Researches on Multidisciplinary Approaches Multidisipliner Akademik Yaklaşım Araştırmaları

Research Article

Researches on Multidisiplinary Approaches 2025, 5(1): 186-198 ISSN:2791-9099

Examination of Consumer Perceptions Regarding Productive Artificial Intelligence Applications: A Qualitative Study on the Case of ChatGPT

Muhammed Fatih Cevher / Dr.
Munzur University, Pertek Sakine Genç Vocational School, Finance Banking and Insurance Department, Banking and Insurance Program
mfcevher@munzur.edu.tr

Abstract

This research intends to examine the perceptions of consumers who use artificial intelligence applications towards these applications and to examine the perceptions, preferences, and usage experiences of users towards artificial intelligence applications from the perspective of marketing and consumer behavior. In line with this purpose, the qualitative analysis method was picked as the analytical approach in the investigation. The sample consists of a total of 25 participants with different demographic characteristics who are experienced in artificial intelligence applications. The information gathered from the participants through interviews was analyzed through the MAXQDA statistical analysis program, and descriptive content analysis was performed. In the study's findings, 8 different codes were identified, and the relationships between the codes were analyzed. "Speed," 'Benefit' (perceived performance), and 'Convenience' (perceived ease of use) are the themes that stand out positively in consumers' perceptions of productive artificial intelligence applications. On the other hand, "Distrust" (perceived risk) is a negative theme. The study's findings reveal consumer perceptions and expectations by examining the rapidly developing artificial intelligence technology from the consumers' perspective. This information obtained for consumers using artificial intelligence offers important solution suggestions for artificial intelligence developers and businesses. Furthermore, the findings obtained in this study provide a different perspective for future studies on this subject.

Keywords: Consumer Behavior, Digital Marketing, Artificial Intelligence, Consumer Perception

JEL Codes: M30, M31, M39

Citation: Cevher, M. F. (2025). Examination of Consumer Perceptions Regarding Productive Artificial Intelligence Applications: A Qualitative Study on the Case of ChatGPT. *Researches on Multidisiplinary Approaches (Romaya Journal)*, 5(1): 186-198.

Submission Date / Yayına Geliş Tarihi : 27.08.2024
Acceptance Date / Yayıma Kabul Tarihi : 08.10.2024

Introduction

Consumers acquire tangible items and digital services (Kotler & Armstrong, 2010); thus, people utilizing AI apps become consumers of these applications by engaging with a service or experience. Belk (2013) also regards individuals as "consumers" in their engagement with digital services in the digital realm. Conversely, as AI is engineered to "learn" and "evolve" from data produced by digital technologies associated with consumer interactions, the engagements of AI users likewise amplify consumer interactions (Olan et al., 2021).

In their study, Rust and Huang (2014) examine the effects of artificial intelligence in terms of the transformation of marketing science, positioning the users of these technologies as active consumers and expressing the interactions of users as an extension of consumer behavior. Artificial intelligence technologies can collect information about users' profiles and behaviors and create consumer segmentation based on this data. Thus, it can provide realistic information about consumer behavior (Cannella, 2018). On the other hand, chatbots, which attract attention in artificial intelligence applications, have become one of the most influential modern tools for digital marketing experts by improving the user experience. Chatbot applications are used in many areas, such as banking, health, tourism, online shopping, and customer service (Savanur et al., 2021).

OpenAI, a leading AI technology company, launched ChatGPT, a versatile chatbot for communicating with service users and consumers, In November 2022; by January 2023, around 13 million users engaged with ChatGPT every day (Wang et al., 2023). Businesses and AI developers constantly try to improve AI capabilities and applications to increase users' adoption and experience of AI technologies (Cheng et al., 2022). At this point, users' perceptions, desires, and expectations towards these applications are important. Existing studies focus on how AI technologies can be used in marketing, but the effects of these applications on users have not been sufficiently investigated.

In this direction, the study aims to examine the perceptions of individuals who use artificial intelligence applications; these applications are grounded in the Unified Theory of Technology Acceptance and Use, which is frequently used in marketing research. The research seeks to investigate AI users' attitudes, preferences, and usage experiences towards AI applications from the perspective of marketing and consumer behavior by considering AI users as consumers. To attain this objective, it investigates the perceptions, intentions, and behaviors of consumers who use the ChatGPT branded AI-supported chatbot, a sub-brand of the OpenAI brand, towards this brand through a qualitative analysis method. Artificial intelligence users can develop preferences for applications by making choices like other consumers of products and services. They can also provide feedback on their satisfaction or dissatisfaction after using these applications and develop purchase/non-purchase decisions for these applications. Analyzing users' perceptions/attitudes, desires, and expectations of artificial intelligence applications is strategically important for businesses and marketers. Because the development, use, and marketing of these technologies are also about responding to users' needs. Therefore, it is imperative to examine users from the perspective of consumer behavior. In order to offer a new perspective to the literature, the study aims to present a more comprehensive consumer profile by differentiating from traditional consumer behavior studies and including AI users in this scope. It also aims to provide in-depth information about users for businesses and artificial intelligence developers to improve themselves in this field and to provide the information they need.

In the study, first of all, a conceptual framework was created, and the research on the subject was examined in detail under the literature review title. Under the "Marketing in the Age of Artificial Intelligence" title, the relationship between artificial intelligence applications and marketing is examined, and the relationship between the ChatGPT artificial intelligence application, which is the research subject, and consumer behavior is also examined. Information about the Unified Theory of Technology Acceptance and Use on which the study is based was given, and the analysis section of the study was started. In the study, Code Frequency Analysis, Code Relationships Browser, Code-Based Frequency Analysis, Code Theory Model (Single Case Model), and Word Cloud analyses were performed using the qualitative analysis method, and the figures and results were presented in the findings section. In the discussion section, the results of previous studies and the results of the current study were evaluated, and similarities and differences were examined. In the conclusion section, important solution suggestions are presented for businesses and artificial intelligence developers based on the findings obtained in the study.

Conceptual Framework and Literature Review

The literature on the subject was conducted through marketing-related studies. In particular, the studies conducted on consumer relationships with ChatGPT, one of the uses of artificial intelligence, have been thoroughly investigated. Zhou et al. (2023) examine the effect of ChatGPT on marketing; Wu et al. (2022) focus on artificial intelligence advertising by examining consumers' perceptions and conversations about artificial intelligence on Twitter, one of the social media platforms.

Wahid et al. (2023) analyze artificial intelligence in terms of content marketing and reveal the implications of artificial intelligence on content creation, digital marketing, and customer interaction. Hussain et al. (2024) concluded that content related to ChatGPT increased audience interaction on YouTube and argued that people are interested in this technology in content creation.

Paul et al. (2023) examined ChatGPT, one of the artificial intelligence applications, with its advantages and pitfalls for consumers and made suggestions for future research. Lee (2023) analyzed the impact of ChatGPT on consumer perceptions and marketing. Kim et al. (2023) examined the recommendations of ChatGPT in terms of consumer perceptions. Again, while Brand et al. (2023) examined consumer perceptions and preferences through large language models, Kirshner (2024) investigated ChatGPT and its impact on consumer recommendations. Slaton and Pookulangara (2024) emphasized the implications of artificial intelligence applications on consumers by investigating the social media marketing communication of luxury brands and the interest of consumers. Damaševičius and Zailskaitė-Jakštė (2024) investigated AI-supported consumer engagement.

McAlister et al. (2023) examine ChatGPT's ethical implications and potential hazards in marketing. Rivas & Zhao (2023) highlight the advantages of ChatGPT in marketing and underscore its ethical assessment. They contend that the ongoing advancement of artificial intelligence can change the field upon resolving ethical dilemmas. Niu and Mvondo (2024) argue that the quality of information plays a crucial role in improving consumer satisfaction and perceived utility. Moreover, perceived utility and technological curiosity also influence consumer pleasure. The study's primary conclusion pertains to brand managers and marketers who must consistently evaluate the chatbot's efficacy to guarantee that the information disseminated is pertinent, dependable, succinct, and promptly sent. It also highlights ethical concerns.

Fraiwan and Khasawneh (2023) drew attention to the future impact of ChatGPT by investigating its applications in areas such as education, engineering, health, and marketing. Bughin (2023) examined the use, advantages, and risks of productive artificial intelligence technology in marketing. Arviani et al. (2023) examined how ChatGPT can be used in marketing communication and concluded that businesses can gain advantages by using ChatGPT in their marketing strategies. Talarico (2023) analyzed ChatGPT in the context of marketing communication and marketers' perceptions regarding this technology. Jain et al. (2023) examined the benefits and obstacles of employing ChatGPT in marketing and offered recommendations for its application in marketing strategies.

Sudirjo et al. (2023) examine the effects of ChatGPT in improving customer emotional analysis. He concluded that businesses could better connect with their customers by utilizing this technology. Abdelkader (2023) examined ChatGPT and moderator roles in creating customer experience in digital marketing and stated that ChatGPT improves customer experience. Again, Kumar et al. (2023) argue that customer experience development will be improved by augmented and virtual reality technologies together with ChatGPT. Bushell (2023) argues that ChatGPT can transform customer interaction and insights. Orzoł & Szopik-Depczyńska (2023) concluded through a case study that ChatGPT creates better customer service in e-commerce, increased interaction, and customer loyalty. Agarwal et al. (2020) point out that customer satisfaction and customer loyalty can be achieved by providing personalized service to customers through artificial intelligence. Huang (2023) emphasizes that ChatGPT will optimize customer interaction and marketing activities in digital marketing and online shopping.

Şentürk et al. (2023) investigated the correlation between artificial intelligence and digital marketing via publications published in the Web of Science. Xu et al. (2023) examined the influence of ChatGPT on search engines and determined that the evolution of search engines has expedited.

Huh et al. (2023) contend that ChatGPT has the potential to transform these sectors in the future through its application in advertising and education. Mutoffar et al. (2023) contend that ChatGPT is beneficial for online marketing and the promotion of SMEs, while Gołąb-Andrzejak (2023) asserts that ChatGPT will enhance the effectiveness and efficiency of digital advertising efforts. Da Silva et al. (2023) analyzed ChatGPT concerning cultural marketing, whereas Glesner and Tvrdišić (2023) investigated both cultural marketing and plagiarism.

Fusté-Forné and Orea-Giner (2023) investigated consumers' motivations for using ChatGPT in gastronomy tourism. Jolly Masih (2023) stated that there may be significant developments in the food industry if artificial intelligence and ChatGPT are used in food marketing strategy. Mich & Garigliano (2023) and Zhang & Prebensen (2023) reveal the effects of ChatGPT in tourism marketing and Gursoy et al. (2023) in the tourism industry. Gulati et al. (2024) point out that using ChatGPT in higher education will be important in the future.

In recent years, artificial intelligence applications have emerged as a significant domain of study. However, it may be challenging to say that the literature is fully formed. In particular, it can be observed that studies on consumer behavior are insufficient. Although there are some studies on consumers' perceptions, customer experience, and adoption of artificial intelligence applications, in-depth analyses are needed in this field. This research seeks to

comprehend the underlying reasons behind these perceptions and motivations by examining consumers' attitudes/perceptions and motivations regarding using artificial intelligence in more detail. In this direction, the findings obtained using qualitative research methods on consumers who are experts in using ChatGPT, one of the artificial intelligence applications, will bring a different perspective to the knowledge in the literature. In addition, the study reveals its originality in this way.

Marketing in the Era of Artificial Intelligence

In recent years, technologies such as blockchain, the Internet of Things, and artificial intelligence technologies have transformed corporate processes. Artificial intelligence (AI) is the most recent and potent disruptive technology among these revolutionary technologies. Nowadays, it has a significant impact and potential in many sectors, such as production, medicine, health, agriculture, logistics, and marketing.

Marketing is undergoing significant evolution due to advancements in artificial intelligence technologies. Artificial Intelligence has numerous opportunities, including the acquisition of insights, hyper-personalization, enhancement of customer experience, provision of superior customer service, reduction of operating expenses, and augmentation of efficiency (Akyüz & Maynacıoğlu, 2021; Jarek & Mazurek, 2019). Technological advancements have continually led to substantial changes in marketing evolution, demonstrating that marketing may effectively partner with artificial intelligence to provide significant results (Siau, 2017; Wirth, 2018).

Nine critical ways of using AI in marketing are summarized: conversational AI, content generation, audience segmentation, paid ad management, personalization dynamic pricing, sales forecasting, predictive analytics, and recommendation engines (Chen et al., 2021).

Artificial intelligence has found a wide range of applications in marketing. For example, Amazon.com automates delivery processes with Prime Air using drones. Domino's Pizza is experimenting with autonomous vehicles and delivery robots for customer pizza delivery. RedBalloon uses Albert's Artificial Intelligence marketing platform to recruit and engage new clientele. Replika, an artificial intelligence chatbot, offers emotional assistance by emulating users' communication patterns. These instances illustrate how artificial intelligence can profoundly transform the future of marketing (Davenport et al., 2020).

The swift advancement of artificial intelligence applications has generated significant interest and expectation in marketing among both scholars and practitioners. In addition to being a highly studied subject in academic studies, it is also used in many ways in marketing. In terms of product and promotion, it can create higher quality content in a shorter time than people. By collecting and analyzing large volumes of data with ChatGPT, consumers' feedback can be analyzed (Zielinski et al., 2023). Consequently, marketing research can be conducted more effectively to comprehend consumers' opinions and attitudes regarding marketing efforts. Personalized content advertisements and customer services that will provide 24/7 support can be carried out with chatbots. Therefore, transaction costs may be reduced, and problem-solving can become more efficient. Similarly, it is expected that the transactions carried out with ChatGPT in marketing will be developed and increase even more over time (Rivas & Zhao, 2023).

Alongside the advantages offered by ChatGPT in marketing, it also entails specific hazards. Artificial intelligence marketing systems like ChatGPT may source information from unreliable origins, resulting in the dissemination of erroneous and obsolete data. Similar and non-homogenous responses may come from ChatGPT for the requested actions. Thus, marketers who attach importance to innovation may face problems. In addition to all these, concerns such as privacy violations and ethics also draw attention. It is predicted that these risks can be reduced with the excellent design of ChatGPT and future improvements (Stone et al., 2020; Yara et al., 2021; Sun & Hoelscher, 2023).

ChatGPT and Consumer Behavior

Since consumers are the focus of marketing strategies, consumer behavior analysis is vital for businesses. Studies on consumer behavior have been conducted in marketing for years, but in recent years, consumer behavior has been examined more in terms of artificial intelligence. It is seen that artificial intelligence technology offers new opportunities for understanding consumer behavior. Organizations utilizing big data have acquired a substantial advantage in formulating marketing and customer service strategies by forecasting consumer behavior through artificial intelligence technology (Wibowo & Ariyanti, 2023).

Since the development of technology can change consumer behavior, businesses are making great efforts to create customer satisfaction and loyalty. At this point, artificial intelligence can help businesses with marketing strategies and consumer behavior analysis, thus increasing sales (Gkikas & Thedoridis, 2022). At this point, the use of artificial intelligence in consumer behavior and customer experience is increasing daily. By offering personalized experiences to consumers, consumers' satisfaction and loyalty can be gained (Abdelkader, 2023).

Artificial intelligence is crucial in comprehending and shaping customer behavior. AI evaluates extensive datasets to deliver immediate and actionable

consumer insights when integrated with associated technologies like big data and machine learning. These insights enable organizations to tailor their products and services to client preferences (Kumar et al., 2023).

Consumer attitudes are expressed through trust, satisfaction, and loyalty to a product or service. Product and service prices can significantly influence consumer behavior; however, even if consumers are loyal to a brand, price changes may cause opportunity costs. At this point, sharing consumers' trust in a product or service through social media is very important for both consumers and brands. Therefore, businesses and marketers should utilize artificial intelligence to understand consumers' reactions to product or service changes (Olan et al., 2021).

Unified Theory of Technology Acceptance and Use

The Technology Acceptance Model (TAM), one of the most common models for explaining the use of new technologies and purchasing tendencies, was developed by Davis in 1985, based on Fishbein's model of human behavior. TAM suggests that a user's attitude towards using a system is the most critical determinant of the actual use of the system. Over time, the model has been criticized for not considering the factors hindering technology adoption, and improved versions have been proposed. Venkatesh (2000) developed TAM 2 in light of these criticisms and added factors such as perceived usefulness to the model. Venkatesh et al. (2003) subsequently established the Unified Theory of Acceptance and Use of Technology (UTAUT) paradigm to clarify technology acceptance and usage (Zalluhoğlu et al., 2023).

The probability of technology adoption is linked to the direct impact of four fundamental constructs: performance expectancy, effort expectancy, social influence, and facilitating factors (Venkatesh et al., 2016). Alongside these four fundamental categories, hedonic motivation is recognized as the degree to which an individual experiences enjoyment or pleasure from a new technology (Beh et al., 2021).

Performance expectancy denotes the conviction that individuals will enhance their work performance through the utilization of technology. In contrast, the degree of ease of using technology refers to the expectation of effort. While the adequacy of the infrastructure to use the technology is accepted as a facilitating condition, the attitudes and thoughts of individuals toward other people's use of this technology express the social effect (Venkatesh et al., 2003). It is stated that factors such as hedonic value, price, and habit are added to these basic structures (Venkatesh et al., 2003).

The adoption of artificial intelligence technologies is essential for businesses. At this point, businesses' resources are also necessary. It is also seen that many companies are not strategically ready to adopt artificial intelligence (Ransbotham et al., 2017). This rapidly developing technology was examined from a marketing perspective and aimed to provide essential results to businesses, and research was conducted with a focus on the Unified Technology Acceptance and Use Theory.

The Unified Theory of Technology Acceptance and Use has been supported by empirical research and outperformed other individual models in explaining individuals' intentions to use information technologies (Momani, 2020). In this direction, the study examines the Unified Theory of Acceptance and Use of Technology by focusing on it.

Research Methodology

A qualitative method was chosen as the analysis method in the research, and the interview technique was used. Qualitative research is defined as the comprehensive presentation of data acquired through methods such as observation, interviews, and document analysis. Notwithstanding its challenges, qualitative research is a potent methodology capable of yielding significant outcomes in the social sciences. The analysis was carried out through MAXQDA statistical analysis programs. The number of samples in qualitative research may be less than in quantitative research. When the number of samples is increased in qualitative research, primarily observations and interviews, it may become repeated after a particular stage (Türk, 2023). In this direction, 25 participants who were actively experienced in using ChatGPT were targeted as the study sample. Interviews with the participants were conducted face-to-face. The analysis of the participants' demographic data revealed a composition of 11 females and 14 males, aged between 23 and 42 years. Among the participants, opinions of people from different professions, such as academicians, doctoral and graduate students, public and private sector employees, marketing managers, pilots, and housewives, were taken. Data collection was carried out in March and April 2024.

The inquiries posed to the participants were grounded in the Unified Theory of Acceptance and Use of Technology (UTAUT) paradigm established by Venkatesh et al. (2003). In this direction, the question about the priority and reasons for users to use ChatGPT is directed toward performance expectations from the Unified Technology Acceptance Model variables. The difficulties encountered in using ChatGPT are analyzed with the perceived risk variable, the areas that are thought to be most helpful are analyzed with the effort expectation variable, and the hedonic value variable is analyzed with the feature that users like the most. The question about the areas in which ChatGPT should be improved is associated with the desire for improvement and per-

formance expectancy in terms of providing benefits to the user. While hedonic value and performance expectancy are associated with the question about users' opinions on the advantages of ChatGPT, the perceived risk variable is associated with the question about its disadvantages.

Variables of the Study

Performance expectancy, or perceived performance, is defined as "the degree to which an individual perceives that using the system will improve their job performance." Along with performance expectancy, effort expectancy is also one of the study's variables. Perceived ease of use is expressed by effort expectancy (Venkatesh et al., 2003).

Perceived enjoyment, hedonic motivation, and pleasure themes are generally accepted as hedonic values (Chitturi et al., 2007). Consumers' concerns about the possibility of unpleasant consequences are expressed as perceived risks. Schierz et al. (2010) also define perceived risk as loss expectancy. The greater the loss expectations, the higher the degree of risk consumers perceive (Schierz et al., 2010).

Trust is characterized as "the readiness of one party to be susceptible to the actions of another party, predicated on the anticipation that the latter will execute a specific action significant to the trustor, irrespective of the former's capacity to oversee or regulate" (Mayer et al., 1995). Consumers' perceptions of the opinions of other consumers are expressed as social pressure. Although it has been expressed differently in the literature as subjective norms, social factors, and normative pressure, social pressure is seen as the perceived social influence of consumers (Belanche et al., 2019; Lin et al., 2020).

Individuals' judgments concerning engagement in behavior are typically defined as behavior by Ajzen (1991). On the other hand, in the concept of behavior in the study and the literature, consumers' attitudes toward artificial intelligence are expressed as behavior (Ajzen, 1991; Zhong et al., 2021). Individuals' willingness to use AI-based platforms is defined as behavioral intention. Behavioral intention, which is considered the intention of users to adopt AI-supported chatbots, can also be seen as the desire to use new technologies (Sohn & Kwon, 2020; Maseeh et al., 2021; Mehta et al., 2022).

The measurement of how often a behavior is performed or the approximate number of times a behavior is repeated in a certain period is considered actual usage (Davis et al., 1989). The literature has explored the topic of actual usage as the prevalent application of technology, including the Internet of Things, artificial intelligence, and mobile banking (Chatterjee & Bhattacharjee, 2020; Elhajjar et al., 2021). Customer satisfaction refers to the satisfaction of consumers. In the study, it refers to the satisfaction of consumers with using it, while perceived personalization is examined as ChatGPT providing personal responses to the person's requests and needs.

Findings

The findings are presented through code frequency analysis, code-based frequency analysis, code relationships browser, code theory model (single case model), and word cloud forms.

Code System	Inconsistency	Asociality	Distrust	Speed	Benefit	Productivity	Convenience	Creativity
Inconsistency			42					
Asociality			22					
Distrust	42	22						
Speed					74	18	67	36
Benefit				74		17	47	35
Productivity				18	17		7	16
Convenience				67	47	7		26
Creativity				36	35	16	26	

Figure 1. Code Frequency Analysis

The code frequency analysis gives information about the codes that emerged from the participants' answers and the frequency of these codes. In other words, according to the perspectives of the specialists engaged in the research, the most frequently mentioned concept by the participants expresses what they make their relationships about. In expressing this, it provides evidence through quantitative data. When analyzing the code frequency analysis, it was found that the relationship intensity was the highest positive relationship between 'speed' and 'benefit' (74). While the relationship between 'Convenience' and 'Speed' (67) ranks second in terms of positivity, the relationship between 'Benefit' and 'Convenience' is then observed.

However, an important observation in this table is the direction and intensity of the negative observations made by the experts participating in the research. Evaluated from this perspective, the most negative relationship is the relationship between 'Distrust' and 'Inconsistency' (42).

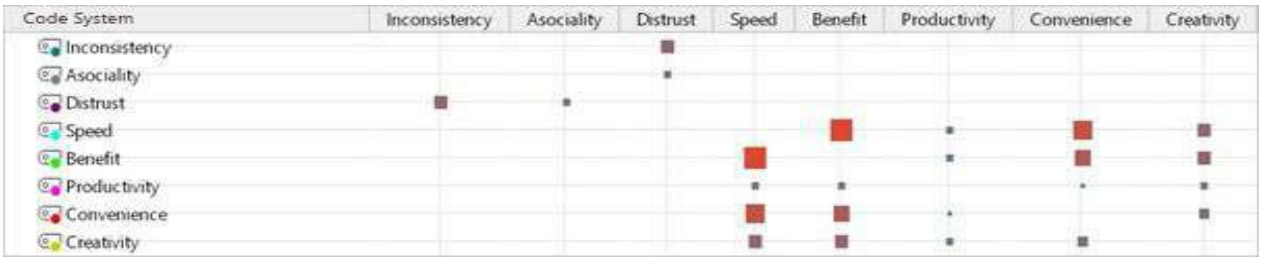

Figure 2. Code Relationships Browser

In Figure 2, the statistical analysis program MAXQDA was used to determine the codes' relationships and examine the frequency with which these codes were used together in the same sentence or paragraph. The relationships between the codes can be interpreted both qualitatively and quantitatively. These relationships were revealed by the perceptions and evaluations of the experts who participated in the study and who experienced and actively used ChatGPT. The dimensions of the dots in the illustration signify the frequency of mention.

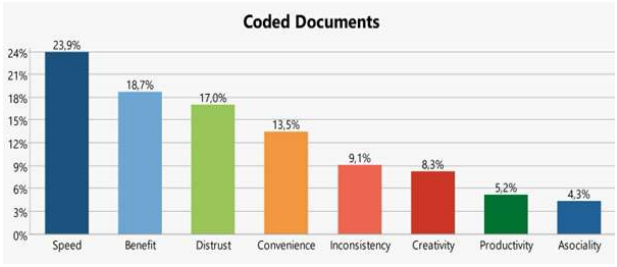

Figure 3. Code-Based Frequency Analysis

Figure 3 shows the most prominent factors in the discussions and comments about consumers' experiences and perceptions of ChatGPT use. The main feature of this finding is that the key elements in the research are revealed in line with the views obtained from the focus group experiences. Looking at the research data, we can see that eight codes are emphasized with different intensities. The code 'speed' is in the first place, while 'benefit' is in second place, followed by 'Distrust.' The results in the code relationships also support these findings. While the codes 'Speed' and 'Benefit' are prominent, the code 'Distrust' stands out in the code-based frequency analysis. While 'speed' and 'benefit' are prominent as positive concepts in participants' perceptions of ChatGPT, 'Distrust,' in contrast, highlights the theme that participants see as negative. Although the percentage of emphasis is low, the codes 'Inconsistency' (9.1%) and 'Asociality' (4.3%) also emerged due to participants' negative perceptions.

The main emphasis of this analysis is related to the density of explanations for each code and the answers given by the experts participating in the research. In other words, each participant emphasized the code "Speed," with a rate of 23.9% in all research documents. When evaluated from this perspective, the phenomenon code of the research was "Speed" with a positive perspective in the use of ChatGPT, while it was the code "Distrust" with a negative perspective with 17%.

Figure 4 shows the Code Theory Model (Single Case Model) from the analysis findings. This model aims to present a detailed and comprehensive analysis of a single case. The interviews are analyzed independently of each other as if they were evaluated on a single case. In other words, when examining generative artificial intelligence applications through consumer perceptions, when the different opinions put forward by the experts participating in the research are brought together and evaluated as the opinion of a single person, a finding is made regarding the answer to the question "what is the main idea?"

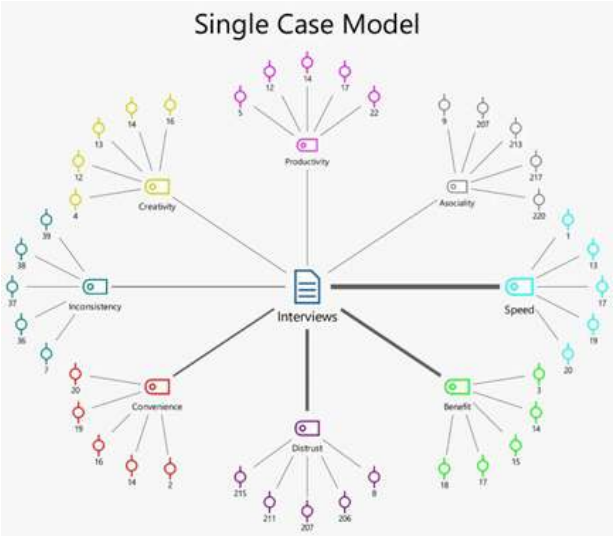

Figure 4. Code Theory Model (Single Case Model)

The figure shows the main themes discussed in the interviews and the details of these themes. In addition, the line thicknesses of the themes that are the focal points also indicate the density of the themes. This analysis supports the other findings and shows that the theme "Speed" extends to "Interviews" with a thicker line than the other themes. It is followed by "Benefit" and then "Distrust". Although this finding emerging from the research is a common idea data, it is seen that it is consistent with the frequency density of individual ideas presented in Figure 3. In this respect, the different findings of the research are consistent within themselves.

Figure 5. Word Cloud

Another research finding is the word cloud analysis shown in Figure 5. In this way, words are visually presented in different tones in size, thickness, and color tones. These features show the frequently used words based on the interview participants' statements. The main subject of the study, "ChatGPT," appears to be the most frequently used concept. In addition, the frequency of use of concepts such as "fast," "speed," "easy," and "creativity" draws attention as concepts that support the participants' perceptions of ChatGPT. This analysis also supports other findings. In addition, the result in the word cloud indicates that the participants have sufficient conceptual knowledge about generative artificial intelligence applications.

Upon examination of the findings derived from the analysis in terms of the combined technology acceptance model variables, the "Benefit" code expresses the performance expectation, that is, the perceived performance thought of the consumers. The participants think they will benefit from their work by using ChatGPT. The "Benefit" code can also be related to customer satisfaction. It can represent the consumer's sense of satisfaction, in other words, the users' perceived satisfaction and choice satisfaction.

The "Speed" code can express performance expectations like the "benefit" code. The fact that participants save time thanks to speed and perceive it as beneficial shows that this technology can benefit consumers with speed.

The "Distrust" code represents perceived risk. It expresses the concerns of the experts participating in the research about using ChatGPT and the situations they see as disadvantages. The "Asociality" code also reveals the negative perceptions that people can become asocial as a result of using ChatGPT. Similarly, the "Inconsistency" code emerges as another negative theme resulting from the participants' perceived risk.

The participants evaluated the codes "Creativity" and "Productivity" from many perspectives. The perceived performance of ChatGPT through providing benefits, perceived ease of use, aesthetic, experiential, emotional, and pleasure-related benefits (Hedonic Value-Perceived pleasure) that may cause these codes to emerge, and speed that may affect these codes were included in the process. Multiple factors were included in the process, resulting in the emergence of these themes. The code "Convenience" expresses effort expectation, in other words, perceived ease of use. It can also be expressed as the degree of perception that the participants will find ChatGPT easy to use.

Discussion

The experts who participated in the research highlighted that the most important feature of ChatGPT in the relevant subject is that they can save time and that it is related to time management and satisfaction as a result of their work. This situation indicates that they have a positive psychological output benefit. The creativity and productivity situation is also seen as positive. However, the same experts emphasized that the information obtained should be checked, and the risk of the information not being reliable should be taken into consideration. They also highlighted that this could be related to ethical problems such as protecting personal data, internet addiction, and plagiarism. At this point, the study findings show that consumers focus on hedonic motivation, albeit partially, in addition to perceived ease of use, perceived benefit, perceived risk, and customer satisfaction.

They see ChatGPT's most important feature as saving time for individuals. Immediately after that, customer satisfaction, service quality, and efficiency gained from time management come to the fore. Then, a code drew attention as an individual concern. With the code "Distrust," they emphasized that using ChatGPT could cause negative situations such as personal data protection problems, fraud, addiction, and inconsistent and outdated information, as well as guidance. Situations such as asociality, obesity, anxiety, lack of communication, fraud, plagiarism, and ethics emerge as negative situations expressed by consumers.

When individuals see a technology's value, they are inclined to cultivate a favorable disposition toward its utilization. Kasilingam (2023) determined that opinions toward chatbots were significantly influenced by perceived utility, simplicity of use, enjoyment, price sensitivity, danger, and individual innovativeness (Kasilingam, 2020). Similar results emerge in health students' attitudes towards ChatGPT in the Sallam et al. (2023) study. The speed, benefit, and convenience codes that stand out in the study findings overlap with the results of perceived benefit and ease of use in these studies. Saif et al. (2024), similar to the findings of this study, concluded that students' perceived ease of use and usefulness associated with ChatGPT contributes to shaping their positive attitudes toward using ChatGPT. However, unlike the results of this study, they concluded that

ease of use and usefulness factors play a role in reducing stress levels. Zhang and Wang (2023) concluded that, from the standpoint of consumer emotions, AI products influence consumers' purchase intentions and brand evaluations, with perceived usefulness and perceived enjoyment serving as mediators in this relationship. However, these findings also differ from the results of Tiwari et al. (2024) and Abdul-Halim et al. (2022). Because Tiwari et al. (2024) concluded that perceived ease of use was not an important determining factor in students' adoption and use of ChatGPT.

A study by Shahzad et al. (2024) on ChatGPT in higher education found that perceived ease of use, utility, and intelligence significantly moderate the association between awareness of ChatGPT and the intention to embrace this technology. Moreover, perceived trust strongly influences the association between awareness of ChatGPT and perceived ease of use, usefulness, and intelligence (Shahzad et al., 2024). The results of this study correspond with the variable of perceived ease of use.

In their studies, Tiwari et al. (2024), Mishra et al. (2022), and Chang et al. (2024), who revealed that hedonic motivation could be effective in users developing positive attitudes towards ChatGPT, stated that users found the use of ChatGPT enjoyable and fun. In the study, the participants' views on ChatGPT, which they found enjoyable and fun, together with the creativity and productivity codes, are parallel to those of these studies.

While improving marketing decisions and automating customer service can increase revenue and reduce costs, it is also claimed that consumers do not trust AI's decisions, answers, and suggestions and have a very negative attitude toward AI applications in marketing (Davenport et al., 2020). Likewise, Chen et al. (2021) determined that participants predominantly exhibited a neutral or mildly unfavorable sentiment towards AI marketing communication applications in their research. This may be linked to the prominent topic of distrust evident in the study findings.

Regarding the outcome of the distrust theme, which is seen as negative in the study, consumers' emerging biases can be due to two main reasons, such as consumers making predictions based on internally generated data and consumers' behavioral biases (Abrardi et al., 2022). Privacy regulations are important for consumers' power over businesses or brands. Consumer privacy and consumer information's use and protection levels may cause a debate on property rights. Because behavioral patterns of consumers can also emerge through personal information, this situation is open to manipulation (Acquisti et al., 2015). Iqbal et al. (2022) determined faculty members' negative perceptions and attitudes toward using ChatGPT. Potential risks such as cheating and plagiarism were stated as perceived risks. Rohden and Zeferino (2023) draw attention to the effect of trust in reducing privacy concerns and risk perception. In the study, concerns about issues such as insecurity, asociality, inconsistency, and ethical and personal security violations are consistent with the results of these studies and draw attention to perceived risk.

Although other studies have addressed sub-dimensional patterns, these are empirical findings regarding the scales used in quantitative research and the sub-dimensions of these scales. However, in contrast to these, this study employed a qualitative method; the data obtained were thematically separated and conceptually coded. Therefore, it may not be possible to compare with the generalizability patterns of quantitative research because it is qualitative research. However, when taken together, they may have the power to create a different perspective on the literature.

Conclusion

Consumers' use of generative AI applications is increasing day by day. The impact of AI is clearly felt in many areas. Generative AI applications are also widely used in marketing (Stone et al., 2020). Dawid et al. (2017) contend that AI technology beneficially influences consumer behavior and sentiments and that consumer interactions with AI gadgets progressively enhance marketing research.

First of all, marketers are expected to add artificial intelligence applications that can meet consumers' expectations to their strategies. Consumers' intentions to use productive artificial intelligence applications are shifting from utilitarian motivation to hedonic motivation today. Marketers should also consider this orientation (Dinh & Mark, 2023). On the other hand, consumers' perceptions of artificial intelligence applications are also changing daily. Therefore, productive artificial intelligence applications are becoming more important for businesses. From another perspective, artificial intelligence is strategically important for all global players to achieve economic gains in the future (Pan et al., 2023).

Businesses can improve their digital marketing strategies by optimizing the impact of ChatGPT on consumer experience and customizing it according to consumer demands. From an academic perspective, ChatGPT needs to consider consumer expectations to improve consumer experience in digital marketing (Abdelkader, 2023). At this point, the study draws attention to the concept of "Distrust" as well as the emphasis consumers place on the concepts of "Speed," "Benefit," and "Convenience." As a result of consumers' perceptions of productive artificial intelligence applications, they expect this technology to be fast, useful, easy, creative, and productive. On the other hand, they also have reservations about

issues such as insecurity, asociality, inconsistency, violation of ethics, and personal security. The study findings and comments recommend businesses to pay attention to analyzing consumer behavior well with artificial intelligence applications in digital marketing strategies, improving consumer experiences, and providing confidence in issues that consumers are hesitant about because meeting consumer expectations by analyzing consumer behavior data can be effective in purchasing decisions and brand loyalty (Olan et al., 2021; Jain et al., 2023; Krakowski et al., 2023).

When the situation revealed by the study's findings is examined, we would like to draw attention to the fact that consumers are sensitive about time-saving and benefits. It is seen that when consumers think that they will benefit from artificial intelligence applications and that they can realize this in a short time, their usage tendencies increase. To respond to consumers' expectations, businesses can focus on strategies to provide speed and time savings by emphasizing the benefits of their services. On the other hand, if the strategies are to be created by considering the situations that consumers are concerned about, artificial intelligence applications give consumers a sense of trust, and there may be positive returns for businesses.

Generative AI applications have affected many disciplines. Their effects are also seen in terms of marketing discipline. In addition to its effectiveness in marketing research, it can be effective in many points related to the consumer. However, negative situations such as inaccuracies, privacy violations, and ethical concerns also affect consumers. Developing generative AI applications is thought to eliminate these negative situations and produce more successful and harmonious work with people in the future.

Limitations of the Study and Future Studies

The study was conducted on ChatGPT, a developing generative artificial intelligence application. Considering the increase in generative artificial intelligence applications every day, the fact that the study was conducted only on ChatGPT can be considered a limitation. On the other hand, the study's participants consisted of 25 people with different demographic characteristics. Considering that the participants did not have a specific field or expertise, the number of participants and the period in which the study was conducted may be insufficient compared to future studies; we can consider this situation as a limitation of the study.

The results of this study provide valuable information about consumer perceptions of ChatGPT. From this information, topics such as consumer behavior, customer experience, customer satisfaction, and loyalty can be investigated. Nonetheless, numerous inquiries regarding the influence of ChatGPT on customer experience remain unresolved. Further research is necessary to investigate these inquiries and enhance our comprehension of ChatGPT's capacity to transform digital marketing.

References

Abdelkader, O. A. (2023). ChatGPT's influence on customer experience in digital marketing: Investigating the moderating roles. Heliyon, 9(8). https://doi.org/10.1016/j.heliyon.2023.e18770

Abdul-Halim, N.A., Vafaei-Zadeh, A., Hanifah, H., Teoh, A.P. and Nawaser, K. (2022). Understanding the determinants of e-wallet continuance usage intention in Malaysia. Quality and Quantity, 56 (5), 3413-3439, doi: 10.1007/s11135-021-01276-7

Abrardi, L., Cambini, C., & Rondi, L. (2022). Artificial intelligence, firms and consumer behavior: A survey. Journal of Economic Surveys, 36(4), 969-991. https://doi.org/10.1111/joes.12455

Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. Science, 347(6221), 509-514.

Agarwal, M., Dr. Valliappan Raju, Dr. Rajesh Dey, & Dr. Ipseeta Nanda. (2023). Descriptive Research on AI-based tools to aid personalized customer service: Case of ChatGPT. Journal of Reproducible Research, 1(1), 140–146. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/27

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

Akyüz, A., & Mavnacıoğlu, K. (2021). Marketing and financial services in the age of artificial intelligence. Financial Strategies in Competitive Markets: Multidimensional Approaches to Financial Policies for Local Companies, 327-340. https://doi.org/10.1007/978-3-030-68612-3_23

Arviani, H., Tutiasri, R. P., Fauzan, L. A., & Kusuma, A. (2023). ChatGPT For Marketing Communications: Friend or Foe? Kanal: Jurnal Ilmu Komunikasi, 12(1), 1-7. https://doi.org/10.21070/kanal.v12i1.1729

Beh, P. K., Ganesan, Y., Iranmanesh, M., & Foroughi, B. (2021). Using smartwatches for fitness and health monitoring: the UTAUT2 combined with threat appraisal as moderators. Behaviour & Information Technology, 40(3), 282-299. https://doi.org/10.1080/0144929X.2019.1685597

Belanche, D., Casaló, L. V., & Flavián, C. (2019). Artificial Intelligence in FinTech: understanding robo-advisors adoption among customers. Industrial Management & Data Systems, 119(7), 1411-1430. DOI 10.1108/IMDS-08-2018-0368

Belk, R. W. (2013). Extended self in a digital world. Journal of consumer research, 40(3), 477-500. https://www.jstor.org/stable/10.1086/671052

Brand, James and Israeli, Ayelet and Ngwe, Donald, Using GPT for Market Research (March 21, 2023). Harvard Business School Marketing Unit Working Paper No. 23-062 http://dx.doi.org/10.2139/ssrn.4395751

Bughin, J. (2023). To ChatGPT or not to ChatGPT: A note to marketing executives. Applied Marketing Analytics: The Peer-Reviewed Journal, 9(2), 110-116. https://ideas.repec.org/a/aza/ama000/y2023v9i2p110-116.html

Bushell, Chris. (2023). ChatGPT for Marketers: Transforming Customer Engagement and Insights (August 30, 2023). Available at SSRN: https://ssrn.com/abstract=4556644

Cannella, J. (2018). Artificial Intelligence in marketing. Avaiable at: https://keep.lib.asu.edu/items/133393

Chang, T.-S. and Hsiao, W.-H. (2024). Understand resist use online customer service chatbot: an integrated innovation resist theory and negative emotion perspective. Aslib Journal of Information Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/AJIM-12-2023-0551

Chatterjee, S., & Bhattacharjee, K. K. (2020). Adoption of artificial intelligence in higher education: A quantitative analysis using structural equation modelling. Education and Information Technologies, 25, 3443-3463. https://doi.org/10.1007/s10639-020-10159-7

Chen, H., Chan-Olmsted, S., Kim, J., & Sanabria, I. M. (2021). Consumers' perception on artificial intelligence applications in marketing communication. Qualitative Market Research: An International Journal, 25(1), 125-142. https://doi.org/10.1108/QMR-03-2021-0040

Cheng, X., Cohen, J., & Mou, J. (2023). AI-enabled technology innovation in e-commerce. Journal of Electronic Commerce Research, 24(1), 1-6. http://www.jecr.org/node/674

Cheng, X., Lin, X., Shen, X. L., Zarifis, A., & Mou, J. (2022). The dark sides of AI. Electronic Markets, 32(1), 11-15. https://doi.org/10.1007/s12525-022-00531-5

Chitturi, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. Journal of marketing research, 44(4), 702-714. https://doi.org/10.1509/jmkr.44.4.702

Da Silva, A. P., dos Santos Acedo, R., Duarte, R. S. F., & Lepre, T. R. F. (2023). ChatGPT: Como A Inteligência Artificial Pode Impulsionar O Marketing. In Colloquium Socialis. ISSN: 2526-7035 (Vol. 7, No. 1, pp. 68-76). DOI: 10.5747/cs.2023.v7. s166

Damaševičius, R., & Zailskaitė-Jakštė, L. (2024). Transforming Consumer Experience Through ChatGPT: Challenges and Opportunities. Leveraging ChatGPT and Artificial Intelligence for Effective Customer Engagement, 129-155. IGI Global. DOI: 10.4018/979-8-3693-0815-8.ch008

Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. Journal of the Academy of Marketing Science, 48, 24-42. https://doi.org/10.1007/s11747-019-00696-0

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management science, 35(8), 982-1003.

Dawid, H., Decker, R., Hermann, T., Jahnke, H., Klat, W., König, R., & Stummer, C. (2017). Management science in the era of smart consumer products: challenges and research perspectives. Central European Journal of Operations Research, 25, 203-230. DOI 10.1007/s10100-016-0436-9

Dinh, C. M., & Park, S. (2023). How to increase consumer intention to use Chatbots? An empirical analysis of hedonic and utilitarian motivations on social presence and the moderating effects of fear across generations. Electronic Commerce Research, 1–41. https://doi.org/10.1007/s10660-022-09662-5

Elhajjar, Samer, Scarlett Karam, and Shaheen Borna. (2021). Artificial intelligence in marketing education programs. Marketing Education Review 31, (1) 2-13. https://doi.org/10.1080/10528008.2020.1835492

Fraiwan, M., & Khasawneh, N. (2023). A Review of ChatGPT Applications in Education, Marketing, Software Engineering, and Healthcare: Benefits, Drawbacks, and Research Directions. arXiv preprint arXiv:2305.00237. https://doi.org/10.48550/arXiv.2305.00237

Fusté-Forné, F., & Orea-Giner, A. (2023). Gastronomy in tourism management and marketing: an interview with ChatGPT. ROBONOMICS: The Journal of the Automated Economy, 4, 42-42. https://www.journal.robonomics.science/index.php/rj/article/view/42

Gkikas, D. C., & Theodoridis, P. K. (2022). AI in consumer behavior. Advances in Artificial Intelligence-based Technologies: Selected Papers in Honour of Professor Nikolaos G. Bourbakis—Vol. 1, 147-176. https://link.springer.com/chapter/10.1007/978-3-030-80571-5_10

Glesner, J., & Tvrdišić, S. (2023). How to use ChatGPT in Cultural Marketing? /encatcSCHOLAR, (18). http://blogs.encatc.org/encatcscholar/?p=3026

Gołąb-Andrzejak, E. (2023). The Impact of Generative AI and ChatGPT on Creating Digital Advertising Campaigns. Cybernetics and Systems, 1-15. https://doi.org/10.1080/01969722.2023.2296253

Gulati, A., Saini, H., Singh, S., & Kumar, V. (2024). Enhancing Learning Potential: Investigating Marketing Students 'behavioral Intentions to Adopt ChatGPT. Marketing Education Review, 1-34. https://doi.org/10.1080/10528008.2023.2300139

Gursoy, D., Li, Y., & Song, H. (2023). ChatGPT and the hospitality and tourism industry: an overview of current trends and future research directions. Journal of Hospitality Marketing & Management, 32(5), 579-592. https://doi.org/10.1080/19368623.2023.2211993

Huang, J. (2023). ChatGPT Unveiled: Unleashing AI Magic in Online Shopping and Digital Marketing. Atlantic Marketing Journal, 12(2), 1. Available at: https://digitalcommons.kennesaw.edu/amj/vol12/iss2/1

Huang, MH., Rust, R.T. (2021). A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science. 49, 30–50. https://doi.org/10.1007/s11747-020-00749-9

Huang, Y. K., Hsieh, C. H., Li, W., Chang, C., & Fan, W. S. (2019). Preliminary study of factors affecting the spread and resistance of consumers' use of AI customer service. In Proceedings of the 2019 2nd Artificial Intelligence and Cloud Computing Conference (pp. 132-138). https://doi.org/10.1145/3375959.3375968

Huh, J., Nelson, M. R., & Russell, C. A. (2023). ChatGPT, AI advertising, and advertising research and education. Journal of Advertising, 52(4), 477-482. https://doi.org/10.1080/00913367.2023.2227013

Hussain, K., Khan, M. L., & Malik, A. (2024). Exploring audience engagement with ChatGPT-related content on YouTube: Implications for content creators and AI tool developers. Digital Business, 4(1), 100071. https://doi.org/10.1016/j.digbus.2023.100071

Iqbal, N., Ahmed, H., & Azhar, K. A. (2022). Exploring teachers' attitudes towards using ChatGPT. Global Journal for Management and Administrative Sciences, 3(4), 97-111.

Jain, V., Rai, H., Subash, P., & Mogaji, E. (2023). The Prospects and Challenges of ChatGPT on Marketing Research and Practices. Emmanuel, The Prospects and Challenges of ChatGPT on Marketing Research and Practices. http://dx.doi.org/10.2139/ssrn.4398033

Jarek, K., & Mazurek, G. (2019). Marketing and artificial intelligence. Central European Business Review, 8(2). https://www.ceeol.com/search/article-detail?id=775030

Jolly Masih, D. N. S. (2023). Leveraging Ai and ChatGPT for Food Marketing: A Bikanervala Case Study. European Economic Letters (EEL), 13(3), 1638-1650. https://doi.org/10.52783/eel.v13i3.474

Kasilingam, D. L. (2020). Understanding the attitude and intention to use smartphone chatbots for shopping. Technology in society, 62, 101280. https://doi.org/10.1016/j.techsoc.2020.101280

Kim, J., Kim, J. H., Kim, C., & Park, J. (2023). Decisions with ChatGPT: Reexamining choice overload in ChatGPT recommendations. Journal of Retailing and Consumer Services, 75, 103494. https://doi.org/10.1016/j.jretconser.2023.103494

Kirshner, S. N. (2024). GPT and CLT: The impact of ChatGPT's level of abstraction on consumer recommendations. Journal of Retailing and Consumer Services, 76, 103580. https://doi.org/10.1016/j.jretconser.2023.103580

Kotler, P., & Armstrong, G. (2010). Principles of marketing. Pearson education.

Krakowski, S., Luger, J., & Raisch, S. (2023). Artificial intelligence and the changing sources of competitive advantage. Strategic Management Journal, 44(6), 1425-1452. https://doi.org/10.1002/smj.3387

Kumar, A., Gupta, N., & Bapat, G. (2023). Who is making the decisions? How retail managers can use the power of ChatGPT. Journal of Business Strategy. https://doi.org/10.1108/JBS-04-2023-0067

Kumar, P., Vrontis, D., & Pallonetto, F. (2023). Cognitive engagement with AI-enabled technologies and value creation in

healthcare. Journal of Consumer Behaviour, 1–16. https://doi.org/10.1002/cb.2196

Lee, W. J., Lee, H. S., & Cha, M. K. (2023). AI Like ChatGPT, Users Like Us: How ChatGPT Drivers and AI Efficacy Affect Consumer Behaviour. Virtual Economics, 6(4), 44-59. https://doi.org/10.34021/ve.2023.06.04(3)

Lin, H., Chi, O. H., & Gursoy, D. (2020). Antecedents of customers' acceptance of artificially intelligent robotic device use in hospitality services. Journal of Hospitality Marketing & Management, 29(5), 530-549. https://doi.org/10.1080/19368623.2020.1685053

Maseeh, H. I., Jebarajakirthy, C., Pentecost, R., Ashaduzzaman, M., Arli, D., & Weaven, S. (2021). A meta-analytic review of mobile advertising research. Journal of Business Research, 136, 33-51. https://doi.org/10.1016/j.jbusres.2021.06.022

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of management review, 20(3), 709-734. https://www.jstor.org/stable/258792

McAlister, A. R., Alhabash, S., & Yang, J. (2023). Artificial intelligence and ChatGPT: Exploring Current and potential future roles in marketing education. Journal of Marketing Communications, 1-22. https://doi.org/10.1080/13527266.2023.2289034

Mehta, P., Jebarajakirthy, C., Maseeh, H. I., Anubha, A., Saha, R., & Dhanda, K. (2022). Artificial intelligence in marketing: A meta‐analytic review. Psychology & Marketing, 39(11), 2013-2038. https://doi.org/10.1002/mar.21716

Mich, L., & Garigliano, R. (2023). ChatGPT for e-Tourism: a technological perspective. Information Technology & Tourism, 1-12. https://link.springer.com/article/10.1007/s40558-023-00248-x

Mishra, S., Ewing, M.T. & Cooper, H.B. Artificial intelligence focus and firm performance. J. of the Acad. Mark. Sci. 50, 1176–1197 (2022). https://doi.org/10.1007/s11747-022-00876-5

Momani, A. M. (2020). The unified theory of acceptance and use of technology: A new approach in technology acceptance. International Journal of Sociotechnology and Knowledge Development (IJSKD), 12(3), 79-98. DOI: 10.4018/IJSKD.2020070105

Mutoffar, M. M., Kuswayati, S., Anggraeny, F. T., & Sumarni, T. (2023). Exploring the Potential of ChatGPT in Improving Online Marketing and Promotion of MSMEs. Journal Minfo Polgan, 12(2), 480-489. DOI: 10.33395/jmp.v12i1.12440

Niu, B., & Mvondo, G. F. N. (2024). I Am ChatGPT, the ultimate AI Chatbot! Investigating the determinants of users' loyalty and ethical usage concerns of ChatGPT. Journal of Retailing and Consumer Services, 76, 103562. https://doi.org/10.1016/j.jretconser.2023.103562

Olan, F., Suklan, J., Arakpogun, E. O., & Robson, A. (2021). Advancing consumer behavior: The role of artificial intelligence technologies and knowledge sharing. IEEE Transactions on Engineering Management. DOI: 10.1109/TEM.2021.3083536

Orzoł, M., & Szopik-Depczyńska, K. (2023). ChatGPT as an innovative tool for increasing sales in online stores. Procedia Computer Science, 225, 3450-3459. https://doi.org/10.1016/j.procs.2023.10.340

Pan, Y., Froese, F., Liu, N., Hu, Y., & Ye, M. (2023). The adoption of artificial intelligence in employee recruitment: The influence of contextual factors. In Artificial Intelligence and International HRM (pp. 60-82). Routledge. https://doi.org/10.1080/09585192.2021.1879206

Paul, J., Ueno, A., & Dennis, C. (2023). ChatGPT and consumers: Benefits, pitfalls and future research agenda. International Journal of Consumer Studies, 47(4), 1213-1225. https://doi.org/10.1111/ijcs.12928

Ransbotham, S., Kiron, D., Gerbert, P., & Reeves, M. (2017). Reshaping business with artificial intelligence: Closing the gap between ambition and action. MIT sloan management review, 59(1).https://www.proquest.com/openview/83d554491afeb2435c6c2e386821c60c/1?cbl=26142&pqorigsite=gscholar&parentSessionId=jENRi%2F9azRymp2Wlnp4Nv9mZKcZDTAI2%2FpbmV6bU0xE%3D

Rivas, P., & Zhao, L. (2023). Marketing with ChatGPT: Navigating the ethical terrain of gpt-based chatbot technology. AI, 4(2), 375-384. https://doi.org/10.3390/ai4020019

Rohden, S. F., & Zeferino, D. G. (2023). Recommendation agents: an analysis of consumers' risk perceptions toward artificial intelligence. Electronic Commerce Research, 23(4), 2035-2050. https://link.springer.com/article/10.1007/s10660-022-09626-9

Rust, R. T., & Huang, M. H. (2014). The service revolution and the transformation of marketing science. Marketing Science, 33(2), 206-221. https://www.jstor.org/stable/24544825

Saif, N., Khan, S. U., Shaheen, I., ALotaibi, F. A., Alnfiai, M. M., & Arif, M. (2024). Chat-GPT; validating Technology Acceptance Model (TAM) in education sector via ubiquitous learning mechanism. Computers in Human Behavior, 154, 108097. https://doi.org/10.1016/j.chb.2023.108097

Sallam, M., Salim, N. A., Barakat, M., Al-Mahzoum, K., Ala'a, B., Malaeb, D. & Hallit, S. (2023). Assessing health students' attitudes and usage of ChatGPT in Jordan: validation study. JMIR medical education, 9(1), e48254. doi:10.2196/48254

Savanur, A., Niranjanamurthy, M., Amulya, M. P., & Dayananda, P. (2021). Application of Chatbot for consumer perspective using Artificial Intelligence. In 2021 6th International Conference on Communication and Electronics Systems (ICCES) .1479-1483. IEEE. DOI: 10.1109/ICCES51350.2021.9488990

Schierz, P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. Electronic commerce research and applications, 9(3), 209-216. https://doi.org/10.1016/j.elerap.2009.07.005

Şentürk, E. E., Kartal, C., & İşcan, R. V. (2023). Visibility of Artificial Intelligence Applications in Digital Marketing on WOS. Scientific Journal of Innovation and Social Sciences Research, 3(1), 27-42. https://www.journals.academicianstudies.com/sjissr/article/view/186

Shahzad, M. F., Xu, S., & Javed, I. (2024). ChatGPT awareness, acceptance, and adoption in higher education: the role of trust as a cornerstone. International Journal of Educational Technology in Higher Education, 21(1), 46. https://link.springer.com/article/10.1186/s41239-024-00478-x

Siau, K. (2017, August). Impact of artificial intelligence, robotics, and automation on higher education. In 23rd Americas Conference on Information Systems (AMCIS 2017) (p. 63). Association for Information Systems (AIS).

Slaton, K. & Pookulangara, S., (2024). Utilizing ChatGPT in the Creation of Social Media Marketing Communications for Luxury Brands: An Investigation into Lovemarks and Follow Intention. International Textile and Apparel Association Annual Conference Proceedings 80(1). doi: https://doi.org/10.31274/itaa.17267

Sohn, K., & Kwon, O. (2020). Technology acceptance theories and factors influencing artificial Intelligence-based intelligent products. Telematics and Informatics, 47, 101324. https://doi.org/10.1016/j.tele.2019.101324

Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A. & Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. The Bottom Line, 33(2), 183-200. https://doi.org/10.1108/BL-03-2020-0022

Sudirjo, F., Diantoro, K., Al-Gasawneh, J. A., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Application of ChatGPT in Improving Customer Sentiment Analysis for Businesses. Jurnal Teknologi Dan Sistem Informasi Bisnis, 5(3), 283-288. https://doi.org/10.47233/jteksis.v5i3.871

Sun, G. H., & Hoelscher, S. H. (2023). The ChatGPT storm and what faculty can do. Nurse Educator, 48(3), 119-124. DOI: 10.1097/NNE.0000000000001390

Talarico, D. (2023). An open AI roundup: What marketers are saying about ChatGPT. Dean and Provost, 24(11), 5-8. https://doi.org/10.1002/dap.31219

Türk, A. (2023). Digital leadership role in developing business strategy suitable for digital transformation. Frontiers in psychology, 13, 1066180. https://doi.org/10.3389/fpsyg.2022.1066180

Tiwari, C. K., Bhat, M. A., Khan, S. T., Subramaniam, R., & Khan,

M. A. I. (2024). What drives students toward ChatGPT? An investigation of the factors influencing adoption and usage of ChatGPT. Interactive Technology and Smart Education, 21(3), 333-355. DOI 10.1108/ITSE-04-2023-0061

Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. Information systems research, 11(4), 342-365. https://doi.org/10.1287/isre.11.4.342.11872

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS quarterly, 425-478. https://www.jstor.org/stable/30036540

Venkatesh, V., Thong, J. Y., & Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. Journal of the association for Information Systems, 17(5), 328-376. DOI:10.17705/1jais.00428

Wahid, R., Mero, J. and Ritala, P. (2023). Editorial: Written by ChatGPT, illustrated by Midjourney: generative AI for content marketing. Asia Pacific Journal of Marketing and Logistics, Vol. 35 No. 8, pp. 1813-1822. https://doi.org/10.1108/APJML-10-2023-994.

Wang, Y., Pan, Y., Yan, M., Su, Z., & Luan, T. H. (2023). A survey on ChatGPT: AI-generated contents, challenges, and solutions. IEEE Open Journal of the Computer Society. doi: 10.1109/OJCS.2023.3300321

Wibowo, L. A., & Ariyanti, M. (2023). Utilization of Artificial Intelligence Systems to Predict Consumer Behavior. In Journal of Jabar Economic Society Networking Forum (Vol. 1, No. 1, pp. 45-53). http://jesocin.com/index.php/jesocin/article/view/6

Wirth, N. (2018). Hello marketing, what can artificial intelligence help you with?. International Journal of Market Research, 60(5), 435-438.

Wu, L., Dodoo, N. A., Wen, T. J., & Ke, L. (2022). Understanding Twitter conversations about artificial intelligence in advertising based on natural language processing. International Journal of Advertising, 41(4), 685-702. https://doi.org/10.1080/02650487.2021.1920218

Xu, R., Feng, Y., & Chen, H. (2023). ChatGPT vs. Google: a comparative study of search performance and user experience. arXiv preprint arXiv:2307.01135. https://doi.org/10.48550/arXiv.2307.01135

Yara, O., Brazheyev, A., Golovko, L., & Bashkatova, V. (2021). Legal regulation of the use of artificial intelligence: Problems and development prospects. European Journal of Sustainable Development, 10(1), 281-281. https://doi.org/10.14207/ejsd.2021.v10n1p281

Zalluhoğlu, A. E., Ventura, K., & Çakır, İ. (2023). Dijital Oyunlaştırma Uygulamalarının Marka Tutumu Üzerindeki Etkisinin Teknoloji Kabul ve Kullanım Birleştirilmiş Modeli-(Utaut2) ile Analizi. Uluslararası İktisadi ve İdari İncelemeler Dergisi, (C-iasoS 2022 Özel Sayısı), 29-50. https://dergipark.org.tr/tr/pub/ulikidince

Zhang, Y., & Prebensen, N. K. (2024). Co-creating with ChatGPT for tourism marketing materials. Annals of Tourism Research Empirical Insights, 5(1), 100124. https://doi.org/10.1016/j.annale.2024.100124

Zhang, Y., & Wang, S. (2023). The influence of anthropomorphic appearance of artificial intelligence products on consumer behavior and brand evaluation under different product types. Journal of Retailing and Consumer Services, 74, 103432. https://doi.org/10.1016/j.jretconser.2023.103432

Zhong, L., Zhang, X., Rong, J., Chan, H. K., Xiao, J., & Kong, H. (2021). Construction and empirical research on acceptance model of service robots applied in hotel industry. Industrial Management & Data Systems, 121(6), 1325-1352. DOI 10.1108/IMDS-11-2019-0603

Zhou, W., Zhang, C., Wu, L., & Shashidhar, M. (2023). ChatGPT and marketing: Analyzing public discourse in early Twitter posts. Journal of Marketing Analytics, 1-14. https://doi.org/10.1057/s41270-023-00250-6

Zielinski, C., Winker, M., Aggarwal, R., Ferris, L., Heinemann, M., Lapeña, J. F. & Citrome, L. (2023). Chatbots, ChatGPT, and scholarly manuscripts-WAME recommendations on ChatGPT and chatbots in relation to scholarly publications. Afro-Egyptian Journal of Infectious and Endemic Diseases, 13(1), 75-79. DOI: 10.21608/AEJI.2023.282936