, such as perceived transparency, service reliability, and cognitive ease. The paper evaluates how algorithmic decision systems modify consumer attention, reduce friction, and create persuasive purchase pathways that elevate conversion likelihood. It further investigates the ethical complexities of AI-mediated persuasion, highlighting concerns related to privacy, data exploitation, and algorithmic bias. By synthesizing recent empirical findings and industry practices, the study offers an integrated perspective on how AI technologies redefine the foundations of online consumer behaviour. The insights contribute to understanding the evolving digital trust landscape and provide strategic direction for businesses seeking sustainable and ethically aligned AI adoption.

**Keywords :** AI-driven personalization; digital trust; online consumer behaviour; predictive analytics; recommendation systems; user experience (UX); conversion optimization; algorithmic decision-making; conversational AI; e-commerce psychology.

### 1. INTRODUCTION:

Artificial intelligence has become the central force redefining the architecture of digital commerce, fundamentally altering how consumers search, evaluate, and commit to online purchases. In earlier stages of e-commerce development, consumer decisions were shaped by relatively static website interfaces, generic product listings, and broad demographic segmentation strategies. Today, AI operates as a continuous, real-time engine that interprets intent, behaviour, and emotional cues with unprecedented granularity. Every click, pause, scroll, and query is converted into behavioural signals that feed machine learning pipelines capable of predicting what consumers want before they consciously articulate it. Recommendation systems analyse historical interactions

to surface hyper-relevant products, conversational agents influence user reasoning through natural dialogues, and predictive analytics estimate conversion probability to calibrate interventions that reduce friction. As consumers navigate these AI-mediated environments, their perceptual filters shift: trust is no longer derived solely from brand legacy or human assurance, but from algorithmic accuracy, system responsiveness, and the perceived safety of digital interactions. The emergence of real-time decision architectures means that AI now orchestrates the entire experiential flow, from initial browsing curiosity to the final confidence required for purchase commitment. This shift marks a decisive transition from consumer-driven exploration to algorithm-guided decision journeys.

These transformations carry deep implications for both psychological experience and commercial outcomes. Online trust has evolved into a dynamic construct shaped by transparency of data use, fairness of recommendations, reliability of automated responses, and perceived benevolence of AI-generated advice. When algorithms personalise content seamlessly, consumers experience cognitive ease, feel understood, and perceive reduced decision complexity. Conversely, poorly calibrated algorithms, intrusive targeting, or opaque data practices can trigger suspicion, perceived manipulation, and decision withdrawal. In this evolving landscape, AI not only enhances user experience but actively reconstructs behavioural pathways, influencing attention span, search behaviour, comparison strategies, and final purchase decisions. The journey from click to conversion has therefore become an interplay between consumer autonomy and algorithmic persuasion. Businesses increasingly rely on AI to optimise conversion funnels, anticipate shifting expectations, and craft digital environments that feel intuitive, trustworthy, and emotionally aligned with users. Understanding how AI redefines these psychological and experiential components is essential for developing ethical, user-centred digital ecosystems that maximise engagement without undermining user agency. This study situates AI as both a technological infrastructure and a behavioural force, offering a comprehensive exploration of how it reshapes trust, experience, and online consumer decision-making in an era of intelligent commerce. Furthermore, the rise of multimodal AI systems capable of analysing text, visuals, speech, and behavioural micro-patterns introduces an even deeper layer of personalisation that influences how consumers interpret value propositions and risk signals in digital environments. As platforms become increasingly anticipatory, consumers encounter decision pathways that feel seamless yet subtly orchestrated through algorithmic reasoning. This expanding predictive capability intensifies both the commercial potential and ethical responsibility of AI deployment, underscoring the urgency to understand how these systems shape user autonomy, emotional comfort, and long-term trust. Such complexities make it essential to examine AI not only as a technological innovation but as a behavioural architect.

## 2. RELEATED WORKS

Artificial intelligence has become central to contemporary research on digital consumer behaviour, with scholars emphasizing its capacity to personalise decision environments and restructure how users interact with online platforms. Early studies focused on algorithmic recommendation systems, identifying their role in shaping product exposure and influencing decision shortcuts by reducing cognitive load during search tasks [1]. Subsequent research demonstrated that collaborative filtering and deep learning systems significantly improve accuracy in predicting consumer preferences, thereby enhancing satisfaction and perceived relevance [2]. The integration of sentiment analysis into e-commerce interfaces further strengthened predictive models, enabling platforms to decode emotional tone and refine product suggestions accordingly [3]. Scholars also

examined the psychological dimension of algorithmic persuasion, noting that AI systems often succeed because they create an illusion of attentiveness and personalised care, which drives user engagement and purchase intention [4]. Parallel works explored clickstream analytics and behavioural segmentation, arguing that AI transforms raw digital traces into behavioural profiles that anticipate purchasing patterns more effectively than traditional demographic indicators [5]. This evolution encouraged researchers to frame AI not only as a technological layer but as a cognitive mediator that actively shapes the user's digital decision environment [6]. Collectively, these early findings laid the foundation for understanding how AI-driven personalisation alters user expectations, perceived convenience, and trust during online interactions.

A large body of contemporary research examines the intricate relationship between AI systems and digital trust. Scholars in human-computer interaction have highlighted that trust in AI is built through transparency, consistency, and perceived competence, particularly in automated recommendation and decision-support systems [7]. Evidence shows that consumers rely more heavily on AI-generated advice when the system demonstrates high accuracy and low volatility in predictions, even surpassing reliance on human experts in some contexts [8]. At the same time, research identifies privacy concerns, algorithmic bias, and opaque data practices as major inhibitors of trust formation in AI-mediated environments [9]. Studies on consumer psychology reveal that when users perceive AI as intrusive or manipulative, especially in hyper-targeted advertising, they develop resistance behaviours that diminish engagement and increase cart abandonment rates [10]. Several researchers propose trust calibration models where the optimal consumer response occurs when users neither overtrust nor distrust AI systems, but instead understand their capabilities and limitations [11]. Moreover, research in digital experience design demonstrates that meaningful UX elements such as system explainability, accessible privacy controls, and tone-sensitive conversational agents significantly increase trust and conversion probability [12]. Complementary work on social presence theory shows that AI avatars and humanoid chatbots can simulate interpersonal warmth, which enhances user comfort and reduces perceived risk associated with online transactions [13]. Together, these studies underscore that trust in AI is a multidimensional construct shaped by technological performance, perceived ethics, and user experience design. Recent scholarship has also begun examining the interplay between generative AI and consumer decision ecosystems, noting that AI-created content such as personalised product narratives, adaptive interface elements, and dynamic pricing cues can meaningfully alter perceived authenticity and emotional resonance. These studies argue that generative models amplify the persuasive reach of recommender systems by producing context-aware micro-experiences that subtly guide evaluative judgments. Parallel research highlights the increasing relevance of fairness and algorithmic accountability frameworks in commercial AI, emphasising that consumer trust is tightly linked to perceptions of ethical data use and transparent system logic. Such emerging perspectives reinforce the evolving

complexity of AI-mediated decision environments and call for deeper, multidisciplinary investigation.

The final stream of research explores how AI reshapes the architecture of online decision-making and the mechanics of conversion. Behavioural economists have found that AI-driven recommendation engines alter consumer heuristics by narrowing choice sets, presenting anchor options, and facilitating rapid preference formation [14]. Studies using experimental e-commerce simulations show that dynamic, real-time personalisation significantly increases conversion likelihood by intercepting hesitation points, predicting abandonment, and offering targeted incentives at the precise moment of behavioural friction [15]. Researchers also highlight that AI reconstructs the user journey through anticipation: instead of waiting for the consumer to explore options, the system proactively curates pathways that maximize purchase readiness. This predictive intervention reduces uncertainty, accelerates decision speed, and enhances perceived platform competence. However, several scholars caution that excessive automation may limit consumer autonomy, raising ethical concerns about subconscious influence and algorithmic nudging. Additionally, cross-cultural studies reveal that acceptance of AI-driven decision environments varies based on cultural attitudes toward technology, individualism, and privacy sensitivity. This suggests that trust, experience, and conversion dynamics are not universal but depend on contextual adaptation. The emerging consensus across recent literature is clear: AI does not merely support online decision-making but actively co-creates it through personalised, adaptive, and persuasive mechanisms that shape how consumers perceive value, assess risk, and commit to transactions. These insights highlight the need for deeper theoretical and empirical examination of AI's role in reshaping online consumer psychology, which this study seeks to address.

### 3. METHODOLOGY

#### 3.1 Research Design

This study adopts a mixed-method, digital-behaviour analytical design combining AI-driven behavioural modelling, consumer trust assessment, and experience-to-conversion pathway analysis. The approach integrates three complementary components: (1) extraction and preprocessing of consumer clickstream datasets, (2) deployment of machine-learning models to predict trust signals and conversion likelihood, and (3) structured surveys measuring subjective perceptions of AI interactions. This hybrid approach enables a comprehensive evaluation of how AI reshapes online behaviour beyond surface-level metrics. The methodology follows established digital-behaviour modelling frameworks where behavioural traces, sentiment cues, and interaction timings are used to infer psychological states and decision tendencies [16].

#### 3.2 Data Collection and Clickstream Capture

Data for this study were sourced from anonymised e-commerce interaction logs that recorded page visits, dwell time, scroll depth, search queries, item comparisons, and cart events over a 60-day period. Clickstream datasets are widely recognized as reliable indicators of micro-

behaviours that precede conversions, enabling AI systems to detect patterns of intent and hesitation [17]. Additionally, a 15-item trust perception survey was administered to a sample of active platform users. Survey data captured users' perceived transparency, fairness, intrusiveness, and emotional comfort when interacting with AI-mediated recommendations. This dual-source dataset strengthened both behavioural and psychological validity of the analysis.

**Table 1. Clickstream Variables and Descriptions**

Variable	Description	Behavioural Insight
Dwell Time	Total time spent on product pages	Indicates cognitive engagement and evaluation effort
Scroll Depth	Percentage of page scrolled	Reflects curiosity and information-seeking intensity
Comparison Count	Number of products compared	Signals decision complexity and uncertainty
Abandonment Timing	Timestamp of exit before purchase	Identifies friction points in the decision pathway

#### 3.3 AI Modelling Framework

Machine-learning models were developed to classify conversion probability and detect trust-related behavioural patterns. Three algorithms Random Forest, XGBoost, and a two-layer Artificial Neural Network (ANN) were trained and compared for predictive performance. Prior studies confirm the superiority of ensemble and neural architectures in capturing nonlinear behavioural relationships in digital consumer activity [18]. Features included behavioural metrics (from Table 1), sentiment scores from user reviews, chatbot interaction logs, and metadata such as device type or session length. Trust-sensitive features such as refusal to grant permissions, early exit after AI prompts, and avoidance of recommended products were also encoded.

To evaluate the impact of AI-mediated personalisation, A/B testing was conducted across three interface variations:

**Static recommendations** (control)

**AI-driven dynamic recommendations**

**Conversational AI guidance**

This design aligns with frameworks suggesting that comparative interface testing reveals how AI alters task flow, attentional allocation, and conversion readiness [19].

#### 3.4 Survey Component for Psychological Measures

The structured trust survey used a 5-point Likert scale and was adapted from validated models in digital trust research [20]. Items measured perceived transparency, fairness of recommendations, emotional comfort,



perceived intrusiveness, and confidence in AI-mediated decisions. Reliability analysis was performed using Cronbach’s alpha, and results exceeding 0.85 were considered acceptable. Survey responses were merged with behavioural data to form hybrid trust-conversion clusters. This technique mirrors previous work where subjective trust indicators enrich machine-learning predictions of digital behaviour [21].

### 5 Data Preprocessing and Feature Engineering

Preprocessing involved removal of bot traffic, session fragmentation correction, and imputation of missing interaction values. Text-based variables (chatbot dialogues and user reviews) were transformed using TF-IDF vectors and sentiment scores generated via pretrained NLP models. Prior research confirms that emotional tone and linguistic cues substantially influence AI models’ ability to infer trust and purchase intentions [22]. Numerical behavioural features were min-max normalised to ensure balanced model training.

Table 2. Feature Categories in the AI Learning Pipeline

Feature Type	Examples	Purpose in Model
Behavioural	Dwell time, exit patterns, search frequency	Identify intent, inertia, and friction
Emotional	Sentiment polarity, review tone	Model trust, anxiety, or enthusiasm
Interactional	Chatbot queries, recommendation clicks	Assess AI engagement acceptance
Technical	Device type, network speed	Detect contextual effects on conversion

### 3.6 Model Evaluation and Validation

Model performance was assessed using accuracy, F1-score, and AUC metrics. A stratified 80–20 training–testing split was used, and 10-fold cross-validation ensured robustness against overfitting. SHAP (Shapley Additive Explanations) values were employed to quantify feature importance, an approach widely recommended in behavioural AI studies for its interpretability and fairness assessment capabilities [23].

### 3.7 Ethical Considerations

User data was anonymised, no personally identifiable information was extracted, and compliance with GDPR-aligned ethical standards was maintained throughout. Survey participants provided informed consent, and no manipulative recommendation strategies were deployed during testing.

## 4. RESULT AND ANALYSIS

### 4.1 Overview of Behavioural Patterns

Analysis of the clickstream dataset revealed clear behavioural differences between users exposed to AI-driven experiences and those interacting with static digital interfaces. Users in AI-personalised environments demonstrated longer dwell times, deeper scroll behaviour, and significantly fewer hesitation pauses compared to the control group. These users also showed a consistent pattern of reduced product comparison counts, indicating that AI recommendations effectively narrowed their decision field. Conversely, control-group users relied heavily on exploratory browsing, exhibiting higher cognitive effort and more erratic search patterns. Behavioural clustering further showed that trust-sensitive users responded more positively to conversational AI than to conventional product listings, especially in sessions where emotional or reassurance cues were integrated into the interaction flow. These results support the proposition that AI reduces decision friction and alters both the pace and structure of digital evaluation.



Figure 1: Customer Experience [24]

### 4.2 Model Performance and Feature Influence

Among the three predictive architectures tested, XGBoost achieved the highest accuracy and strongest F1-score, followed closely by the ANN model. Random Forest performed adequately but displayed lower sensitivity to fine-grained emotional cues. SHAP value analysis revealed that dwell time, chatbot interaction frequency, and sentiment polarity were the most influential predictors of conversion probability. Contrary to expectation, comparison count showed only moderate influence, suggesting that AI-curated pathways reduced the need for extensive evaluation. The prominence of emotional features indicates that trust, perceived comfort, and affective resonance strongly shape the journey from click to conversion. Users who avoided AI prompts or who declined personalised suggestions consistently showed lower conversion likelihood, reinforcing the behavioural assumption that acceptance of AI mediation is closely linked to purchase intent.

Table 3. Model Performance Summary

Model	Accuracy	F1-Score	AUC	Key Strength

Random Forest	0.81	0.78	0.84	Good for behavioural features
XGBoost	0.89	0.87	0.92	Best overall predictive performance
ANN (2-layer)	0.86	0.83	0.89	Strong emotional-sentiment sensitivity

### 4.3 Psychological Trust Indicators and Conversion Behaviour

Survey-integrated results demonstrated that trust perception strongly influenced both browsing depth and conversion probability. Users who rated AI as transparent and non-intrusive exhibited longer engagement periods and higher propensities to accept personalised prompts. A clear behavioural inflection occurred when users felt overwhelmed or surveilled; these sessions displayed abrupt exits, rapid scrolling, and avoidance of recommendation zones. Emotional comfort scores aligned with chatbot engagement, indicating that natural, conversational tone and non-pushy assistance improved decision confidence. Cluster analysis showed three distinct user types: trust-driven converters, experience-driven explorers, and sceptical resisters. The first group converted frequently and early, while the latter displayed prolonged sessions with low commitment.



Figure 2: Important Factors for Young Customer [25]

### 4.4 Conversion Funnel Impact

AI-mediated interaction significantly improved the conversion funnel across all stages. Users exposed to dynamic personalisation progressed more smoothly from awareness to evaluation and ultimately to purchase. Abandonment rate reduction was most prominent where conversational AI was used to address hesitation triggers, such as price doubts, product uncertainty, or return-policy questions. Funnel mapping indicated that AI shortened decision cycles and increased the proportion of users moving directly from product view to cart addition, bypassing extended comparison stages.

Table 4. Conversion Funnel Performance Across Interface Types

Funnel Stage	Static Recommendations	AI Dynamic Recommendations	Conversational AI
Awareness → Interest	32%	48%	55%
Interest → Evaluation	21%	37%	44%
Evaluation → Cart	14%	28%	36%
Cart → Purchase	8%	19%	25%

### 4.5 Overall Interpretation

Findings confirm that AI fundamentally reshapes not only what users see but *how* they think, evaluate, and decide. Behavioural pathways became more streamlined, emotionally attuned, and responsive to subtle cues when AI mediated interactions. Trust emerged as the hinge between user acceptance and conversion, as emotionally positive interactions and transparent systems yielded higher commitment levels. Ultimately, AI transforms the digital decision process into a guided, adaptive, and psychologically aligned journey that accelerates conversions while enhancing user experience.

## 5. CONCLUSION

This study demonstrates that artificial intelligence fundamentally reshapes the psychological, behavioural, and experiential foundations of online consumer decision-making, transforming the journey from initial clicks to final conversions into an adaptive, personalised, and emotionally calibrated process. By integrating clickstream patterns, sentiment cues, and trust indicators, AI systems create digital environments that feel more intuitive, responsive, and tailored to individual preferences, thereby reducing cognitive load and streamlining user evaluation. The findings show that AI-driven architectures significantly enhance engagement by narrowing choice fields, anticipating hesitation points, and offering timely interventions that guide consumers toward decision readiness. Trust emerged as the central psychological driver in this transformation: when users perceive AI as transparent, competent, and non-intrusive, their engagement deepens, their resistance diminishes, and their conversion likelihood increases. Conversely, negative emotional responses, such as feelings of surveillance or manipulation, immediately suppress engagement and disrupt the decision process. The comparative analysis of interface types further indicates that conversational AI creates the strongest behavioural improvements, both by simulating social presence and by offering real-time reassurance that heightens decision confidence. Ultimately, the study positions AI not merely as a technical enhancement to e-commerce, but as a

behavioural force that reconstructs how consumers interpret information, form trust, and commit to purchase actions. These insights underscore the need for businesses to adopt ethically aligned, user-centred AI strategies that balance persuasive effectiveness with transparency and respect for consumer autonomy, ensuring that technological innovation enhances decision quality without compromising trust or agency. Looking ahead, the findings highlight that AI's influence on consumer decision-making will intensify as systems evolve toward greater contextual awareness and behavioural sensitivity. The convergence of predictive analytics, multimodal interfaces, and emotionally intelligent algorithms will further blur the line between autonomous user choice and AI-guided persuasion. As digital ecosystems mature, organisations must prioritise transparent and accountable AI design to avoid eroding trust, amplifying perceived manipulation, or compromising consumer welfare. This expanding landscape positions ethical governance, explainability, and user empowerment as indispensable pillars for sustaining credible AI-driven commerce in the coming decade.

## 6. FUTURE WORK

Future research should expand this study by developing longitudinal models that capture how consumer trust evolves across repeated interactions with AI-driven systems, as trust formation is dynamic and may shift as users become more aware of algorithmic behaviour. There is also strong potential for integrating multimodal behavioural signals, including eye tracking, voice sentiment, and gesture analysis, to obtain richer insights into real-time emotional responses to AI-mediated experiences. Further work could examine cross-cultural variations in digital trust, recognising that attitudes toward automation, privacy, and personalisation differ substantially across demographic groups and national contexts. As conversational agents become more human-like, future studies should also evaluate the ethical boundaries of anthropomorphic AI and its influence on persuasion, dependency, and perceived authenticity. Additionally, investigating how generative AI content such as personalised product descriptions and adaptive user interfaces impacts credibility and conversion could provide new perspectives on emerging commerce ecosystems. Ultimately, future research must balance technical innovation with ethical considerations to ensure AI-driven persuasion remains transparent, fair, and beneficial to users. Future investigations should also explore the boundary conditions under which AI-driven recommendations shift from supportive to overly directive, potentially diminishing user autonomy or leading to decision fatigue. Evaluating these threshold effects across diverse platform types retail, travel, financial services, and subscription ecosystems would offer broader generalisability. Additionally, integrating physiological or neurocognitive measures could provide more objective insights into how users respond to AI-mediated persuasion beyond self-reported trust indicators. As wearable technologies and emotion-sensing interfaces mature, interdisciplinary approaches combining behavioural science, AI ethics, and human-computer interaction will be essential for designing digital

marketplaces that enhance rather than exploit consumer decision processes

## .. REFERENCES

- [1] Jannach, D., Jugovac, M., & Lerche, L. (2021). Efficient algorithms for real-time recommendation. *ACM Transactions on Intelligent Systems and Technology*, 12(4), 1–25.
- [2] Zhang, S., Yao, L., Sun, A., & Tay, Y. (2019). Deep learning based recommender system: A survey and new perspectives. *ACM Computing Surveys*, 52(1), 1–38.
- [3] Chen, Y., Wang, Q., & Xie, K. (2021). Sentiment-driven user modelling in e-commerce personalization. *Information Processing & Management*, 58(5), 102667.
- [4] Kaptein, M., & Eckles, D. (2012). Heterogeneity in the effects of online persuasion. *Journal of Consumer Research*, 39(3), 584–599.
- [5] Bucklin, R., & Sismeiro, C. (2022). Clickstream behaviour and predictive modelling. *Marketing Science*, 41(4), 678–695.
- [6] Sundar, S. S. (2020). Theoretical foundations of human–AI interaction. *Journal of Computer-Mediated Communication*, 25(1), 74–88.
- [7] Hoff, K., & Bashir, M. (2015). Trust in automation: Integrating empirical evidence. *Human Factors*, 57(3), 407–434.
- [8] Logg, J., Minson, J., & Moore, D. (2019). Algorithm appreciation: People prefer algorithmic to human advice. *Organizational Behavior and Human Decision Processes*, 151, 90–103.
- [9] Martin, K., & Nissenbaum, H. (2020). Privacy in the age of algorithms: Ethical implications of data-driven technologies. *Journal of Business Ethics*, 164, 509–532.
- [10] van Doorn, J., & Hoekstra, J. (2023). Consumer resistance to AI-enabled personalization. *Journal of Interactive Marketing*, 62, 50–66.
- [11] Lee, J. D., & See, K. A. (2004). Trust in automation: Designing for calibrated trust. *Ergonomics*, 46(1), 50–80.
- [12] Komiak, S. Y., & Benbasat, I. (2006). The effects of personalization on trust and loyalty. *MIS Quarterly*, 30(4), 941–960.
- [13] Qiu, L., & Benbasat, I. (2023). The role of social presence in conversational commerce. *Information Systems Research*, 34(2), 456–476.
- [14] Thaler, R., & Sunstein, C. (2008). *Nudge: Improving Decisions About Health, Wealth, and Happiness*. Yale University Press.
- [15] Hauser, J., Urban, G., & Liberali, G. (2020). The AI-powered conversion funnel: Real-time optimization. *Marketing Science*, 39(6), 1035–1054.
- [16] Kirkpatrick, D., & Huang, T. (2022). Digital behaviour modelling and AI inference systems. *Expert Systems with Applications*, 187, 115914.
- [17] Padmanabhan, B., & Zheng, Z. (2021). Mining clickstream data to model consumer intent. *Decision Support Systems*, 149, 113595.
- [18] Nair, H., & Narayanan, S. (2019). Predictive analytics in digital commerce using ensemble learning. *Management Science*, 65(9), 4335–4353.

[19] Xu, Y., & Kim, H. (2022). AI-driven interface testing: User adaptation under dynamic personalization. *International Journal of Human-Computer Studies*, 165, 102847.

[20] McKnight, D. H., & Chervany, N. (2001). Trust measurement in e-commerce. *International Journal of Electronic Commerce*, 6(2), 35–60.

[21] Belanche, D., Casaló, L., & Flavián, C. (2021). The role of trust and perceived usefulness in AI-driven services. *Journal of Business Research*, 129, 906–915.

[22] Calefato, F., Lanubile, F., & Novielli, N. (2018). Sentiment analysis for user satisfaction prediction. *IEEE Transactions on Affective Computing*, 9(2), 191–204.

[23] Lundberg, S., & Lee, S. (2017). A unified approach to interpreting model predictions. *Advances in Neural Information Processing Systems*, 30, 4765–4774.

[24] Shin, D. (2021). How AI shapes user trust and perceived fairness. *Computers in Human Behavior*, 120, 106761.

[25] Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change marketing. *Journal of the Academy of Marketing Science*, 48, 24–42