Role of Artificial Intelligence Information in Product Selection for Chinese Consumers

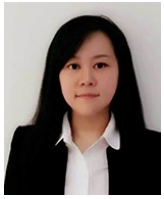
Pengyu Liu; Hui Zhang

Recommended Citation:

Pengyu Liu, Hui Zhang (2024). "Role of Artificial Intelligence Information in Product Selection for Chinese Consumers". *Profesional de la información*, v. 33, n. 1, e330020

https://doi.org/10.3145/epi.2024.0020

Received: 12th October 2023
Accepted: 24th April 2024



Pengyu Liu
Department of Art and Technology
School of Visual Arts and Design
Guangzhou Academy of Fine Arts
Guangzhou, Guangdong
510006, China.
pengyu_liu123@outlook.com

Hui Zhang ✉
Department of Visual Communication Design
Arts College, Heilongjiang University
Haerbin, Heilongjiang
150080, China.
designofficeliu1@126.com

Abstract

A significant amount of AI information has been incorporated into the process of selecting products that offer consumers more precise and individualized services. Conducting research on the various functional experiences of AI for consumers is crucial in order to enhance the current implementation of AI information in China. The purposive sampling techniques is used to target the desired consumer in China. In order to assist consumers in selecting the desired product, this study categorizes AI-related information into three distinct dimensions: insight, interaction, and accuracy. The mediating variable is defined as the consideration set. This study employs primary methods to examine the impact of three components of AI information in order to investigate the internal mechanism that influences consumers' product selection. The findings shows that AI insight is the strongest predictor of consideration set followed by accuracy and interaction is also significant. This study is significant for e-commerce, consumer and market.

Keywords

Artificial Intelligence Information, Product Selection, Consideration Set, Intention, SEM and China.

1. Introduction

E-commerce is a highly dynamic industry due to the technological evolution. Many of these types of organizations readily incorporate new technologies whenever they become available in an effort to increase their competitiveness. Ecommerce proprietors have integrated artificial intelligence (AI) into their repertoire of technologies. Ecommerce emerged as the primary adopter of artificial intelligence, with the Fin-tech sector following suit (**Pushpa *et al.***, 2023). Over the last seven years, there has been a substantial surge in its adoption. As reported in **Makarius *et al.*** (2020), an approximated 84% of these organizations are presently adopting artificial intelligence or are planning the adoption of this technology. Furthermore, 25% artificial intelligence has generated an additional 25% in revenue for ecommerce companies, according to reference (**Lari; Vaishnava; Manu**, 2022). Practically all e-commerce platforms possess critical customer data that could be leveraged to enhance targeted advertising (**Camilleri**, 2020). Conversely, the vast majority of organizations are incapable of utilizing the terabytes upon terabytes of data at their disposal. Beneficial in this circumstance, big data analytics employ artificial intelligence to automate the processing of tremendous data sets (**Rahmani *et al.***, 2021). In a departure from conventional marketing practices, a number of major retailers are perpetually enhancing their results through the application of machine learning.

The conversion of consideration into selection or intention to purchase is a critical function performed by artificial intelligence. E-commerce enterprises obtain a substantial volume of data pertaining to prospective customers or leads (**Li; Zhang**, 2021). Warm leads (who have expressed interest in the brand or product) and cold leads (who may not be familiar with the brand) can both be contacted via AI (**Puntoni *et al.***, 2021). Warm leads are those who have already demonstrated consideration in the brand or product. In addition to this, empirical evidence supports the notion that artificial intelligence is an exceptionally effective method for remarketing customers. Retargeting is a marketing strategy that targets prospective customers who are in the sales

funnel but have not yet completed the purchase process (**Zhang; Zantedeschi; Shivendu**, 2023b). While there are numerous methods for retargeting with artificial intelligence, the vast majority of them involve personalized business messages.

Presently available commercial messaging that is most personalized is conversational artificial intelligence (AI) (**Shumanov; Johnson**, 2021). It is critical to comprehend and retrieve information in the consumer's context as opposed to the business context. The majority of an organization's data resides in its database. However, AI simplifies the process of data analysis. Prior research has examined AI data within the framework of business operations. This study applies AI information to the consumer context. As a result, consumers rely on AI-generated information to make product selections, as they perceive AI to deliver precise, insightful, and interactive data. Therefore, these dimensions are regarded as AI information in this study (**Báez-Sánchez; Bobko**, 2020).

Document "Secrets of Artificial Intelligence Winning Consumers: Enabling Human Intelligence" was published by the Capgemini Digital Transformation Research Institute. His research indicates that 38% of consumers have a positive experience with AI, and their purchase volume increases substantially. Several studies have examined AI service adoption willingness, AI personalized recommendations (**Yoon; Lee**, 2021), AI pricing (**Flavián *et al.***, 2022), and AI consumer assistants (**McLean; Osei-Frimpong; Barhorst**, 2021) in various marketing scenarios, including information delivery (**Yaiprasert; Hidayanto**, 2023) and service delivery. Nevertheless, there is an inadequacy of research that examines the mechanism of AI information in the context of consumer, particularly regarding the influence mechanism on buyer product selection, and that takes into account all AI information in the context of purchase intention or product selection. The inquiry into whether a consideration set can serve as a mediator variable between AI information and consumer product selection, as well as the extent to which the mediator influences product selection, remains unanswered. Thus, we develop a structural equation model in this research endeavor to investigate the relationship between AI information and consumers' purchasing decisions regarding products. We also assess the mediating effect of the consideration set in this relationship. Concurrently, we seek to ascertain the differential impact of each predictor through the mechanism of a mediator. The findings establish a practical foundation for companies to investigate a well-researched avenue of AI information and to enhance buyer purchasing consideration in order to significantly improve the sustainability of shopping services.

The results indicate that each of the proposed hypotheses is statistically significant and supported. The consideration set is primarily determined by the impact of AI insight, with accuracy and interaction respectively. This study provides researchers with the chance to explore heightened customer perspectives that improve the precision, usability, and promptness of AI information. Furthermore, this study holds importance for businesses aiming to restructure their consumer targeting strategies through the implementation of AI-powered information categorization. The structure of the paper is as follows.

The subsequent sections of this paper are structured as follows. In Section 2, the literature review and formulation of the hypotheses are presented. In Sections 3 and 4, the research methodology and outcomes of hypothesis testing are detailed. In addition, the paper concludes with a discussion of the study's contributions, limitations, and outcomes, as well as recommendations for future research.

2. Literature Review and Hypotheses Development

This study proposes that online shopping platforms can provide consumers with intuitive AI information via intelligent delivery accuracy, intelligent recommendation, and virtual customer service assistants, based on an extensive review of domestic and literature and the information of industrial workers. As a result, this study addresses in an innovative manner the aforementioned three categories of AI information that affect the experiences of online consumers: interactive information, accurate information, and insight information.

An intelligent decision support system is created through the incorporation of artificial intelligence, information technology, and systems engineering-related technologies. This system has the capacity to significantly alter the capabilities of human decision-making (**Duan; Edwards; Dwivedi**, 2019). Intelligent recognition and search refers to the ways in which the marketing engines of e-commerce platforms utilise AI information and big data to expedite the filtering process for consumers when confronted with vast quantities of data (**Kashyap; Sahu; Kumar**, 2022). When consumers enter keywords, voice, or images into the search bar, artificial intelligence can use text, voice, and image analysis information to locate and priorities potential targeted commodities (**Shahin; Chen; Hosseinzadeh**, 2024). Autonomous neural networks for learning have effectively mitigated the 30% error rate observed in 2010 and reduced it to 4% by 2016 (**Parisi *et al.***, 2019).

By 2021, AI speech recognition will have attained parity with that of humans. A proliferation of data volume introduces intricacy into the decision-making process at the individual level, ultimately rendering it unfeasible to finalize (**Vijayalakshmi; Jayasudha**, 2024). Intelligent search engines can help users remove dissonance and assist consumers in finding the desired product in an accurate manner (**Chetioui; El Bouzidi**, 2023). The foregoing demonstrates conclusively that AI information can provide consumers with accurate data (**Deng *et al.***, 2021). Currently, prominent Chinese e-commerce platforms and various search engines, have achieved text, image, and voice recognition capabilities.

The stimulation of AI information technology is conducive to consumers making complex selection decisions (**Bjørlo;**

Moen; Pasquine, 2021), which can save consumers time and money when purchasing (**Hoyer *et al.***, 2020), making shopping decisions more accurate and contributing to the enhancement of consumers' shopping efficiency (**Tsai *et al.***, 2020). In order to give consumers a more effective consumption reference and make the consideration set form of the entire consumption process richer and smoother, In five areas—problem recognition, information collection, alternative evaluation, purchase decision-making, and post-purchase evaluation—artificial intelligence technologies such as speech recognition, machine vision, and visual recognition—can provide greater insight into consumer behavior (**Röst; Sadeghimanesh**, 2021; **Gkikas; Theodoridis**, 2022). Accurate and extensive information stimulation during user interactions on e-commerce platforms can broaden the scope of target selection for consumers (**Xue *et al.***, 2020). The personalized information needs of consumers with regard to delight, regard, and attention can be met by the visual impact of online purchasing and perusing (**Batool; Mou**, 2023). Artificial intelligence can search for words, images, and voice using machine vision and deep learning technologies, allowing consumers to accurately identify product features (**Haleem *et al.***, 2022). This improves the consumer search experience, reduces shopping boredom, and increases interest in the consumption process (**Hyun; Thavisay; Lee**, 2022). Following this, the subsequent hypotheses are proposed:

H1: AI information accuracy has positive and significant influence on product selection of consumers via consideration set
H1a: AI information accuracy has positive and significant influence on consideration set of consumers in China.

In accordance with user preferences and propensity to pay, machine learning can personalize the content of the organization's website and establish seamless, cross-device connections with consumers across all channels (**Heinemann**, 2023). Regarding the comprehension of consumer preferences, machine learning is arguably the most effective technology (**Sun; Zafar; Hasan**, 2022; **Ma; Sun**, 2020). Personalized solutions can be generated based on AI-generated information that accurately predicts user requirements and provides insight into users (**Verma; Kumari**, 2023). The interactive consultation and decision-making system (**Jussupow *et al.***, 2021). is the marketing software system that utilizes information from AI technology and big data (**Haleem *et al.***, 2022). Automatic knowledge acquisition and intelligent decision-making are its most conspicuous attributes (**Cossette-Lefebvre; Maclure**, 2023). The most prevalent application of AI information in the marketing domain, as perceived by users, is the provision of desired products to thousands of consumers in a timely manner (**Haleem *et al.***, 2022). Among these applications, the intelligent push portion of the "guess you like" function on online shopping platforms is the most prevalent utilization of AI information (**Deng; Guo**, 2023). To gain informational insight into consumer behavior, AI information technology maximizes the utilization of the vast quantities of data stored on the e-commerce platform (**Zhang; Pee; Cui**, 2021). It minimizes the cognitive burden of consumers, is committed to providing optimal services for customers through prediction, and employs a recommendation engine to suggest products that users may purchase in the future based on their previous purchases. As compared to conventional retail, the precision and impact of "intelligent" advertising executed via AI technology are considerably greater (**Qin; Jiang**, 2019). The aforementioned describes the experience of employing the insight function that AI information provides to consumers.

A crucial subfield of artificial intelligence is machine learning. It can precisely discern the preferences and purchasing requirements of customers, deliver tailored information to current and prospective clients, and offer more efficient product selection recommendations to consumers, in accordance with an algorithm of evolutionary behavior derived from empirical data (**Ahn**, 2010). Nonetheless, some mechanism must be in place for the intelligent spread of information to affect the product selection behaviour of consumers. In order to prevent the loss of the purpose and significance of purchasing, the promoted information must elicit a certain level of cognitive and physical engagement from the consumer, as well as stimulate their consideration of the information's efficacy (**Underwood; Klein; Burke**, 2001). Therefore, the following assumptions are put forward:

H2: AI information insight has positive and significant influence on product selection of consumers via consideration set
H2a: AI information insight has positive and significant influence on consideration set of consumers in China.

AI customer service has supplanted human customer service as a result of machine learning and natural language interaction. AI customer service provides users with a human-like communication mode (**Song *et al.***, 2022), can comprehend and respond to consumer language (**Adam; Wessel; Benlian**, 2021), aids businesses in consumer marketing and sales (**Daqar; Smoudy**, 2019), and logs customer preferences and behaviors (**Ostrom; Fotheringham; Bitner**, 2019). In order to better communicate with consumers and merchants, the online shopping platform's virtual assistant has started to take on the role of intelligent information (**Demirkan; Spohrer**, 2014). This is especially true when it comes to providing advice on common issues like products, inventory, invoices, logistics, and returns (**Zhang *et al.***, 2023a). Positioned at the entrance, an AI virtual assistant can provide voice interaction with consumers to provide intelligent interactive information that assists them in making complex purchase decisions and concluding closed-loop consumption (**Bhardwaj *et al.***, 2024). The interactive AI information technology offers consumers is accurately reflected in the aforementioned.

Individuals may experience either a favorable or unfavorable emotional reaction to and be influenced by the information generated by artificial intelligence (**Chiu; Zhu; Corbett**, 2021), notwithstanding their awareness that this influence does not originate from a genuine interpersonal emotional exchange (**Edmondson; Bransby**, 2023). Certain scholars hold the belief that AI information technology can facilitate the automation of consumer feedback management (**Haleem *et al.***, 2022). Furthermore, they assert that artificial intelligence-powered emotional analysis can aid marketers in providing more

effective responses to consumers, by augmenting the intelligence quotients of automated customer service agents operating on e-commerce platforms, the overall consumer value experience for online purchasing can be elevated (**Sun *et al.***, 2022). Consequently, the subsequent assumptions are proposed: The number of products on a client's desire list constitutes a consideration set. Irrespective of the list's extent, a consumer retains the discretion to proceed or abstain from the purchase. Individuals who mark products as favorites on ecommerce platforms are more likely to ultimately make a purchase of those items, according to (**Meng *et al.***, 2021). When an individual adds an item to a wish list, it is due to their being impressed by its features (**Malik *et al.***, 2020). The items on this list are rarely removed unless they are sold out (**Turunen; Cervellon; Carey**, 2020). However, on each visit to the 'cart', 'favorites', or 'wish list' pages, the products will serve as a visual reminder of the user's prior purchase intent or product selection (**Wang; Cheah; Lim**, 2023). The outcome is a customer-driven desire to finalize the transaction and obtain the products that are enumerated, and this alternative is consistently accessible and convenient for the client (**Gbadamosi**, 2020). Numerous consumers, provided they possess the necessary financial means to complete the transaction, are captivated by the purchase (**Aljukhadar; Bériault Poirier; Senecal**, 2020). The researcher thus developed the following hypothesis:

H3: AI information interactive has positive and significant influence on product selection of consumers via consideration set
H3a: AI information interactive has positive and significant influence on consideration set of consumers in China.
H4: There is a positive and significant influence of consideration set to product selection of consumer in China.

3. Research Methodology

The research philosophy places emphasis on the process by which beliefs and assumptions contribute to the advancement of knowledge (**Coates**, 2021). It is specifically what the researchers strives for during the course of conducting research and acquiring knowledge in a given field. The present study employs the positivist philosophy of analysis. Just as generalizations originate from an observable social reality, positivism focuses on that which generates laws. This philosophy bases the development of hypotheses in this study on an established theory. In addition, this philosophy is applied to this research due to its focus on quantifiable and measurable data. In conducting this research, data collection and analysis are conducted using the quantitative method. The quantitative approach emphasizes measurable data and offers a methodical framework for evaluating occurrences and their correlations. Furthermore, in the course of conducting this research, the author assessed the instruments' validity and reliability in order to guarantee the data's rigor. The research paper incorporated a descriptive survey design, which drew inspiration from the positivist research philosophy that underpins the study. The philosophy is appropriate as this research investigates the impact of artificial intelligence information on the product selection of consumers during both online and in-person purchases. We are specifically intrigued by investigating the manner in which a consumer evaluates products beyond the mere act of selecting them. Our Research Model, upon which a collection of testable hypotheses is constructed, is depicted in Figure 1. By employing this methodology, the investigator ascertained that data would be gathered at the consumer level. The researcher utilized social media to engage the target consumer in an effort to reduce the potential number of responses and improve the quality of those received. The criteria for inclusion were individuals who had gathered the product data. It was determined that the study population consisted of the total number of users who matched this profile.

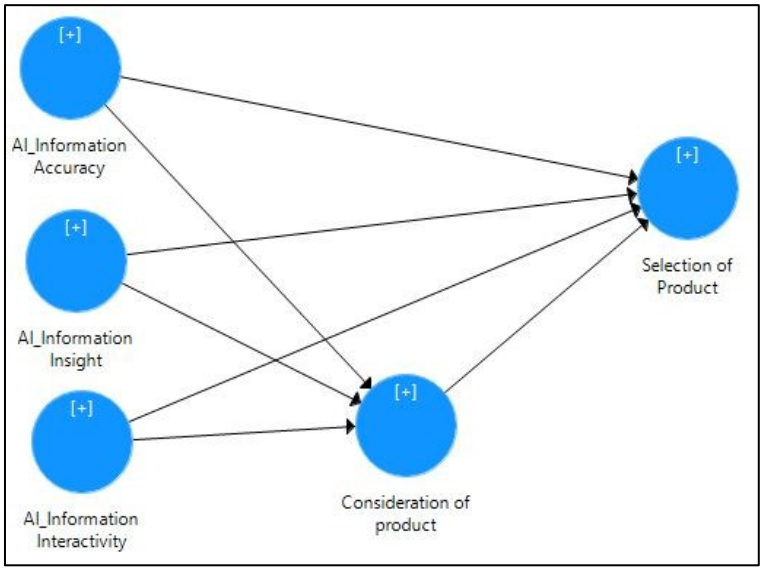


Figure 1: AI Information Model.

3.1. Sample Procedure and Data Collection

A sample comprises a portion of the entire population that is being examined. The study population consisted of Chinese market consumers. To determine the sample, the researcher employed the technique of purposive sampling. As the criterion for determining the unit of analysis from China, the analysis of product-specific information from AI is required by the participant.

Additionally, participants were required to purchase or consider the product through online within the previous two months utilizing the information provided by the artificial intelligence systems and to be willing to partake in the research. A probabilistic sampling method was employed to ensure that every Chinese had an equal opportunity to partake in the survey. It was considered appropriate due to the similarity of characteristics among all the respondents. The initial vetting process involved meeting the purposive criteria of sampling. Social media platform use to target the audience for initial purposive screening in China. There are nearly one thousand individuals who meet the requirements and attest to answer the preliminary inquiries. The participants who expressed interest were provided with email URLs to the questionnaires. The online survey was administered through Google Forms, a platform that was created and is owned by Google in order to facilitate the accumulation of data for research purposes. All inquiries were made available on the website, and participants were directed to them via a hyperlink in order to engage with the questions. For convenience's sake, the researcher drafted the questionnaire using easy English. One thousand individuals were mailed the questionnaire. The encouraging result indicated that 343 participants completed the questionnaire in a timely manner, representing a response rate of 34.3%. Even more positively, there were no unanswered inquiries. The researcher ensured this result was achieved by following up with those who had not responded to their questionnaire via email reminders. A reminder was also extended to individuals who had only partially completed the task. Using the G power formula, the researcher calculated that a minimum sample size of 137 was required. The calculation was predicated on this numerical value. Thus, the final sample is 392 that is more than sufficient.

3.2. Measurement

Regarding the evaluation of artificial intelligence information in the context of product selection. A comprehensive literature review on current artificial intelligence information and functional scenarios for the Chinese' consumer helps to decide the measurement of artificial intelligence information. Building upon the aforementioned summary, this article assesses the three-dimensional nature of consumers' AI-information in process to select the product. Accuracy refers to the ability to locate the desired product. The second refer to insight to personalized recommendations, and interactivity refer to virtual assistance with a specific inquiry. The measure of accuracy is derived from **Yin and Qiu**'s (2021) research. The measurement of insight experience is determined by the research perspectives of **Qian and Xu** (2019), **Kumar *et al.*** (2019), and **Jordan and Mitchell** (2015). The dimension of interactivity measurement pertains to the assessment of responsiveness as defined by **Jiang; Zhao, and Meng** (2014). The measurement of the consideration set is based on **Shocker *et al.***'s (1991) research. The product selection of consumers is quantified using the scale developed by **Lorenzo-Romero; Alarcon-del-Amo, and Gómez-Borja** (2016). The researchers have developed a measurement that incorporates the relevant aspects of product selection by using artificial intelligence information. Point 1 denoted strong disapproval and point 7 signified strong approval, in accordance with the measurement items of the aforementioned scale, which were utilized to construct the questionnaire. Two phases were utilized to complete the survey so as to assurance the rationality and efficacy of the questionnaire design. A large number of instruments are available on artificial intelligence technologies advance. Therefore, the modifications are incorporated into each individual scale. Conversely, this research endeavor devised a survey within the framework of employing AI information to ascertain the optimal product. Insight, interactivity, and accuracy are the three primary attributes of the information. Three components were utilized as AI information in this research.

3.3. Data Analysis

The data analysis for this study was conducted using SPSS 25.0 and Smart PLS. The collected data for the scale were initially subjected to validity and reliability tests. Furthermore, to validate the fit between the model and the data, confirmatory factor analysis (CFA) was performed on the structural equation model (SEM). The theoretical model was subsequently subjected to overall and multi-group path coefficient analyses.

3.4. Pilot Study

Due to modifications made to the instruments, the initial phase was the pre-survey stage. Twenty participants were sent the pilot study via We Chat, which was conducted through the social media platform, so that they could complete it. We ensured that respondents could comprehend the research terms and product selection by providing an overview of the purpose of the study and the definition of AI and AI information at the beginning of the questionnaire. This included intelligent search, intelligent accuracy and recommendation, and virtual customer service assistant. The effective rate was ultimately 86%, with the confirmation of 13 valid questionnaires. A preliminary investigation was conducted to identify significant factors for the questionnaire. 16 items and six latent variables were derived from the analysis of fifteen small-scale questionnaires. As 0.93 is an Alpha value greater than 0.9 for the associated variables, the questionnaire can be utilized for formal research with confidence. Six latent variables are assessed in the second section, which comprises the bulk of the questionnaire. The initial section consists of personal information.

4. Results

The data analysis for the current research was performed in three distinct phases prior to the structural analysis. In the first phase descriptive statistics and correlation matrix are presented. CFA was utilized to validate the PLS measurement model initially, then outer loadings and reliability were assessed. Convergent and discriminant validities are assessed for all variables during the

second phase. The table 1 & 2 shows the descriptive statistics and correlation matrix respectively that confirm the descriptive analysis of the constructs for further analysis. The outer loadings specify the minimum criterion of 0.6 for each item's loading in the corresponding factor. Therefore, each of the constructs successfully met the minimum criterion of 0.6. Composite reliability is the most suitable metric for verifying the internal consistency of the constructs. 0.7 represents the minimum threshold for composite reliability. Therefore, each construct satisfies the minimum requirements, as shown in Table 3. The AVE value, which must be greater than 0.5, verifies the convergent validity (**Fornell; Larcker**, 1981). The 0.5 criteria specify that any discrepancies in the constructs are attributable to particular objects. Consequently, each of the constructs examined in this research study met the minimum threshold of 0.5 (refer to Table 3). Additionally, it is imperative to validate discriminant validity during the data analysis phase. It demonstrates how every construct is distinct from the others. If the square root of the AVE for each construct is greater than the correlation of all other constructs, then discriminant validity is confirmed. All variables attain discriminant validity, as evidenced by the fact that the diagonal value (square root of AVE) is greater than the bivariate correlation of other constructs (Refer to Table 4). As a consequence, the model demonstrates discriminant validity. The goodness-of-fit formula was employed in the concluding stage to validate the hypothesized model. Criteria consist of R2, Q2 and model fit also measured with SRMR and NFI values.

Table 1: Descriptive Statistics.

	Mean	Std. Deviation
AI Accuracy	4.314	1.545
AI Insight	5.666	0.960
AI Interactive	4.161	1.545
Consideration Set	5.456	1.174
Product Selection	5.466	1.155

Table 2: Correlation Matrix.

	AI Accuracy	AI Insight	AI Interactive	Consideration Set	Product Selection
AI Accuracy	**1**				
AI Insight	0.117	**1**			
AI Interactive	.791**	0.103	**1**		
Consideration Set	.443**	.356**	.367**	**1**	
Product Selection	.340**	.318**	.291**	.552**	**1**
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 3: Outer Loadings, Reliability and Convergent Validity.

Latent Constructs	Items	Outer loadings	Composite Reliability	AVE
AI Information Accuracy	AIAC1	0.935	0.942	0.844
	AIAC2	0.925		
	AIAC3	0.896		
AI Information Insight	AIIN1	0.875	0.894	0.737
	AIIN2	0.888		
	AIIN3	0.843		
AI Information Interactivity	AIIT1	0.849	0.902	0.755
	AIIT2	0.877		
	AIIT3	0.856		
Consideration set	CS1	0.843	0.896	0.741
	CS2	0.867		
	CS3	0.866		
Selection of Product	SP1	0.854	0.925	0.756
	SP2	0.862		
	SP3	0.882		
	SP4	0.880		

Table 4: Discriminant Validity.

	1	2	3	4	5
1	0.919				
2	0.116	0.859			
3	0.722	0.183	0.869		
4	0.445	0.357	0.462	0.861	
5	0.344	0.321	0.263	0.552	0.869

4.1 Structural Paths

This study used 500 bootstrapping with 572 respondents to investigate the model's path coefficient for statistical significance. The detailed estimations of the structural routes are shown in Tables 5 and 6. First, talk about the indirect hypothesis that suggests a favorable relationship between the accuracy of AI knowledge and product selection using a consideration set. The outcome shows that the suggested hypothesis and the data have a significant (p=0.001) and positive effect (β=0.112). This implies that the indirect hypothesis is true. The next hypothesis proposes a direct and positive relationship between the

consideration set and the accuracy of AI knowledge. The findings indicate that, with a confidence level of 5%, AI information accuracy significantly influences (β=0.243) consideration. As a result, the suggested hypothesis is validated. The third hypothesis suggests a positive and direct correlation between the product selection process and the consideration set. The outcome shows that the consideration set is the strongest (β=0.463) and most significant predictor of product selection (p=0.000). The fourth hypothesis, which has one tail, suggests a positive indirect effect between product selection and AI information insight, with consideration set acting as a mediator. Using a consideration set with 99% confidence, the structural model shows that AI information insight influences product selection in a positive way (β=0.132). The fifth hypothesis is the AI information insight that positively affects the consideration set. The outcome shows that, with a 99% confidence level, AI information insight has a positive impact (β=0.286) on consideration. Using a consideration set, the sixth relationship between the AI information interactive and product selection is suggested. The findings demonstrate that product selection via consideration set is positively and significantly influenced by AI information interactive (β=0.109; p=0.005). Analyzing the impact of AI information interactive and product selection is the final hypothesis. The findings show that the consideration set is significantly (p=0.005) and positively (β=0.235) influenced by AI information interactive. Table 5 displays all of the direct hypotheses outcomes, while Table 6 displays all particular indirect results. The particular indirect demonstrates that although AI interaction has full mediation, AI information accuracy and insight have partial mediation. Only the partial or complete mediation is shown, not the direct impact of predictors on outcomes. The goodness of fit of the model is represented by the coefficient's determinant (see table 9). The percentage shows how the independent variables have affected the dependent variables. R2 is a tool for explaining model variance. The statistical method known as R2 is used to explain the regress relation of the suggested relationships. With an R2 of 0.319, the three overconfidence bias drivers account for just 31.9% of the variation in the consideration set. Table 7 demonstrates that the product selection's R2 is 0.345, indicating a mere 34.5% variation by the consideration set. In the current investigation, the R2 value is moderate. The criterion of predictive accuracy, or Q2, is a measure of the model's predictive relevance. Stone-Geisser's Q2 is another name for it. Q2 has to be more than zero. The dependent variables cannot be explained by any independent variable if the value is less than zero. Table 6 of this study reveals that the Q2 values for the consideration set are 0.217 and 0.238 for the product selection. Q2 is greater than 0 in this investigation. The predictors that explain the model are therefore pertinent.

Table 5: Direct Path Coefficient.

	Coefficient	T Value	P Values
AI Information Accuracy -> Consideration set	0.234	3.023	0.003
AI Information Accuracy -> Selection of Product	0.215	3.051	0.002
AI Information Insight -> Consideration set	0.288	5.023	0.000
AI Information Insight -> Selection of Product	0.16	2.297	0.022
AI Information Interactivity -> Consideration set	0.242	2.816	0.005
AI Information Interactivity -> Selection of Product	-0.131	1.704	0.089
Consideration set -> Selection of Product	0.458	5.989	0.000

Table 6: Specific Indirect Hypotheses.

	Coefficient	T Values	P Values
AI Information Accuracy -> Consideration set -> Selection of Product	0.112	2.537	0.011
AI Information Insight -> Consideration set -> Selection of Product	0.132	3.822	0.000
AI Information Interactivity -> Consideration set -> Selection of Product	0.109	2.842	0.005

Table 7: R Square.

	R Square	R Square Adjusted
Consideration set	0.319	0.311
Selection of Product	0.345	0.334

Table 8: Q square.

	Q^2 (=1-SSE/SSO)
Consideration set	0.217
Selection of Product	0.238

Table 9: Model Fit.

	Saturated Model	Estimated Model
SRMR	0.057	0.057
d_ULS	0.440	0.440
d_G	0.301	0.301
Chi-Square	467.874	467.874
NFI	0.816	0.816

5. Discussion

Consumers are more likely to give greater consideration to a product when the information provided by AI is more accurate. Consumer satisfaction with the accuracy of text retrieval facilitated by AI information is highest, according to the survey results.

However, their satisfaction with image recognition technology and voice recognition technology is comparatively lower, as the accuracy provided by these technologies can negatively impact the retrieval experience of consumers. The enhancement of product evaluation through the utilization of accurate AI information suggests that consumers perceive AI information as having greater value in relation to time and money savings, purchasing convenience, and convenience (**Tsai *et al.***, 2020). A procuring platform is more effectively able to assist consumers in their product selection when its AI information provides a higher degree of insight. When the results of the survey are considered, the level of consumer recognition for AI information insight surpasses that of its interactivity and accuracy. Simultaneously, AI information provides online consumers with an insight experience (**Ma; Sun**, 2020). This not only leads to enhanced product consideration but also has the potential to heighten purchase intentions, pique curiosity during the consumption process, and stimulate shopping desire and interest. The influence of consumers' consideration sets on their product selection is the most significant predictor among them.

A greater degree of interaction between AI information and consumers on an e-commerce platform facilitates the development of consumers' product considerations and selection with intention to buy. The contentment of consumers with regard to an AI virtual assistant is comparatively lower than their satisfaction with regard to accuracy and insights. Simultaneously, the interactive nature of AI-generated information on e-commerce platforms fails to adequately encourage the development of this set of considerations. This demonstrates that current AI technology is insufficient to meet the demands of consumers for personalized and emotive communication in instances involving relatively complex semantic and human-computer interactions. Currently, AI interactive is limited to resolving conventional issues, including those pertaining to product description, delivery time, and logistics information. The interaction between AI customer service and the consumer is given less weight than accuracy and insight.

To begin with, the mediating role of consideration sets is positive in the relationship between AI information and consumers' product selection. This suggests that AI information has the potential to influence consumers' product selection through the mediation of consideration. Furthermore, in comparison to alternative predictors, consumers' purchase intention garners the most substantial promotion. The widespread adoption of AI information in e-commerce platforms has resulted in the routine implementation of functional requirements such as product selection, shopping efficiency, and convenience. As a consequence, consumers perceive a greater sense of value-added, leading to greater variations in their consideration sets. With the assistance of AI technology, consumers prefer an online purchasing experience that is more spiritual in nature, evoking delight, relaxation, and stimulation. AI information demonstrates proficiency in dynamically adjusting its recommendation trajectory in response to consumer behavior, consistently identifying potential demand, and directly inciting consumers' desire to make purchases (**Bjørlo *et al.***, 2021). When engaging in online purchasing, the contemplation set assumes a pivotal role in influencing consumers' product selection and purchase intent.

AI is extensively utilized in procuring as a form of technology to assist businesses in increasing their sales volume and to assist customers in identifying the most suitable product that satisfies their needs but does not operate in a direct manner. During the product selection process, consumers seek an emotion that imbues various services and assistance with value. Before deciding which product to purchase, they simply compile a desire list as a consideration set. For instance, factors such as cost and experience can influence the decision to purchase a product (**Gkikas; Theodoridis**, 2022). Consideration sets are effective mediators between AI information and consumers' purchasing decisions on an online retail platform, according to the findings of this study.

5.1. Practical Implication

It is imperative for organizations to uphold the sustainability of AI technological information and marketing investments. This entails the ongoing enhancement and modernization of intelligent search, intelligent recommendation, and intelligent interaction technologies, the improvement of search engine precision for various character fields, images, voice, and image retrieval, and the strengthening of big data retrieval services' technical capabilities. Sustainable optimization of the platform algorithm, enhancement of the platform's AI insight capability, and stimulation of consumer shopping desire can be achieved through the mining of consumer behavior rules, prediction of consumers' intention to select a product, and optimization of the pleasure experience, including relaxation and enjoyment in shopping. It is recommended that organizations enhance their capacity for research and development pertaining to AI interaction technology. This would enable them to surmount the current technical obstacle pertaining to the comprehension and natural language learning of AI customer service, ultimately resulting in a more precise and gratifying interaction environment for users. Enterprises that operate online shopping platforms ought to consider the technological impact that AI data has on the selection process of consumers and broaden their application boundaries in accordance with consumers' intentions regarding online purchasing. Simultaneously, they should accelerate the formation of consumers' intentions to select and purchase products by enhancing the integration of machine vision, artificial neural networks, and other technologies with the online shopping domain, broadening the investigation of consumers' eye movement, expression change, and reasoning psychological state change, and gaining a more precise understanding of the factors that influence consumers' perception in order to select the product.

5.2. Theoretical Implication

This investigation possesses threefold academic and theoretical significance. This study addresses a gap in the local and

global literature regarding AI information by conducting an analysis of the comprehensive application of AI information in the domain of online purchasing. Furthermore, this research study broadens the scope of information technology applications by examining how consumers' product selection is influenced by the stimulus variable of AI technology experience. It accomplishes this by employing consideration set as a mediating mechanism and confirming the significance of the mediating effects of consideration set. This study concludes by assessing the precision, insight, and interactivity of AI in relation to direct and specific indirect differential paths. It concludes that the weightage assigned to the three types of information is considerably greater than that assigned to product selection with the intention to purchase. It furnishes a point of reference for AI information that facilitates the application of online consumer product selection in order to advance sustainable development.

5.3. Limitation and Future Direction

This research has some limitations that must be investigated further in future investigations of AI-related information. To begin with, this study exclusively examines AI information from the consumer's perspective in order to underscore the fundamental determinants. However, future research may expand to encompass additional AI technologies and attributes of AI information, including but not limited to accessibility, reliability, and timeliness. This study employed cross-sectional data, whereas future research will utilize longitudinal data to bolster the findings. This research solely examined a single mediator. Nevertheless, additional mediators may be employed in the future.

5.4. Acknowledgement

1. This research was supported by the 2023 General Project of Guangdong Provincial Philosophy and Social Science Planning Research on Guangdong External Image Design in the New Era (GD23CYS09).
2.This research was supported by the 2023 Guangdong Provincial Education Science Planning Project (Higher Education Special Project) Research on the Strategy of Chinese path to modernization Construction of University Art Design Practice Teaching Service Bay Area (2023GXJK111).
3. This research was supported by the 2021 General Project of Heilongjiang Provincial Philosophy and Social Science Planning Research on Heilongjiang External Image Design in the New Era (21YSB135).

References

Adam, Martin; Wessel, Michael; Benlian, Alexander (2021). "AI-based chatbots in customer service and their effects on user compliance". *Electronic Markets,* v. 31, n. 2, pp. 427-445. *https://doi.org/10.1007/s12525-020-00414-7*

Ahn, Hyung Jun (2010). "Evaluating customer aid functions of online stores with agent-based models of customer behavior and evolution strategy". *Information sciences,* v. 180, n. 9, pp. 1555-1570. *https://doi.org/10.1016/j.ins.2009.12.029*

Aljukhadar, Muhammad; Bériault Poirier, Amélie; Senecal, Sylvain (2020). "Imagery makes social media captivating! Aesthetic value in a consumer-as-value-maximizer framework". *Journal of Research in Interactive Marketing,* v. 14, n. 3, pp. 285-303. *https://doi.org/10.1108/JRIM-10-2018-0136*

Báez-Sánchez, Andrés David; Bobko, Nara (2020). "Analysis of infected population threshold exceedance in an SIR epidemiological model". *arXiv preprint arXiv:2009.06409*. *https://doi.org/10.48550/arXiv.2009.06409*

Batool, Raheela; Mou, Jian (2023). "A systematic literature review and analysis of try-on technology: Virtual fitting rooms". *Data and Information Management,* pp. 100060. *https://doi.org/10.1016/j.dim.2023.100060*

Bhardwaj, Vivek; Dhaliwal, Balwinder Kaur; Sarangi, Sanjaya Kumar; Thiyagu, TM; Patidar, Aruna; Pithawa, Divyam (2024). "Conversational AI: Introduction to Chatbot's Security Risks, Their Probable Solutions, and the Best Practices to Follow." In: *Conversational Artificial Intelligence.* pp. 435-457. Scrivener Publishing LLC. *https://doi.org/10.1002/9781394200801.ch26*

Bjørlo, Lena; Moen, Øystein; Pasquine, Mark (2021). "The role of consumer autonomy in developing sustainable AI: A conceptual framework". *Sustainability,* v. 13, n. 4, pp. 2332. *https://doi.org/10.3390/su13042332*

Camilleri, Mark Anthony (2020). "The use of data-driven technologies for customer-centric marketing". *International Journal of Big Data Management,* v. 1, n. 1, pp. 50-63. *https://doi.org/10.1504/IJBDM.2020.106876*

Chetioui, Youssef; El Bouzidi, Laila (2023). "An investigation of the nexus between online impulsive buying and cognitive dissonance among gen Z shoppers: are female shoppers different?". *Young Consumers,* v. 24, n. 4, pp. 406-426. *https://doi.org/10.1108/YC-06-2022-1548*

Chiu, Yi-Te; Zhu, Yu-Qian; Corbett, Jacqueline (2021). "In the hearts and minds of employees: A model of pre-adoptive appraisal toward artificial intelligence in organizations". *International Journal of Information Management,* v. 60, pp. 102379. *https://doi.org/10.1016/j.ijinfomgt.2021.102379*

Coates, Adam (2021). "The prevalence of philosophical assumptions described in mixed methods research in education". *Journal of Mixed Methods Research,* v. 15, n. 2, pp. 171-189. *https://doi.org/10.1177/1558689820958210*

Cossette-Lefebvre, Hugo; Maclure, Jocelyn (2023). "AI's fairness problem: understanding wrongful discrimination in the context of automated decision-making". *AI and Ethics,* v. 3, n. 4, pp. 1255-1269. *https://doi.org/10.1007/s43681-022-00233-w*

Daqar, Mohannad AM Abu; Smoudy, Ahmad KA (2019). "The role of artificial intelligence on enhancing customer experience". *International Review of Management and Marketing,* v. 9, n. 4, pp. 22-31. *https://doi.org/10.32479/irmm.8166*

Demirkan, Haluk; Spohrer, Jim (2014). "Developing a framework to improve virtual shopping in digital malls with intelligent self-service systems". *Journal of Retailing and Consumer Services,* v. 21, n. 5, pp. 860-868. *https://doi.org/10.1016/j.jretconser.2014.02.012*

Deng, Guangkuan; Zhang, Jianyu; Ye, Naiyi; Chi, Rui (2021). "Consumers' human nature and their shopping channel choices in the emerging artificial intelligence era: based on Xunzi's humanity hypothesis". *International Marketing Review,* v. 38, n. 4, pp. 736-755. *https://doi.org/10.1108/IMR-01-2019-0026*

Deng, Zhihang; Guo, Meiwen (2023). "Research on the impact of the application of artificial intelligence technology on the sustainable development of mobile e-commerce". *Benchmarking: An International Journal*. *https://doi.org/10.1108/BIJ-11-2022-0697*

Duan, Yanqing; Edwards, John S; Dwivedi, Yogesh K (2019). "Artificial intelligence for decision making in the era of Big Data–evolution, challenges and research agenda". *International Journal of Information Management,* v. 48, pp. 63-71. *https://doi.org/10.1016/j.ijinfomgt.2019.01.021*

Edmondson, Amy C; Bransby, Derrick P (2023). "Psychological safety comes of age: Observed themes in an established literature". *Annual Review of Organizational Psychology and Organizational Behavior,* v. 10, n. 1, pp. 55-78. *https://doi.org/10.1146/annurev-orgpsych-120920-055217*

Flavián, Carlos; Pérez-Rueda, Alfredo; Belanche, Daniel; Casaló, Luis V (2022). "Intention to use analytical artificial intelligence (AI) in services–the effect of technology readiness and awareness". *Journal of Service Management,* v. 33, n. 2, pp. 293-320. *https://doi.org/10.1108/JOSM-10-2020-0378*

Fornell, Claes; Larcker, David F (1981). "Evaluating structural equation models with unobservable variables and measurement error". *Journal of Marketing Research,* v. 18, n. 1, pp. 39-50. *https://doi.org/10.1177/002224378101800104*

Gbadamosi, Ayantunji (2020). "Managing products and customer value: Implications for SME marketing." In: *Entrepreneurship Marketing.* pp. 112-130. Routledge. *https://doi.org/10.4324/9780429505461-7*

Gkikas, Dimitris C; Theodoridis, Prokopis K (2022). "AI in consumer behavior." In: *Advances in Artificial Intelligence-based Technologies: Selected Papers in Honour of Professor Nikolaos G. Bourbakis—Vol. 1.* Virvou, M.; Tsihrintzis, G. A.; Tsoukalas, L. H.; Jain, L. C. (Eds.), pp. 147-176. Springer, Cham. *https://doi.org/10.1007/978-3-030-80571-5_10*

Haleem, Abid; Javaid, Mohd; Qadri, Mohd Asim; Singh, Ravi Pratap; Suman, Rajiv (2022). "Artificial intelligence (AI) applications for marketing: A literature-based study". *International Journal of Intelligent Networks,* v. 3, pp. 119-132. *https://doi.org/10.1016/j.ijin.2022.08.005*

Heinemann, Gerrit (2023). "Meta-targeting and Business ideas in online Retailing." In: *The new online trade: Business models, business systems and benchmarks in e-commerce.* pp. 1-63. Springer. *https://doi.org/10.1007/978-3-658-40757-5_1*

Hoyer, Wayne D; Kroschke, Mirja; Schmitt, Bernd; Kraume, Karsten; Shankar, Venkatesh (2020). "Transforming the customer experience through new technologies". *Journal of Interactive Marketing,* v. 51, n. 1, pp. 57-71. *https://doi.org/10.1016/j.intmar.2020.04.001*

Hyun, Hyowon; Thavisay, Toulany; Lee, Suk Hyung (2022). "Enhancing the role of flow experience in social media usage and its impact on shopping". *Journal of Retailing and Consumer Services,* v. 65, pp. 102492. *https://doi.org/10.1016/j.jretconser.2021.102492*

Jiang, S; Zhao, H; Meng, L (2014). "Research on online interaction and impulsive purchasing behavior of B2C online shopping". *Econ. Issues Explor,* v. 5, pp. 64-73. *https://doi.org/10.3969/j.issn.1006-2912.2014.05.011*

Jordan, Michael I; Mitchell, Tom M (2015). "Machine Learning: Trends, Perspectives, and Prospects". *Science,* v. 349, n. 6245, pp. 255-260. *https://doi.org/10.1126/science.aaa8415*

Jussupow, Ekaterina; Spohrer, Kai; Heinzl, Armin; Gawlitza, Joshua (2021). "Augmenting medical diagnosis decisions? An investigation into physicians' decision-making process with artificial intelligence". *Information Systems Research,* v. 32, n. 3, pp. 713-735. *https://doi.org/10.1287/isre.2020.0980*

Kashyap, Anil Kimar; Sahu, Ity; Kumar, Ajay (2022). "Artificial Intelligence and Its Applications in E-Commerce–a Review Analysis and Research Agenda". *Journal of Theoretical and Applied Information Technology,* v. 100, n. 24, pp. 7347-7365. *https://www.jatit.org/volumes/Vol100No24/12Vol100No24.pdf*

Kumar, Vipin; Rajan, Bharath; Venkatesan, Rajkumar; Lecinski, Jim (2019). "Understanding the Role of Artificial Intelligence in Personalized Engagement Marketing". *California Management Review,* v. 61, n. 4, pp. 135-155. *https://doi.org/10.1177/0008125619859317*

Lari, Halima Afroz; Vaishnava, Kuhu; Manu, KS (2022). "Artifical intelligence in E-commerce: Applications, implications and challenges". *Asian Journal of Management,* v. 13, n. 3, pp. 235-244. *https://doi.org/10.52711/2321-5763.2022.00041*

Li, Linze; Zhang, Jun (2021). "Research and analysis of an enterprise E-commerce marketing system under the big data environment". *Journal of Organizational and End User Computing (JOEUC),* v. 33, n. 6, pp. 1-19. *https://doi.org/10.4018/JOEUC.20211101.oa15*

Lorenzo-Romero, Carlota; Alarcon-del-Amo, Maria-del-Carmen; Gómez-Borja, Miguel-Ángel (2016). "Analyzing the User Behavior toward Electronic Commerce Stimuli". *Frontiers in Behavioral Neuroscience,* v. 10, pp. 224. *https://doi.org/10.3389/fnbeh.2016.00224*

Ma, Liye; Sun, Baohong (2020). "Machine learning and AI in marketing–Connecting computing power to human insights". *International Journal of Research in Marketing,* v. 37, n. 3, pp. 481-504. *https://doi.org/10.1016/j.ijresmar.2020.04.005*

Makarius, Erin E; Mukherjee, Debmalya; Fox, Joseph D; Fox, Alexa K (2020). "Rising with the machines: A sociotechnical framework for bringing artificial intelligence into the organization". *Journal of Business Research,* v. 120, pp. 262-273. *https://doi.org/10.1016/j.jbusres.2020.07.045*

Malik, Aneela; Merunka, Dwight; Akram, Muhammad S; Barnes, Bradley R; Chen, Annie (2020). "Self-concept, individual characteristics, and counterfeit consumption: Evidence from an emerging market". *Psychology & Marketing,* v. 37, n. 10, pp. 1378-1395. *https://doi.org/10.1002/mar.21386*

McLean, Graeme; Osei-Frimpong, Kofi; Barhorst, Jennifer (2021). "Alexa, do voice assistants influence consumer brand engagement?–Examining the role of AI powered voice assistants in influencing consumer brand engagement". *Journal of Business Research,* v. 124, pp. 312-328. *https://doi.org/10.1016/j.jbusres.2020.11.045*

Meng, Lu Monroe; Duan, Shen; Zhao, Yijun; Lü, Kevin; Chen, Siyun (2021). "The impact of online celebrity in livestreaming E-commerce on purchase intention from the perspective of emotional contagion". *Journal of Retailing and Consumer Services,* v. 63, pp. 102733. *https://doi.org/10.1016/j.jretconser.2021.102733*

Ostrom, Amy L; Fotheringham, Darima; Bitner, Mary Jo (2019). "Customer acceptance of AI in service encounters: understanding antecedents and consequences." In: *Handbook of Service Science, Volume II.* pp. 77-103. Springer, Cham. *https://doi.org/10.1007/978-3-319-98512-1_5*

Parisi, German I; Kemker, Ronald; Part, Jose L; Kanan, Christopher; Wermter, Stefan (2019). "Continual lifelong learning with neural networks: A review". *Neural Networks,* v. 113, pp. 54-71. *https://doi.org/10.1016/j.neunet.2019.01.012*

Puntoni, Stefano; Reczek, Rebecca Walker; Giesler, Markus; Botti, Simona (2021). "Consumers and artificial intelligence: An experiential perspective". *Journal of Marketing,* v. 85, n. 1, pp. 131-151. *https://doi.org/10.1177/0022242920953847*

Pushpa, A; Jaheer Mukthar, K P; Ramya, U; Asis, Edwin Hernan Ramirez; Martinez, William Rene Dextre (2023). "Adoption of Fintech: A Paradigm Shift Among Millennials as a Next Normal Behaviour." In: *Fintech and Cryptocurrency.* pp. 59-89. Scrivener Publishing LLC. *https://doi.org/10.1002/9781119905028.ch4*

Qian, M; Xu, Z (2019). "A Study of Dynamic Recognition of Consumer Brand Decision-making Preference Based on Machine Learning Method". *Nankai Business Review,* v. 22, n. 1, pp. 66-76. *https://nbr.nankai.edu.cn/nkglpl/article/abstract/180622979*

Qin, Xuebing; Jiang, Zhibin (2019). "The impact of AI on the advertising process: The Chinese experience". *Journal of Advertising,* v. 48, n. 4, pp. 338-346. *https://doi.org/10.1080/00913367.2019.1652122S*

Rahmani, Amir Masoud; Azhir, Elham; Ali, Saqib; Mohammadi, Mokhtar; Ahmed, Omed Hassan; Ghafour, Marwan Yassin; Ahmed, Sarkar Hasan; Hosseinzadeh, Mehdi (2021). "Artificial intelligence approaches and mechanisms for big data analytics: a systematic study". *PeerJ Computer Science,* v. 7, pp. e488. *https://doi.org/10.7717/peerj-cs.488*

Röst, Gergely; Sadeghimanesh, AmirHosein (2021). "Unidirectional migration of populations with Allee effect". *bioRxiv,* pp. 2021.06. 24.449708. *https://doi.org/10.1101/2021.06.24.449708*

Shahin, Mohammad; Chen, F Frank; Hosseinzadeh, Ali (2024). "Harnessing customized AI to create voice of customer via GPT3. 5". *Advanced Engineering Informatics,* v. 61, pp. 102462. *https://doi.org/10.1016/j.aei.2024.102462*

Shocker, Allan D.; Ben-Akiva, Moshe; Boccara, Bruno; Nedungadi, Prakash (1991). "Consideration set influences on consumer decision-making and choice: Issues, models, and suggestions". *Marketing Letters,* v. 2, n. 3, pp. 181-197. *https://doi.org/10.1007/BF00554125*

Shumanov, Michael; Johnson, Lester (2021). "Making conversations with chatbots more personalized". *Computers in Human Behavior,* v. 117, pp. 106627. *https://doi.org/10.1016/j.chb.2020.106627*

Song, Mengmeng; Xing, Xinyu; Duan, Yucong; Cohen, Jason; Mou, Jian (2022). "Will artificial intelligence replace human customer service? The impact of communication quality and privacy risks on adoption intention". *Journal of Retailing and Consumer Services,* v. 66, pp. 102900. *https://doi.org/10.1016/j.jretconser.2021.102900*

Sun, Huilin; Zafar, Muhammad Zeeshan; Hasan, Naveed (2022). "Employing natural language processing as artificial intelligence for analyzing consumer opinion toward advertisement". *Frontiers in Psychology,* v. 13, pp. 856663. *https://doi.org/10.3389/fpsyg.2022.856663*

Tsai, Pei-Hsuan; Lin, Guan-Yi; Zheng, Yu-Lin; Chen, Yi-Chong; Chen, Pao-Zhen; Su, Zheng-Cheng (2020). "Exploring the effect of Starbucks' green marketing on consumers' purchase decisions from consumers' perspective". *Journal of Retailing and Consumer Services,* v. 56, pp. 102162. *https://doi.org/10.1016/j.jretconser.2020.102162*

Turunen, Linda Lisa Maria; Cervellon, Marie-Cecile; Carey, Lindsey Drylie (2020). "Selling second-hand luxury: Empowerment and enactment of social roles". *Journal of Business Research,* v. 116, pp. 474-481. *https://doi.org/10.1016/j.jbusres.2019.11.059*

Underwood, Robert L; Klein, Noreen M; Burke, Raymond R (2001). "Packaging communication: attentional effects of product imagery". *Journal of Product & Brand Management,* v. 10, n. 7, pp. 403-422. *https://doi.org/10.1108/10610420110410531*

Verma, Ramesh Kumar; Kumari, Nalini (2023). "Generative AI as a Tool for Enhancing Customer Relationship Management Automation and Personalization Techniques". *International Journal of Responsible Artificial Intelligence,* v. 13, n. 9, pp. 1-8. *https://neuralslate.com/index.php/Journal-of-Responsible-AI/article/view/66*

Vijayalakshmi, A; Jayasudha, M (2024). *Artificial Intelligence And Data Analytics*. Academic Guru Publishing House.

Wang, Siqi; Cheah, Jun-Hwa; Lim, Xin-Jean (2023). "Online shopping cart abandonment: A review and research agenda". *International Journal of Consumer Studies,* v. 47, n. 2, pp. 453-473. *https://doi.org/10.1111/ijcs.12876*

Xue, Jiaolong; Liang, Xinjian; Xie, Tao; Wang, Haizhong (2020). "See now, act now: How to interact with customers to enhance social commerce engagement?". *Information & Management,* v. 57, n. 6, pp. 103324. *https://doi.org/10.1016/j.im.2020.103324*

Yaiprasert, Chairote; Hidayanto, Achmad Nizar (2023). "AI-driven ensemble three machine learning to enhance digital marketing strategies in the food delivery business". *Intelligent Systems with Applications,* v. 18, pp. 200235. *https://doi.org/10.1016/j.iswa.2023.200235*

Yin, Jiwang; Qiu, Xiaodong (2021). "Ai Technology and Online Purchase Intention: Structural Equation Model Based on Perceived Value". *Sustainability,* v. 13, n. 10, pp. 5671. *https://doi.org/10.3390/su13105671*

Yoon, Namhee; Lee, Ha-Kyung (2021). "AI recommendation service acceptance: Assessing the effects of perceived empathy and need for cognition". *Journal of Theoretical and Applied Electronic Commerce Research,* v. 16, n. 5, pp. 1912-1928. *https://doi.org/10.3390/jtaer16050107*

Zhang, Dan; Pee, L G; Cui, Lili (2021). "Artificial intelligence in E-commerce fulfillment: A case study of resource orchestration at Alibaba's Smart Warehouse". *International Journal of Information Management,* v. 57, pp. 102304. *https://doi.org/10.1016/j.ijinfomgt.2020.102304*

Zhang, Danni; Frei, Regina; Wills, Gary; Gerding, Enrico; Bayer, Steffen; Senyo, Prince Kwame (2023a). "Strategies and practices to reduce the ecological impact of product returns: An environmental sustainability framework for multichannel retail". *Business Strategy and the Environment,* v. 32, n. 7, pp. 4636-4661. *https://doi.org/10.1002/bse.3385*

Zhang, Ran Alan; Zantedeschi, Daniel; Shivendu, Shivendu (2023b). *Multi-platform Targeting along the Consumer Funnel: Targeted Advertising Patterns for Consumer Conversions.* MSI and Marketing Science Institute. *https://thearf-org-unified-admin.s3.amazonaws.com/MSI_Report_23-139.pdf*