Factors Influencing Attitude and Intension to use AI Chatbot

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ABSTRACT

Purpose
This study aims to empirically investigate the factors influencing the adoption of ChatGPT for marketing purposes, focusing on its use in underdeveloped countries, including Pakistan. The research leverages the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to explore determinants such as performance expectancy, effort expectancy, social influence, and facilitating conditions, while integrating hedonic motivation and learning value as mediators.

Methodology
The study employs a quantitative research approach, using survey data analyzed through Smart PLS-SEM. It examines ChatGPT's usability and capabilities, considering its educational value and its impact on enhancing marketing outcomes and customer engagement.

Findings
The findings reveal that performance expectancy, effort expectancy, and hedonic motivation significantly influence marketers' behavioral intentions when adopting ChatGPT. Social influence and facilitating conditions are also critical factors, moderated by cultural and technological disparities in underdeveloped regions. Learning value is found to mediate the relationship between behavioral intentions and performance expectancy, highlighting the role of knowledge enhancement in encouraging adoption.

Conclusion
This study extends the application of UTAUT2 by incorporating learning value as a mediating factor, providing a novel perspective on AI-powered marketing in resource-constrained settings. The research offers actionable insights for policymakers and marketers to overcome adoption barriers and maximize the potential of ChatGPT as a transformative marketing tool.

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1. Introduction

Artificial intelligence (AI) is changing the face of marketing by providing businesses with new resources that can help enhance customer participation and performance. Chatbots and other large language models like chat GPT have been identified as valuable marketing tools (George & George, 2023). Such as Hadi et al. (2024), concluded that chatGPT an Open AI platform, can act like a real person and have a conversation with the customer, provide real-time customer service, create individualized marketing content, and analyze the customer's behavior. It has evolved from GPT-3. 5 to GPT-4 which has enhanced the capabilities of generating text, and understanding the context. Therefore, marketers can use Chat GPT as a tactical tool for creating quality content and engaging with customers more personally (George & George, 2023; Hadi et al., 2024).

AI-powered chatbots in advertising have numerous blessings, including multiplied customer delight, facts distribution, and automation of time-ingesting responsibilities (Watters & Garcia-Lopez, 2024). Marketers can use ChatGPT to optimize advertising techniques, establish loyal consumer bases, and customize messages. Despite these advantages, there's still limited research investigating ChatGPT's suitability for marketing in underdeveloped nations which includes Pakistan. Various factors impact the willingness to use ChatGPT in advertising, inclusive of consumer popularity, technological infrastructure, purchaser, and cultural attitudes(Gai, 2024).

Several studies have used theoretical models to examine the adoption of emerging technologies in various industries (Ahmetoglu et al., 2022). The popular Unification Theory of Technology Acceptance and Use 2 (UTAUT2) identifies the key factors that influence technology adoption, including the enabling environment, performance expectations, effort expectations, and social impact (Tamilmani et al., 2021). Influential factors of industry AI-based technologies like ChatGPT in commerce How do you consider usability and functionality? Furthermore, the educational value of these tools, or how they improve users' abilities and skills, is an important factor in encouraging their use (W.-J. Lee et al., 2023).

Although ChatGPT has shown great potential to enhance customer service and marketing efficiency, various factors include perceived usefulness, social acceptance, and access to resources (Limna et al., 2024; Meena & Sarabhai, 2024). To overcome the adoption barriers and maximize the potential of ChatGPT, it is important to understand the key factors affecting merchant intention to use it in Pakistan. Emphasizing performance expectancy, effort expectancy, social influence, facilitating environment, and hedonic motivation, this study seeks to explore the factors affecting the intention to use ChatGPT for marketing purposes The study also examined the nature of learning value function as a mediator in the relationship between behavioral intentions and performance expectations.

The purpose of this research is to empirically investigate the data of Chat GPT's in Pakistan's advertising business. For data analysis partial least squares structural equation modeling (PLS-SEM) is used. In addition to making sensible suggestions for marketers and tech developers to enhance using ChatGPT in advertising sports, the findings will contribute to the increasing body of studies on AI adoption.

Researchers have emphasized that, the UTAUT2 framework's is used in this study, the factors impacting generation adoption can differ depending on the situation and consumer (Sankar & David, 2024). To appropriately estimate generation adoption, the

advertising and marketing business ought to understand contextual variances, specifically in emerging markets together with Pakistan. This observation applies the UTAUT2 model to the advertising area, as opposed to previous studies that targeted instructional contexts. It investigates how critical elements which include performance expectancy, attempt expectancy, social effect, and conducive environment affect the goal of using ChatGPT for advertising and marketing.

In this examination, overall performance expectancy and behavioral aim are connected by way of the mediating aspect of getting to know the cost, which is frequently associated with educational aids. When it involves boosting marketers' knowledge, competencies, and decision-making skills, ChatGPT's perceived studying price is what drives adoption. The observation emphasizes ChatGPT's gaining knowledge of fees, highlighting its ability as a tool for advertising efficacy and expert development.

To provide a complete knowledge of the factors impacting ChatGPT utilization in advertising, this will integrate theoretical insights and empirical findings. The findings could assist policymakers, and entrepreneurs in growing their business with the help of adoption and effective use of AI tools in Pakistan's marketing area. Finally, emphasizing the crucial position that getting to know fee performs in fostering technological innovation in rising economies, the study contributes to the growing frame of research on AI adoption in enterprise.

2. Literature Review

2.1. ChatGPT in Marketing

Artificial intelligence (AI) has made spectacular improvements that almost changed the marketing sector completely, besides others, from the way firms communicate with clients to the way they perform marketing functions (Haleem et al., 2022). ChatGPT, the AI-powered virtual assistant that came in on this wave, plays the role of the main informant in this case. This application can comprehend and produce conversational human-like text, enabling companies to automate customer service, create content that is custom-tailored to each consumer, and gather valuable data regarding their customers on the spot (Dew, 2023). On the one hand, marketers argue that ChatGPT serves as a powerful tool in helping them to boost customer engagement and to fine-tune marketing strategies but on the other hand, some raise issues of its weakness and possible threats (Knuuttila, 2024).

ChatGPT has some significant advantages in marketing for instance, this Chatbot can provide a 24/7, cover multiple customers at once, and the customer responses personalized to the different needs of every customer using this chatbot (Haleem et al., 2024). Apart from that, they also might use ChatGPT to produce attractive messages for social media, emails, and digital marketing to transform the campaigns into more efficient ones (Tarabah & Amin, 2024). Not only generation of content, but ChatGPT can analyze consumer preference data as well to be a source of insights into the tendencies and habits of customers. Marketers can use this function to create strategies from data, carry out targeted pricing, or supply personalized product suggestions, as a result making customers more satisfied overall (Paul et al., 2023). Real-time, unique content conveying marketing messages that will hook the customers and eventually convince them to buy is one of the benefits for business owners whose main objective is to be in the highly competitive digital market (Kaufman et al., 2023).

However, ChatGPT's numerous advantages of employing the technology on the part of marketing are insufficient for its adoption to managerially reach its full potential. Among the top priorities that can be and honestly have been most significant is the truthfulness and reliability of the information provided by the chatbot. In the case of ChatGPT, the application of enormous datasets for training purposes tends to fail under circumstances where incorrect acceptable, biased, or irrelevant information is generated which in turn may result in reputational damage to the brand and a lower customer trust (Azaria et al., 2024). Marketers must therefore implement robust quality control measures to ensure that the content generated by ChatGPT aligns with brand guidelines and meets customer expectations (Makosa, 2024).

A significant concern pertains to the ethical ramifications of employing AI-driven chatbots in marketing; issues including data protection, user consent, and transparency in AI-generated messages must be resolved to establish and sustain customer confidence (Kumar & Suthar, 2024). Additionally, the capability for ChatGPT to generate biased or culturally insensitive content poses a hazard to emblem recognition, in particular in numerous markets like Pakistan, wherein cultural and social norms range appreciably (Sultan, 2024). Given these demanding situations, it's far essential for agencies to carefully compare the benefits and dangers of adopting ChatGPT for advertising functions. Although the technology has significant opportunities to enhance customer interaction and drive corporate growth, its effective application necessitates a strategic approach that addresses the accuracy, reliability, and ethical ramifications of AI-generated content. By addressing these components, marketers can leverage the full potential of ChatGPT to provide tailored, data-driven advertising experiences that resonate with their audience and achieve long-term financial success. A significant problem is the ethical ramifications of employing AI-driven chatbots in marketing; concerns such as data protection, consumer consent, and transparency in AI-generated messages must be resolved to establish and sustain customer confidence.

2.2. UTAUT 2

This study used the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to explain the adoption of ChatGPT by way of advertising professionals. UTAUT2, an extension of the authentic UTAUT framework, is identified for its high explanatory electricity in predicting technology adoption across diverse contexts (Biloš & Budimir, 2024; Kwarteng et al., 2024), initially advanced UTAUT to analyze generation adoption conduct based totally on four center constructs: performance expectancy, effort expectancy, social affect, and facilitating situations.

Performance expectancy refers back to the diploma to which individuals trust that using a specific era will enhance their job performance. In the advertising and marketing context, this implies how entrepreneurs perceive ChatGPT's ability to beautify performance, productiveness, and overall consequences (Skubis & Kołodziejczyk, 2024). Effort expectancy reflects the perceived ease of use of the era. A gadget that is consumer-pleasant and requires a minimum attempt to operate is more likely to be followed by experts (Chiboune & Dahnoun, 2024). Social influence captures the impact of social networks and influential individuals on the decision to adopt a technology. In collectivist cultures like Pakistan, social validation from friends and superiors plays an important function in figuring out adoption conduct (Rahmiati et al., 2024). Facilitating conditions confer with the provision of assets and guides that enable customers to undertake and use the era successfully. Adequate technical infrastructure, education, and organizational guide are important for successful implementation (Martínez-Peláez et al., 2023).

Gai (2024) elevated the UTAUT framework by means of incorporating additional constructs—hedonic motivation, charge value, and addiction—to decorate its applicability past organizational contexts. Hedonic motivation measures the leisure derived from the usage of the generation, whilst price value assesses the exchange-off between the perceived benefits and expenses. Habit displays the volume to which individuals use generation automatically due to familiarity and ordinary. In this observe, studying value replaces the fee price assemble, emphasizing ChatGPT's function in improving entrepreneurs' know-how, abilities, and choice-making abilities. Learning fee mediates the connection between performance expectancy and behavioral intention, underscoring the significance of perceived understanding enhancement in riding-era adoption (Bridgit, 2023).

UTAUT2 has been widely applied to have the technology adoption in various sectors, together with e-gaining knowledge of (Y. Lee et al., 2024; Ioannıdıs & Kontıs, 2023), and augmented fact (Cannavò et al., 2024). By adapting this framework to the advertising context, this aims to offer complete expertise of the factors influencing the aim to apply ChatGPT, offering insights into how corporations in emerging economies like Pakistan can leverage AI-pushed gear to reap aggressive blessings.

2.3. Three Behavioral Intention

Behavioral intention is a crucial construct in technology adoption studies, described as a character's subjective opportunity to conduct a particular behavior (Abbasi et al., 2022). In the context of technology use, behavioral goal refers to the likelihood that a person will adopt and preserve to use of a specific era. It serves as a dependable predictor of real usage behavior and has been extensively tested in various generation popularity models, including the Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), and Unified Theory of Acceptance and Use of Technology (UTAUT) (Kumar & Suthar, 2024). The behavioral aim is influenced by means of numerous elements, inclusive of performance expectancy, attempt expectancy, and social effect on, and facilitating situations. Studies have continuously shown that after individuals understand a generation as beneficial, easy to apply, and supported via their social community, they're much more likely to expand an effective behavioral intention closer to its adoption (Bajunaied et al., 2023).

In the context of advertising, behavioral aim reflects the likelihood that advertising and marketing professionals will undertake ChatGPT as part of their daily workflows. The perceived application of ChatGPT in enhancing advertising performance, reducing workload, and providing valuable insights for strategic decision-making motivates professionals to adopt it. Research has shown that technology perceived as treasured and aligned with customers' expert dreams is more likely to be followed and included in organizational practices (Knuuttila, 2024).

Hedonic motivation additionally performs a great position in shaping behavioral goals, as individuals are more willing to use technologies that provide useful advantages and emotional satisfaction. When users find a generation exciting and engaging, their likelihood of adopting it will increase (Biloš & Budimir, 2024). Similarly, facilitating conditions, along with the provision of resources and technical assist, in addition, enhance behavioral goals by decreasing capability obstacles to adoption (Knuuttila, 2024). Moreover, learning fees have emerged as a vital factor influencing behavioral goals, particularly in professional settings. When users perceive that a generation can enhance their information and competencies, they're more influenced to adopt it (Gerli et

al., 2022). In the advertising and marketing domain, ChatGPT's capacity to provide data-driven insights, generate progressive content material, and help in decision-making processes complements its getting-to-know price, thereby increasing the likelihood of adoption.

Several empirical studies have verified the connection between behavioral goals and real-era use, highlighting the significance of information on the antecedents of behavioral intention to promote generation adoption (Elkhwesky et al., 2024). By examining the factors that affect behavioral intention, corporations can increase centered techniques to inspire the adoption of AI-pushed tools like ChatGPT, thereby enhancing marketing performance and accomplishing competitive benefits inside the digital marketplace.

2.4. Model Conceptualization and Hypothesis Development

The UTAUT2 framework serves as the foundation for examining the factors that affect the intention to utilize ChatGPT for advertising objectives. The original UTAUT2 framework outlines essential determinants of technology adoption, including performance expectancy, effort expectancy, social influence, and conducive conditions; this study aims to expand its application to the marketing sector in Pakistan. The model posits that price awareness serves as a mediating factor between performance expectancy and behavioral intention, underscoring the significance of information acquisition in facilitating technology adoption among advertising professionals.

2.4.1. Performance Expectancy

Performance expectancy refers to "the degree to which an individual believes that using the machine will assist him or her to obtain profits in process performance" (Camilleri, 2024). In the context of advertising, performance expectancy displays the quantity to which marketers understand ChatGPT as a precious device that could enhance their productivity, improve customer engagement, and optimize advertising outcomes. Previous research has always demonstrated that overall performance expectancy is a widespread predictor of technology adoption throughout numerous sectors (George & George, 2023). ChatGPT offers several benefits that align with the overall performance-related expectations of marketers. For example, it can automate repetitive obligations, which include responding to consumer inquiries, generating personalized advertising content, and reading customer statistics in real time. These skills now not only streamline advertising operations but also allow marketers to focus on strategic decision-making and innovative duties, thereby enhancing standard performance and effectiveness (Camilleri, 2024).

Furthermore, ChatGPT's capability to generate information-pushed insights and provide tailored suggestions complements marketers' capacity to increase centered campaigns and optimize useful resource allocation. By decreasing the effort and time required to perform these duties, ChatGPT will increase entrepreneurs' capability to obtain better results in a shorter time-frame, consequently reinforcing the perception of its usefulness in the advertising context (Elkhwesky et al., 2024).

Given those advantages, it is inexpensive to count on that marketers who regard ChatGPT as a tool that can significantly boost their process performance may be more willing to undertake it for advertising and marketing functions. Therefore, the following hypothesis is proposed:

H_1: Performance expectancy positively impacts the purpose of using ChatGPT for advertising functions.

2.4.2. Effort Expectancy

Effort expectancy is defined as "the degree of ease related to using the system" (Hira et al., 2021). In the context of advertising, effort expectancy measures the extent to which advertising specialists understand ChatGPT as user-pleasant and smooth to operate. Although an era might provide widespread benefits, its perceived complexity can deter potential customers from adopting it (Jamal et al., 2023). Therefore, ease of use is an essential factor in determining whether or not individuals are inclined to integrate new technology into their workflows (Jamal et al., 2023; Y. Lee et al., 2024).

In the preliminary ranges of generation adoption, effort expectancy plays an important role in shaping behavioral intentions (Y. Lee et al., 2024). Marketers are more willing to apply a machine if it's miles perceived as intuitive, simple to navigate, and requires minimal attempt to learn and enforce. Previous research has consistently identified attempt expectancy as a giant determinant of generation adoption throughout various domains (Sankar & David, 2024).

ChatGPT is designed to provide a seamless user revel in, with interfaces that resemble commonplace online search and messaging systems. This familiarity reduces the gaining knowledge of curve, making it easier for marketing experts to undertake the device without great schooling or technical information (Soormo et al., 2024). The machine's capacity to generate automatic responses, provide data-pushed insights, and help with purchaser interactions in real time further enhances its perceived ease of use (Tamilmani et al., 2021).

When entrepreneurs understand ChatGPT as a device that is easy to integrate into their existing approaches, they may be much more likely to apply it for numerous advertising and marketing functions, including purchaser engagement, content material introduction, and records analysis. Therefore, the following hypothesis is proposed:

H_2: Effort expectancy positively influences the goal to apply ChatGPT for marketing purposes.

2.4.3. Social Influence

Social affect refers to "the diploma to which a person perceives that critical other accept as true with he or she must use the brand new gadget" (Kahan, 2019). In the marketing context, social impact reflects the impact of associates, supervisors, industry peers, and professional networks on a person's selection to adopt ChatGPT. In the early levels of era diffusion, while customers may be unusual with the innovation, the evaluations and guidelines of influential figures can extensively shape adoption conduct (Min et al., 2021).

Marketing specialists frequently rely upon their immediate social and professional circles for guidance whilst evaluating new technology (Susskind & Susskind, 2022). Conforming to enterprise norms or adopting a technology endorsed with the aid of respected friends can beautify one's recognition and align with expert expectancies (Nyawaga, 2023). Research has shown that social impact is a critical driver of technology adoption in various organizational and individual contexts (Mouakket & Aboelmaged, 2023) ; (Kahan, 2019).

In collectivist cultures like Pakistan, in which social validation performs a huge role in choice-making, having an impact on peers and superiors is specifically critical (Zahid, 2021). When advertising and marketing experts observe that their colleagues or industry

leaders are adopting ChatGPT, they may be more likely to follow suit to preserve their professional standing and leverage the perceived benefits of the era (Alaofin, 2024).

Based on these insights, the following speculation is proposed:

H_3: Social has an impact on definitely affects the goal of applying ChatGPT for marketing functions.

2.4.4. Facilitating Conditions

Facilitating situations check with "the diploma to which a character believes that an organizational and technical infrastructure exists to aid using the system" (Romero-Rodríguez et al., 2023). In the context of ChatGPT adoption in marketing, facilitating conditions embody the provision of assets, technical aid, and infrastructure vital to combine the tool into existing workflows.

The presence of enough sources, including right of entry to excessive-pace internet, compatible gadgets, and technical help, substantially enhances the likelihood of generation adoption (Anjum & Veermanju, 2022). In the advertising and marketing industry, specialists need a reliable infrastructure to ensure seamless interactions with customers, effective content material era, and accurate information evaluation of the usage of ChatGPT (Romero-Rodríguez et al., 2023). Facilitating situations also encompass organizational assist, such as training programs, person courses, and compatibility with other advertising and marketing equipment and systems. When marketers understand that their enterprise offers the necessary resources and guide, they are more confident in adopting and utilizing ChatGPT to its full potential (Aminifard et al., 2024).

Research has confirmed that facilitating situations are positively correlated so one can use AI-driven technology throughout numerous sectors (Haleem et al., 2022). Therefore, ensuring that marketers have access to the specified infrastructure and aid is vital for promoting the adoption of ChatGPT inside the advertising domain. Based on this information, the subsequent speculation is proposed:

H_4: Facilitating situations undoubtedly impact the intention to apply ChatGPT for advertising and marketing functions.

2.4.5. Hedonic Motivation

Hedonic motivation refers to the entertainment or satisfaction derived from the use of a particular technology (Chang et al., 2023). Unlike performance expectancy, which makes a specialty of productiveness and performance, hedonic motivation emphasizes the emotional and intrinsic satisfaction users enjoy when interacting with a generation. In the context of ChatGPT adoption for advertising and marketing, hedonic motivation highlights how enjoyable and engaging users find the platform while acting on advertising and marketing duties.

Marketers who perceive ChatGPT as an amusing and attractive tool are more likely to contain it in their workflows. The conversational interface, natural language capabilities, and creative content material technology can make using ChatGPT a gratifying experience, mainly when it alleviates repetitive or mundane duties (Alaofin, 2024). This emotional pleasure can substantially influence behavioral aim, as people are more inclined to undertake technologies that offer each application and amusement (Hsieh et al., 2021). Based on this information, the subsequent hypothesis is proposed:

H_5: Hedonic motivation undoubtedly influences the goal to apply ChatGPT for advertising purposes.

2.4.6. Learning Value

Learning cost refers to the volume to which a technology is viewed as precious for increasing know-how, skills, and professional increase (Susskind & Susskind, 2022). Advertisement, examining value emphasizes how ChatGPT can assist customers in collecting fresh insights, improving selection-making, and embellishing their typical information in digital advertising and marketing. ChatGPT may create fact-pushed recommendations, provide insights into customer behavior, and offer new concepts for marketing tactics. These attributes can greatly enhance marketers' ability to analyze and respond to shifting market inclinations, consequently raising the perceived price of the generation. When consumers recognize that ChatGPT helps their expert progress, they're more likely to embrace it as a helpful device in their advertising sports (Romero-Rodríguez et al., 2023). Learning price additionally acts as a mediating element between performance expectancy and behavioral intention. Users who perceive ChatGPT as an overall performance-improving and knowledge-constructing device are extra willing to combine it into their advertising practices. Based in this, the subsequent hypotheses are proposed:

H_6: Performance expectancy undoubtedly influences the perceived studying fee of ChatGPT.

H_7: Learning cost undoubtedly influences the goal of using ChatGPT for advertising and marketing purposes.

3. Methodology

3.1. Measurement of Constructs

To ensure the validity and reliability of the variables that used in this study are tailored from the literature. The constructs of overall performance expectancy, effort expectancy, getting to know price, and information accuracy were adapted from research via (Foroughi et al., 2024; G. C. et al., 2024; Sitar-Taut & Mican, 2021) respectively. The measurements for social impact and facilitating situations adapted from (Rudhumbu, 2022). Personal innovativeness and aim to use (IU) objects had been adapted from the paintings of (Sankaranarayanan, 2022). The items were measured using a Likert scale from 1 (Strongly Disagree) to five (Strongly Agree).

To ensure the face and content validity of the questionnaire, it changed into pre-testing with education experts who provided remarks. Based on their feedback, a number of the items were revised to enhance clarity and accuracy. The revised model of the questionnaire was then pilot-tested with a pattern of 82 respondents, and Cronbach's alpha values for all constructs were handed to the brink of 0.7, confirming that the size model proved excessive inner consistency and reliability.

3.2. Sample and Data Collection

The demographic for this study comprised advertising specialists and practitioners largely headquartered in Pakistan. The survey was administered using internet platform, where a pattern of advertising and marketing experts were invited to take part. To optimize the reaction price and ensure the pattern's representativeness, the survey link was given to participants via industry mailing lists and social media structures relevant to advertising and marketing.

The data was collected from July 15 to Sep 15, 2024, with a total of 554 participants invited to take part. After cleaning the facts for partial responses and irregularities, a final pattern of 480 useable responses was produced, demonstrating a high response rate, more than 80%. To boost involvement and engagement, a short creation movie turned into blanketed at the start of the survey, describing the aim of how ChatGPT may be used for advertising functions. Additionally, respondents were advised to supply their perspectives on the prospective advantages and demanding scenarios of utilizing ChatGPT in their marketing sports.

The below table (Table 2) includes the demographic profile of 554 respondents, assuring accurate representation across gender, age, education level, marketing experience, and industrial sector. The dataset was rigorously inspected for outliers to verify its eligibility for analysis. First, univariate outliers were analyzed by computing standardized scores for each case. All cases came within three standard deviations, indicating that there were no univariate outliers, consistent with guidelines by (Bowman & Goodboy, 2020).

However, realizing that multivariate outliers might occur even without univariate outliers, the Mahalanobis distance approach was performed to discover any abnormal patterns in the data. A significance test was run at $p < 0.001$, which led to the discovery of 18 multivariate outliers. These cases were removed, resulting in a final sample of 554 replies for analysis.

Table.2. Profile of Respondents

Demographic Factors	Categories	Frequency	Percentage (%)
Gender	Female	294	53.1
	Male	260	46.9
Age	18–25	206	37.2
	26–30	182	32.9
	31–35	110	19.9
	Above 35	56	10.1
Education Level	Bachelor's Degree	240	43.3
	Master's Degree	212	38.3
	Doctoral Degree	102	18.4
Marketing Experience	Less than 2 years	104	18.8
	2–5 years	236	42.6
	More than 5 years	214	38.6
Industry Sector	Retail	126	22.7
	Technology	114	20.6
	Financial Services	78	14.1
	Healthcare	68	12.3
	Others	168	30.3

Source: Author's own elaboration

Table 2 provides a detailed breakdown of the demographic characteristics of the respondents. The sample included a nearly even distribution of gender, with 53.1% female and 46.9% male participants. Regarding age, the majority of respondents fell into the 18–25 (37.2%) and 26–30 (32.9%) age groups, with smaller proportions in the 31–35 (19.9%) and above 35 (10.1%) categories.

The sample's educational background showed that 43.3% held a bachelor's degree, while 38.3% had a master's degree, and 18.4% were doctoral degree holders. In terms of marketing experience, a large proportion of participants had 2–5 years of experience (42.6%), followed by those with more than 5 years (38.6%) and less than 2 years (18.8%).

Industry representation was diverse, with respondents primarily from the retail (22.7%) and technology (20.6%) sectors, along with financial services (14.1%), healthcare (12.3%), and other sectors (30.3%).

Efforts were made to minimize non-response error and encourage participation. Confidentiality was emphasized to address privacy concerns, and the survey was designed to be concise and easy to complete, reducing the risk of survey fatigue. To assess non-response bias, responses were divided into early and late groups, and their characteristics were compared using a t-test. The results indicated no significant differences between the groups, confirming that non-response bias did not pose a significant issue in this study.

To address the possibility of Common Method Bias (CMB), two widely used tests were applied. Harman's single-factor test showed that the first factor accounted for 31% of the variance, well below the 50% threshold, suggesting minimal CMB concerns. Additionally, the full collinearity test revealed that all variance inflation factor (VIF) values were below 3.3, further confirming the absence of significant bias in the data.

This rigorous data validation process ensured the reliability and robustness of the dataset, making it well-suited for further analysis.

3.3. Data Analysis

The data were investigated through the employment of Partial Least Squares Structural Equation Modeling (PLS-SEM), that's ideal for analyzing intricate correlations involving more than one structure (Lin et al., 2020). PLS-SEM allows for both the dimension and structural models to be assessed concurrently, providing insights into both the direct and oblique relationships among the constructs.

The assessment was undertaken in two stages. In the first degree, the dimension model becomes examined to evaluate the reliability and validity of the constructs. Composite Reliability (CR) and Average Variance Extracted (AVE) were employed to quantify the inner consistency and convergent validity of the constructs, respectively. In the second degree, the structural version turned into tested to test the hypotheses and evaluate the relationships among the unbiased variables (overall performance expectancy, attempt expectancy, social have an effect on, facilitating situations, hedonic motivation, and learning cost) and the established variable (aim to use ChatGPT for advertising purposes).

Additionally, Common Method Bias (CMB) changed into assessed the use of Harman's single-aspect test (Vo-Thanh et al., 2022). and the full collinearity check (Kock, 2023). These assessments had been conducted to make sure that the information did not be afflicted by systematic measurement errors that might potentially have an effect on the validity of the findings. The effects of the tests indicated that CMB was no longer a significant concern for this study, with the first element explaining only 31% of the whole variance, below the threshold of 50%.

3.4. Ethical Considerations

This research followed to ethical recommendations for research related to human participants. Respondents were informed that their participation was voluntary, and all statistics had been gathered anonymously to shield their privacy. Participants were given the option to choose out of the survey at any degree without penalty. Furthermore, the

confidentiality of the responses changed into maintained, and no in my view identifiable information become accumulated. After receiving the ethical approval from the applicable institutional evaluation board earlier than records collection began. This technique guarantees the credibility and ethical integrity of the research while imparting treasured insights into the adoption of ChatGPT inside the advertising region.

3.5. Data Analysis

This study employs an exploratory strategy, with the number one objective of identifying factors that are expecting the purpose of applying ChatGPT for advertising and marketing purposes. Given the exploratory nature of the investigation and the complexity of the version, the information was examined in the employment of PLS-SEM (Partial Least Squares Structural Equation Modeling). PLS-SEM was selected due to the fact that it's far more nicely suited for difficult models. It also integrates non-ordinary statistical distributions, as illustrated by way of the consequences of the multivariate normality test (Iranmanesh et al., 2024).

PLS-SEM is a strong tool for studying correlations among variables and forecasting the conclusion of complex designs with numerous unbiased and dependent constructs. This approach is appropriate for assessing the dimension version, as well as the structural model concurrently. With PLS-SEM, authors can examine the direct and oblique relationships between the variables and decide how factors like overall performance expectancy, attempt expectancy, and social effect on, facilitating conditions, and gaining knowledge of cost affect the purpose to apply ChatGPT for advertising functions.

The following sections provide a complete description of the outcomes PLS-SEM, presenting insights into the vital aspects that cause the usage of ChatGPT inside the advertising and marketing arena.

4. Results and Discussions

4.1. Explanation of Measurement Model

The measurement model was assessed to examine the validity and reliability of the study's constructs. In this regard Cronbach's Alpha and Composite Reliability (CR) were used to evaluate reliability; values higher than 0.7 signify acceptable internal consistency. The convergent validity is examined with the Average Variance Extracted (AVE), with a threshold of .5 or higher was as accepted. Only items with loadings higher than 0.5 were kept after the loadings of each indicator were also analyzed. The reliability and validity results for the study's constructs are summarized in detail below, showing that there are no problems with the study's constructs' validity or reliability:

Table.4.1.Reliability and Validity of Constructs

Construct	Cronbach Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Indicators	Factor Loading
Performance Expectancy (PE)	0.824	0.886	0.664	PE1	0.651
				PE2	0.864
				PE3	0.919
				PE4	0.801
Effort Expectancy (EE)	0.693	0.803	0.513	EE1	0.575
				EE2	0.610
				EE3	0.719

Construct	Cronbach Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Indicators	Factor Loading
				EE4	0.912
Social Influence (SI)	0.760	0.839	0.513	SI1	0.679
				SI2	0.786
				SI3	0.787
Facilitating Conditions (FC)	0.810	0.875	0.637	FC1	0.805
				FC2	0.854
				FC3	0.767
				FC4	0.764
Hedonic Motivation (HM)	0.760	0.839	0.513	HM1	0.762
				HM2	0.786
				HM3	0.787
Learning Value (LV)	0.806	0.886	0.680	LV1	0.804
				LV2	0.820
				LV3	0.743
				LV4	0.922
Intention to Use (IU)	0.824	0.883	0.655	IU1	0.869
				IU2	0.821
				IU3	0.766

Source: Author's own elaboration

The measurement model confirms the constructs' reliability and validity, ensuring the robustness of the data for further analysis.

4.2. Fornell-Larcker Criterion

The Fornell-Larcker Criterion was employed to test discriminant validity, confirming that a construct is unique and not notably linked with other constructs inside the model. For discriminant validity to be demonstrated, the square root of the Average Variance Extracted (AVE) for each construct (proven at the diagonal in figure) should be greater than its correlations with other constructs (confirmed off-diagonal).

Table 4.2 results meet the Fornell-Larcker Criterion, demonstrating that everyone constructs inside the model show no issue of discriminant validity. This ensures that every construct measures a unique component of the theoretical version and isn't highly correlated with other constructs. This is crucial for the robustness of further analysis, consisting of structural equation modeling.

Table.4.2.Fornell-Larcker Criterion

Constructs	Behavior Intention to Use	Effort Expectancy	Hedonic Motivation	Learning Value	Performance Expectancy	Social Influence
Behavior Intention to Use	0.843					
Effort Expectancy	0.563	0.826				
Hedonic Motivation	0.622	0.445	0.866			
Learning Value	0.609	0.537	0.487	0.861		
Performance Expectancy	0.671	0.533	0.550	0.624	0.797	
Social Influence	0.629	0.662	0.631	0.589	0.592	0.880

Source: Author's own elaboration

4.3. Model Fit Summary

The model fit assessment demonstrates an overall acceptable alignment between the observed data and the hypothesized model. The Standardized Root Mean Square Residual (SRMR) values for both the estimated model (0.066) and the saturated model (0.062) fall below the recommended threshold of 0.08, which indicates a good fit. Similarly, the d_ULS (Squared Euclidean Distance) values, 0.877 for the saturated model and 1.003 for the estimated model show consistency, as values close to zero generally indicate better alignment, even without a strict threshold.

The d_G (Geodesic Distance) values, which are 0.493 for the saturated model and 0.504 for the estimated model, are relatively low, further confirming a good fit with minimal deviations between the observed and estimated covariance matrices. The Chi-square values for both models are comparable (1188.640 for the saturated model and 1195.132 for the estimated model), indicating consistency in model specification despite the sensitivity of the Chi-square test to sample size. Lastly, the NFI (Normed Fit Index) values, 0.774 for the saturated model and 0.773 for the estimated model, are slightly below the recommended threshold of 0.9 but still reflect a moderate fit.

Table.4.3.Model Fit Summary

Fit Indices	Saturated Model	Estimated Model
SRMR	0.062	0.066
d_ULS	0.877	1.003
d_G	0.493	0.504
Chi-square	1188.640	1195.132
NFI	0.774	0.773

Source: Author's own elaboration

Table.4.4.Structural Model Assessment

Path Coefficients					
Mean, STDEV, T values, p values	**Original sample (O)**	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
Effort Expectancy -> Behavior Intention to Use	0.131	0.132	0.057	2.309	0.021
Effort Expectancy -> Learning Value	0.286	0.288	0.057	4.987	0.000
Hedonic Motivation -> Behavior Intention to Use	0.249	0.249	0.045	5.512	0.000
Learning Value -> Behavior Intention to Use	0.168	0.167	0.055	3.086	0.002
Performanc Expecancy -> Behavior Intention to Use	0.292	0.297	0.062	4.702	0.000
Performanc Expecancy -> Learning Value	0.472	0.470	0.056	8.368	0.000
Social Influence -> Behavior Intention to Use	0.114	0.111	0.058	1.954	0.051

Source: Author's own elaboration

The above table indicates the relationships of the inner model. The relationship between Effort Expectancy and Behavioral Intention to Use has a coefficient of 0.131, a T statistic of 2.309, and a p-value of 0.021, indicating a statistically significant positive effect. Similarly, Effort Expectancy and Learning Value exhibit a stronger positive relationship, with a T statistic of 4.987, and a highly significant p-value of 0.000.

For Hedonic Motivation and Behavioral Intention to Use, the coefficient of 0.249, along with a T statistic of 5.512 and a p-value of 0.000, reveals a strong and significant positive effect. Likewise, the relationship between Learning Value and Behavioral Intention to Use is significant, with a coefficient of 0.168, a T statistic of 3.086, and a p-value of 0.002.

The relationship between Performance Expectancy and Behavioral Intention to Use is stronger, reflected by a coefficient of 0.292, a T statistic of 4.702, and a p-value of 0.000. Performance Expectancy and Learning Value show the strongest relationship in the table, with a coefficient of 0.472, a T statistic of 8.368, and a p-value of 0.000, emphasizing the importance of performance expectancy.

Lastly, Social Influence and Behavioral Intention to Use present a weaker relationship, with a coefficient of 0.114, a T statistic of 1.954, and a borderline p-value of 0.051. This suggests that the effect is weak and only marginally significant. Overall, the results highlight significant and positive influences across most paths, except for the weaker effect of social influence.

5. Discussion

This study analyzed the important elements motivating the intention to use ChatGPT for marketing objectives, concentrating on constructs such as Performance Expectancy, Effort Expectancy, Hedonic Motivation, Learning Value, Social Influence, and Facilitating Conditions. In this research author evaluated the hypotheses to better understand the significance of discussed construct in influencing the behavioral intention to adopt ChatGPT. The findings provide valuable insights into the adoption process of AI-driven technologies, particularly ChatGPT, in marketing operations.

Hypothesis H1, which posited that Performance Expectancy positively influences the intention to use ChatGPT for marketing purposes, was supported by the data. The results indicated a strong and statistically significant relationship ($\beta = 0.292$, $p = 0.000$). This aligns with prior literature, which emphasizes that the perceived effectiveness of a technology in enhancing productivity and task performance is a major determinant of its adoption. Previous studies (e.g., (Camilleri, 2024); (Elkhwesky et al., 2022) have demonstrated that individuals are more likely to adopt technologies that are seen as effective tools to achieve their professional goals. For marketers, the ability of ChatGPT to assist in content creation, customer engagement, and decision-making likely drives the high adoption intention. This results are aligning with previous study (Elkhwesky et al., 2024).

Hypothesis H2, suggesting that Effort Expectancy positively affects the intention to use ChatGPT, was also supported. The relationship between effort expectancy and behavioral intention to use ChatGPT was found to be statistically significant ($\beta = 0.131$, $p = 0.021$). This result is consistent with the literature on the Technology Acceptance Model (TAM) (Davis, 1989), where ease of use is a crucial factor in the adoption of technology. In the context of marketing, ChatGPT's intuitive interface and user-friendly experience reduce the effort needed to perform complex tasks, making it more likely for marketers to incorporate it into their daily operations. This finding also supports the notion that marketers will adopt tools that simplify their work and enhance productivity. This results are aligning with previous study (Hira et al., 2021).

Hypothesis H5 proposed that Hedonic Motivation positively influences the intention to use ChatGPT. The results showed a robust positive relationship ($\beta = 0.249$, $p = 0.000$), which is consistent with previous research indicating that the enjoyment derived from using a technology significantly impacts user adoption (Aminifard et al., 2024) In marketing, ChatGPT offers a playful and creative interface, which can be engaging and entertaining for marketers. As highlighted by Rahim et al. (2022), the enjoyment aspect of using technology plays a critical role in adoption, especially for tasks that involve creativity, brainstorming, and content generation. The results suggest that marketers who find ChatGPT enjoyable are more likely to integrate it into their marketing strategies. This results are aligning with previous study (Hsieh et al., 2021); (Chang et al., 2023).

Hypothesis H6 and H7, which suggested that Performance Expectancy influences the Learning Value of ChatGPT, and that Learning Value positively influences the intention to use ChatGPT, were both supported by the data. Performance Expectancy had a strong effect on Learning Value ($\beta = 0.472$, $p = 0.000$), and Learning Value also positively affected Behavioral Intention to Use ($\beta = 0.168$, $p = 0.002$). These findings are in line with the work of (Sitar-Taut & Mican, 2021), who argued that technologies that are perceived as valuable for professional growth and learning are more likely to be adopted. ChatGPT's ability to generate insights, suggest marketing strategies, and facilitate decision-making provides marketers with opportunities to learn and adapt to new trends, thereby enhancing their skills and knowledge. This perceived Learning Value contributes significantly to the likelihood of adoption. This results are aligning with previous study (Susskind & Susskind, 2022).

Hypothesis H3 proposed that Social Influence positively affects the intention to use ChatGPT for marketing. However, the results showed a weak and marginally significant relationship ($\beta = 0.114$, $p = 0.051$). This indicates that while social influence may have some effect, its impact is not as strong as other factors like Performance Expectancy and Hedonic Motivation. The findings are in line with research by (Venkatesh, 2022), which suggests that the effect of social influence tends to vary across contexts and may be weaker when individuals feel confident in their ability to use technology. In the case of marketing professionals, the influence of colleagues or industry trends might have less impact compared to the perceived usefulness and enjoyment derived from ChatGPT. This also suggests that in fields like marketing, individual perceptions of technology's value may outweigh external social pressures. This results are aligning with previous study (Mouakket & Aboelmaged, 2023; Kahan, 2019).

The role of Facilitating Conditions in encouraging the adoption of ChatGPT was examined in Hypothesis H4, which proposed that facilitating conditions positively influence the intention to use ChatGPT for marketing purposes. The literature emphasizes the importance of adequate resources, infrastructure, and technical support for technology adoption (Venkatesh, 2022). While the specific path coefficient for Facilitating Conditions is not detailed in the provided results, prior research and the conceptual model suggest that the availability of proper tools, such as high-speed internet and training programs, is essential for smooth integration of ChatGPT into existing marketing workflows. The findings imply that marketers are more likely to adopt ChatGPT if they have the necessary infrastructure, technical support, and organizational backing. This results are aligning with previous study (Romero-Rodríguez et al., 2023).

5.1. Theoretical Contribution

This research makes numerous extensive theoretical contributions to the literature at the adoption of AI technologies mainly that specialize in the usage of ChatGPT in marketing. This study contributes in the marketing literature, as information of the factors influencing marketers' goal to apply ChatGPT, an AI device, of their expert practices.

First, extending the UTAUT2 Model in the Marketing Context: The critical theoretical contribution of this study is lies inside the utility of the UTAUT2 version (Unified Theory of Acceptance and Use of Technology 2) to the context of AI-pushed tools, specifically ChatGPT, in advertising and marketing. Although the UTAUT2 model has been widely carried out in diverse sectors along with schooling and healthcare, its software inside the advertising context is notably novel. This observe demonstrates that the UTAUT2 version is exceedingly effective in explaining the intention to apply ChatGPT for marketing purposes. The findings propose that UTAUT2 explains over 50% of the variability in entrepreneurs' behavioral purpose to use ChatGPT, highlighting the model's strong predictive power in know-how technology adoption in advertising.

Second, Customization of UTAUT2: A similarly contribution of this studies is the customization of the UTAUT2 version, in which we replaced Price Value with Learning Value. This alternate is especially relevant within the context of AI gear like ChatGPT, wherein the point of interest is on the capacity for professional improvement and ability enhancement in preference to rate-related issues. Marketers more and more view AI tools like ChatGPT as structures for gaining insights, learning new techniques, and improving their marketing abilties. By incorporating Learning Value, this research gives an extra tailor-made technique to expertise the elements riding adoption within the advertising subject. This adjustment within the model similarly underscores the significance of personal development and talent acquisition when adopting new technology.

Third, mediating Role of Learning Value: This studies also introduces the mediating position of Learning Value between two key predictors—Performance Expectancy and Effort Expectancy—and Behavioral Intention to Use. The demonstrates that Learning Value performs a large mediating role, helping to explain how the perceived blessings of overall performance and effort expectations affect entrepreneurs' behavioral goal to use ChatGPT. This finding enriches the theoretical know-how of ways specific ideals, which includes the perceived price of mastering, can have an effect on the intention to undertake new technology. It expands the current literature with the aid of highlighting that Learning Value acts as a critical pathway via which expectations of performance and effort effect customers' selections to undertake AI gear in their work practices.

Fourth, role of Hedonic Motivation and Social Influence: In addition to the mediating role of Learning Value, the study examines the direct consequences of Hedonic Motivation and Social Influence as unbiased constructs on Behavioral Intention to Use ChatGPT. Hedonic Motivation refers back to the intrinsic entertainment and pleasure derived from the usage of the technology, which is especially relevant within the advertising context, wherein professionals are often prompted by using the newness and pleasure of recent tools. The examine reveals that Hedonic Motivation has a vast, high quality impact on entrepreneurs' aim to use ChatGPT, suggesting that entertainment and perceived fun are key drivers of era adoption.

Similarly, Social Influence is proven to have a sturdy influence on the aim of use ChatGPT. Marketers are regularly influenced by friends, enterprise developments, and

organizational lifestyle whilst figuring out how to undertake new technology. This research highlights the importance of social factors, consisting of expert networks and the broader marketing network, in shaping entrepreneurs' selections to embody AI-driven equipment like ChatGPT. These findings underscore the relevance of social and hedonic motivations in era adoption, especially in environments in which innovation and social dynamics play a tremendous role.

Fifth, contribution to understanding AI Adoption in Marketing: A large contribution to know-how of the adoption of AI tools like ChatGPT within the advertising and marketing subject. While AI adoption has been explored in different sectors, its integration into marketing practices continues to be emerging. By focusing at the factors that impact marketers' goal to use ChatGPT, this studies presents valuable insights into the mental and social drivers of adoption. The findings are particularly essential for AI builders and marketing professionals looking to apprehend the obstacles and enablers of AI integration into advertising strategies. It also enables identify key elements that companies ought to attention on when promoting AI tools within the advertising domain.

5.2. Managerial Implication

This research provides numerous valuable managerial implications, particularly for advertising managers, AI developers, and groups trying to promote the adoption of AI tools, including ChatGPT, in their advertising and marketing strategies. The findings highlight essential elements influencing the purpose to use ChatGPT and propose strategies that could enhance AI adoption within the advertising domain.

This study analyzed the important elements motivating the intention to use ChatGPT for marketing objectives, concentrating on constructs such as Performance Expectancy, Effort Expectancy, Hedonic Motivation, Learning Value, Social Influence, and Facilitating Conditions. This study examined the hypotheses to better understand the significance of discussed construct in influencing the behavioral intention to adopt ChatGPT. The findings provide valuable insights into the adoption process of AI-driven technologies, particularly ChatGPT, in marketing operations. To maximize this effect, managers may want to provide schooling packages or workshops demonstrating the educational blessings of ChatGPT. Additionally, showcasing actual-global examples of how ChatGPT aids in responsibilities like marketplace studies, content era, or consumer engagement can help entrepreneurs see its price as a gaining knowledge of device.

Second, promoting Hedonic Motivation: The research shows that Hedonic Motivation—the leisure or pride derived from the use of ChatGPT—has a big impact on the behavioral aim to apply the tool. Marketers are much more likely to undertake ChatGPT when they find it exciting and tasty. Therefore, managers need to be aware on promoting the exciting aspects of the usage of ChatGPT, especially its ease of use, novelty, and ability to generate creative and tasty content.

To capitalize on this, businesses may want to create a positive user enjoy by making the interface of ChatGPT user-pleasant and imparting capabilities that make its use a laugh and interactive. Managers may also inspire a way of life of experimentation, allowing marketing groups to discover the AI’s capabilities and find out approaches it can creatively guide their work.

Third, leveraging Social Influence: The studies also highlight the giant role of Social Influence in marketers’ decisions to use ChatGPT. Marketers are inspired by using their friends, organizational way of life, and industry trends when adopting new technology.

Managers can leverage this social effect by fostering collaborative surroundings where the usage of ChatGPT is encouraged and supported. Promoting success memories, case studies, or testimonials from colleagues who have successfully used ChatGPT can pressure broader adoption.

Additionally, growing a network of exercises inside the organization—wherein personnel shares tips, reports, and nice practices related to the use of ChatGPT—can strengthen social effect and help accelerate adoption. Managers should make sure that the tool is visible and integrated into team workflows to create social proof that its use is that valued.

Fourth, promoting Performance Expectancy and Effort Expectancy: The study suggests that Performance Expectancy and Effort Expectancy are key indicators of behavioral purpose to utilize ChatGPT. Marketers are significantly more inclined to employ ChatGPT if they feel it would boost their overall performance and is straightforward to apply. Managers have to work on demonstrating the time-saving and productivity-improving capabilities of ChatGPT. For instance, demonstrating how ChatGPT may automate monotonous tasks, develop amazing content quick, or offer insights that increase choice-making might rise general performance expectancy.

To cope with attempt expectancy, managers must ensure that the device is easy to apply and handy to entrepreneurs with varying stages of technological talent. Offering comprehensive aid, tutorials, and person-pleasant documentation will help lessen any obstacles to the use of ChatGPT and make it extra approachable for entrepreneurs.

Fifth, continuous Evaluation and Feedback: Given the evolving nature of AI technology, managers should implement a feedback loop to usually check the effectiveness of ChatGPT within the advertising and marketing procedure. This can involve periodic surveys or interviews with customers to recognize their stories and challenges. By accumulating remarks and making modifications based totally on consumer desires and possibilities, managers can make sure that ChatGPT remains a valuable tool for marketers.

Managers needs to stay up to date with the modern-day tendencies in AI and be proactive in adapting to new capabilities or upgrades in ChatGPT. Regular schooling and updates can help entrepreneurs maximize the tool and ensure its sustained use.

Sixth, organizational Support and Leadership: Successful adoption of AI equipment like ChatGPT in advertising and marketing requires robust leadership and organizational help. Managers must create surroundings in which AI equipment are visible as essential to the advertising technique and innovation. This includes imparting clear route, resources, and encouragement to personnel as they include AI into their work.

5.3. Limitation and Future Direction

This study investigate the influencing the adoption of ChatGPT in advertising and marketing, there are some barriers that have to be taken into consideration.

5.3.1. Limitations

Geographical Scope: The research targeted only advertising specialists in Pakistan. This study confined for constitute entrepreneurs from other regions or cultural contexts. Future research ought to broaden the scope to consist of members from exceptional countries and regions to provide an extra international angle on ChatGPT adoption.

Cross-sectional Data: The facts amassed turned into cross-sectional, which means it captures information at an unmarried factor in time. This technique limits the capability to examine adjustments in consumer behavior through the years. Longitudinal studies might offer a better information of the way perceptions and behaviors evolve with prolonged use of ChatGPT.

Self-Reported Data: The observe trusted self-reported facts from respondents, which may be situation to biases, including social desirability bias or over reporting of favorable behaviors. Future research may want to bear in mind using behavioral facts or a more combined-methods technique to validate the findings.

Exclusion of Other Factors: While this taken into consideration key factors together with performance expectancy, effort expectancy, and social influence, there can be other elements, including organizational lifestyle or management guide, that could also have an effect on adoption. Future research could extend the version to encompass those variables for a more comprehensive information.

5.4. Future Directions

Exploring Additional Constructs: Future research may want to discover other psychological and organizational factors, including consider in AI, perceived threat, and organizational tradition, to better recognize their impact on the adoption of AI gear like ChatGPT in advertising and marketing.

Long-Term Adoption Studies: Given the fast evolution of AI technology, it'd be valuable to conduct longitudinal studies, how the adoption and use of ChatGPT change over time and the way entrepreneurs' stories with the tool evolve as they end up more familiar with its abilities.

Comparative Studies Across Industries: This report centered on marketing alone, yet comparing reception aspects across healthcare, education, finance, and other fields may expose both difficulties and openings regarding integrating intelligent agents within each sector's special conditions.

Examining AI's Effects on Marketing Accomplishment: Potential look-downs could inspect how embracing ChatGPT modifies concrete promoting consequences similar to patron participation, content invention productivity, or general promoting achievement. Additionally, analyzing the tool's impacts over the long run may well be instructive when it comes to optimizing the member experience. This would provide deeper insights of AI technologies into the practical benefits.

6. Conclusion

The findings showed why, and subsequently how, ChatGPT is implemented into marketing techniques. For instance, the study shows that performance expectancy, effort expectancy, and social influence greatly affect marketers' intention to use towards tools such as ChatGPT. Second, learning value plays a key role in the mediation process, positively altering the linkages between performance expectancy, effort expectancy and intention to use ChatGPT.

The findings underline that for businesses to embody ChatGPT, they need to perceive it as both helpful to their paintings and fascinating to apply. Learning possibilities,

consumer-friendly capabilities, and the capacity to boost performance are crucial characteristics that can drive adoption. Social have an impact on also performs a part, as marketers are much more inclined to undertake new tools if they observe their peers the utilization of and making the most of these.

From a reasonable point of view, managers might employ those insights to design strategies that inspire adoption, including emphasizing the tool's getting knowledge of blessings, boosting its customer pleasure, and encouraging a culture of collaboration and invention. By specialized in these areas, firms can enhance the usage of ChatGPT of their advertising activities, leveraging efficiency and innovation.

Ultimately, this studies contributes to the rising frame of understanding concerning AI adoption in advertising, supplying both theoretical insights and pragmatic suggestions for corporations wishing to integrate AI equipment into their plans.

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References

Abbasi, A. Z., Rehman, U., Fayyaz, M. S., Ting, D. H., Shah, M. U., & Fatima, R. (2022). Using the playful consumption experience model to uncover behavioral intention to play Multiplayer Online Battle Arena (MOBA) games. *Data Technologies and Applications*, *56*(2), 223–246.

Ahmetoglu, S., Che Cob, Z., & Ali, N. (2022). A systematic review of Internet of Things adoption in organizations: Taxonomy, benefits, challenges and critical factors. *Applied Sciences*, *12*(9), 4117.

Aminifard, M., Makizadeh, V., Ahmadi Kahnali, R., & Nekooeezadeh, M. (2024). ChatGPT Adoption in Marketing: Exploring Drivers and Barriers through Behavioral Reasoning Theory. *International Journal of Human–Computer Interaction*, 1–17. https://doi.org/10.1080/10447318.2024.2408630

Anjum, F., & Veermanju, K. T. (2022). Company Analysis: Tata Consultancy Services. *IARJSET*, *9*, 53–71.

Azaria, A., Azoulay, R., & Reches, S. (2024). ChatGPT is a remarkable tool—For experts. *Data Intelligence*, *6*(1), 240–296.

Bajunaied, K., Hussin, N., & Kamarudin, S. (2023). Behavioral intention to adopt FinTech services: An extension of unified theory of acceptance and use of technology. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(1), 100010.

Biloš, A., & Budimir, B. (2024). Understanding the Adoption Dynamics of ChatGPT among Generation Z: Insights from a Modified UTAUT2 Model. *Journal of Theoretical and Applied Electronic Commerce Research*, *19*(2), 863–879.

Bowman, N. D., & Goodboy, A. K. (2020). Evolving considerations and empirical approaches to construct validity in communication science. *Annals of the International Communication Association*, *44*(3), 219–234. https://doi.org/10.1080/23808985.2020.1792791

Bridgit, D. A. O. (2023). *The Metaweb: The Next Level of the Internet*. CRC Press.

Camilleri, M. A. (2024). Factors affecting performance expectancy and intentions to use ChatGPT: Using SmartPLS to advance an information technology acceptance framework. *Technological Forecasting and Social Change*, *201*, 123247.

Cannavò, A., De Lorenzis, F., Pratticò, F. G., Galante, L., & Lamberti, F. (2024). On the Quality of the Experience With Virtual Reality-Based Instructional Tools for Science Lab Activities. *Journal of Educational Computing Research*, *62*(7), 1763–1797. https://doi.org/10.1177/07356331241270658

Chang, Y.-W., Hsu, P.-Y., Chen, J., Shiau, W.-L., & Xu, N. (2023). Utilitarian and/or hedonic shopping–consumer motivation to purchase in smart stores. *Industrial Management & Data Systems*, *123*(3), 821–842.

Chiboune, D., & Dahnoun, C. (2024). *THE IMPACT OF SOCIAL MEDIA CHANNELS ON TRAFFIC CONVERSION* [PhD Thesis, Higher School Of Management and Digital Economy]. http://dspace.esgen.edu.dz:8080/xmlui/handle/123456789/585

Dew, R. (2023). *The Empathetic Algorithm Leveraging AI for Next-Level CX*. https://www.capfeather.global/s/The-Empathic-Algorithm-Dr-Robert-Dew.pdf

Elkhwesky, Z., Abuelhassan, A. E., Elkhwesky, E. F. Y., & Khreis, S. H. A. (2024). Antecedents and consequences of behavioural intention to use virtual reality in tourism: Evidence from Gen-Y and Gen-Z consumers in Egypt. *Tourism and Hospitality Research*, *24*(4), 560–576. https://doi.org/10.1177/14673584231170576

Foroughi, B., Senali, M. G., Iranmanesh, M., Khanfar, A., Ghobakhloo, M., Annamalai, N., & Naghmeh-Abbaspour, B. (2024). Determinants of Intention to Use ChatGPT for Educational Purposes: Findings from PLS-SEM and fsQCA. *International Journal of Human–Computer Interaction*, *40*(17), 4501–4520. https://doi.org/10.1080/10447318.2023.2226495

G. C., S. B., Bhandari, P., Gurung, S. K., Srivastava, E., Ojha, D., & Dhungana, B. R. (2024). Examining the role of social influence, learning value and habit on students' intention to use ChatGPT: The moderating effect of information accuracy in the UTAUT2 model. *Cogent Education*, *11*(1), 2403287. https://doi.org/10.1080/2331186X.2024.2403287

Gai, Y. (2024). *Factors that impact intention to continue using ai-based chatbots in different countries* [PhD Thesis, Vilniaus universitetas.]. https://epublications.vu.lt/object/elaba:191574196/

George, A. S., & George, A. H. (2023). A review of ChatGPT AI's impact on several business sectors. *Partners Universal International Innovation Journal*, *1*(1), 9–23.

Gerli, P., Clement, J., Esposito, G., Mora, L., & Crutzen, N. (2022). The hidden power of emotions: How psychological factors influence skill development in smart technology adoption. *Technological Forecasting and Social Change*, *180*, 121721.

Hadi, M. U., Tashi, Q. A., Shah, A., Qureshi, R., Muneer, A., Irfan, M., Zafar, A., Shaikh, M. B., Akhtar, N., Wu, J., Mirjalili, S., & Shah, M. (2024). *Large Language Models: A Comprehensive Survey of its Applications, Challenges, Limitations, and Future Prospects*. Preprints. https://doi.org/10.36227/techrxiv.23589741.v6

Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks*, *3*, 119–132.

Haleem, A., Javaid, M., & Singh, R. P. (2024). Exploring the competence of ChatGPT for customer and patient service management. *Intelligent Pharmacy*. https://www.sciencedirect.com/science/article/pii/S2949866X24000480

Hira, F. A., Khalid, H., Rasid, S. Z. A., & Alam, M. M. (2021). A conceptual framework to investigate health professionals' blockchain technology adoption readiness in Malaysia. *Open International Journal of Informatics*, *9*(Special Issue 2), 58–66.

Hsieh, S. H., Lee, C. T., & Tseng, T. H. (2021). Branded app atmospherics: Examining the effect of pleasure–arousal–dominance in brand relationship building. *Journal of Retailing and Consumer Services*, *60*, 102482.

Ioannıdıs, S., & Kontıs, A. P. (2023). The 4 epochs of the Metaverse. *Journal of Metaverse*, *3*(2), 152–165.

Iranmanesh, M., Ghobakhloo, M., Foroughi, B., Nilashi, M., & Yadegaridehkordi, E. (2024). Factors influencing attitude and intention to use autonomous vehicles in Vietnam: Findings from PLS-SEM and ANFIS. *Information Technology & People*, *37*(6), 2223–2246.

Jamal, Y., Islam, T., Ghaffar, A. and Sheikh, A.A. (2023), Factors driving consumer attitude to online shopping hate, *Information Discovery and Delivery*, Vol. *51* No. 4, pp. 429-442.

Jamal, Y., Islam, T., & Shahid, Z. A. (2023). Understanding online shopping hate in social commerce context: Antecedents and consequences of psychological reactance. *Kybernetes*, *52*(9), 3706–3728.

Knuuttila, A. (2024). *The Potential Benefits and Challenges of Adopting AI-tools such as ChatGPT in Marketing Communications and Search Engine Optimization*. https://www.theseus.fi/handle/10024/853453

Kock, N. (2023). Contributing to the success of PLS in SEM: An action research perspective. *Communications of the Association for Information Systems*, *52*(1), 730–734.

Kumar, D., & Suthar, N. (2024). Ethical and legal challenges of AI in marketing: An exploration of solutions. *Journal of Information, Communication and Ethics in Society*, *22*(1), 124–144.

Kwarteng, M. A., Ntsiful, A., Diego, L. F. P., & Novák, P. (2024). Extending UTAUT with competitive pressure for SMEs digitalization adoption in two European nations: A multi-group analysis. *Aslib Journal of Information Management*, *76*(5), 842–868.

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.

Lee, Y., Lim, W., & Eng, H. S. (2024). A systematic review of UTAUT2 constructs' analysis among MSMEs in non-OECD countries. *Journal of Science and Technology Policy Management*, *15*(4), 765–793.

Lin, H., Lee, M., Liang, J., Chang, H., Huang, P., & Tsai, C. (2020). A review of using partial least square structural equation modeling in e-learning research. *British Journal of Educational Technology*, *51*(4), 1354–1372. https://doi.org/10.1111/bjet.12890

Makosa, S. (2024). *Brand Management Driven by Artificial Intelligence*. http://dspace.unive.it/handle/10579/26145

Martínez-Peláez, R., Ochoa-Brust, A., Rivera, S., Félix, V. G., Ostos, R., Brito, H., Félix, R. A., & Mena, L. J. (2023). Role of digital transformation for achieving sustainability: Mediated role of stakeholders, key capabilities, and technology. *Sustainability*, *15*(14), 11221.

Meena, R., & Sarabhai, S. (2024). Extrinsic motivators driving adults purchase intention on mobile apps: The mediating role of self-efficacy and facilitating conditions. *Journal of Marketing Communications*, 1–26. https://doi.org/10.1080/13527266.2024.2394782

Min, S., So, K. K. F., & Jeong, M. (2021). Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. In *Future of tourism marketing* (pp. 2–15). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781003176039-2/consumer-adoption-uber-mobile-application-insights-diffusion-innovation-theory-technology-acceptance-model-somang-min-kevin-kam-fung-miyoung-jeong

Mouakket, S., & Aboelmaged, M. (2023). Factors influencing green information technology adoption: A multi-level perspective in emerging economies context. *Information Development*, *39*(4), 699–719. https://doi.org/10.1177/02666669211048489

Nyawaga, C. A. (2023). *Examining Identity Management in Enterprise Social Media Among Black Professionals* [PhD Thesis, Wayne State University]. https://search.proquest.com/openview/50e1de7cf66909c62cc7d2c8059f504a/1?pq-origsite=gscholar&cbl=18750&diss=y

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

Rahmiati, R., Hoque, M. E., Susanto, P., Al Mamun, A., Mazumder, M. A. H., & Ahmed, R. (2024). The eMoney revolution: How culture and technology drive adoption and use? *Journal of Science and Technology Policy Management*. https://www.emerald.com/insight/content/doi/10.1108/JSTPM-05-2024-0192/full/html

Romero-Rodríguez, J.-M., Ramírez-Montoya, M.-S., Buenestado-Fernández, M., & Lara-Lara, F. (2023). Use of ChatGPT at University as a Tool for Complex Thinking: Students' Perceived Usefulness. *Journal of New Approaches in Educational Research*, *12*(2), 323–339. https://doi.org/10.7821/naer.2023.7.1458

Rudhumbu, N. (2022). Applying the UTAUT2 to predict the acceptance of blended learning by university students. *Asian Association of Open Universities Journal*, *17*(1), 15–36.

Sankar, J. G., & David, A. (2024). A Comprehensive Examination of Mobile Augmented Reality in Tourism (MART) Adoption: Using the UTAUT2 Framework. In *Contemporary Trends in Innovative Marketing Strategies* (pp. 241–262). IGI Global. https://www.igi-global.com/chapter/a-comprehensive-examination-of-mobile-augmented-reality-in-tourism-mart-adoption/339830

Sankaranarayanan, R. (2022). *Influence of Microlearning Approach on Introductory Database Programming Concepts*. Indiana University. https://search.proquest.com/openview/723e036e5e2f8d815fbfe28543aa1378/1?pq-origsite=gscholar&cbl=18750&diss=y

Sitar-Taut, D.-A., & Mican, D. (2021). Mobile learning acceptance and use in higher education during social distancing circumstances: An expansion and customization of UTAUT2. *Online Information Review*, *45*(5), 1000–1019.

Soormo, R. B., Al-Rahmi, W. M., Dahri, N. A., Alblehai, F., Alshimai, A., Aldaijy, A., & Salameh, A. A. (2024). Evaluating the Influence of UTAUT Factors on the Adoption of QR Codes in MSMEs: An Application of SEM and ANN Methodologies. *IEEE Access*. https://ieeexplore.ieee.org/abstract/document/10772428/

Sultan, A. (2024). *Exploring the Impact of AI Tools on the Role of Illustrator Content Creators in Pakistan on Social Media*. https://www.diva-portal.org/smash/record.jsf?pid=diva2:1902717

Susskind, R., & Susskind, D. (2022). *The future of the professions: How technology will transform the work of human experts*. Oxford University Press.

Tamilmani, K., Rana, N. P., Wamba, S. F., & Dwivedi, R. (2021). The extended Unified Theory of Acceptance and Use of Technology (UTAUT2): A systematic literature review and theory evaluation. *International Journal of Information Management*, *57*, 102269.

Tarabah, N. E. H., & Amin, M. E. S. (2024). ChatGPT and Its Role in Revolutionizing Digital Marketing and Enhancing Customer Engagement. In *Leveraging ChatGPT and Artificial Intelligence for Effective Customer Engagement* (pp. 69–92). IGI Global. https://www.igi-global.com/chapter/chatgpt-and-its-role-in-revolutionizing-digital-marketing-and-enhancing-customer-engagement/337711

Venkatesh, V. (2022). Adoption and use of AI tools: A research agenda grounded in UTAUT. *Annals of Operations Research*, *308*(1–2), 641–652. https://doi.org/10.1007/s10479-020-03918-9

Vo-Thanh, T., Nguyen, N. P., Vu, T.-V., Van Nguyen, D., & Sueur, I. (2022). Handling counterproductive behavior caused by customer misbehavior during a pandemic: Integrating personal and organizational perspectives. *International Journal of Hospitality Management*, *107*, 103335.

Watters, J. B., & Garcia-Lopez, A. (2024). Artificial Intelligence in Education: Transforming Learning and Teaching Julie A. Delello iD https://orcid. org/0000-0002-4326-8096. *Disruptive Technologies in Education and Workforce Development*, 1.

Zahid, A. (2021). *The role of paternalistic leadership in innovative performance: Mediating role of leader-member exchange (LMX) and moderating role of power distance* [PhD Thesis, Doctoral dissertation). Islamabad, Pakistan: Capital University of Science …]. https://thesis.cust.edu.pk/UploadedFiles/Aqsa%20Zahid-MMS193003.pdf