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**USER ACCEPTANCE OF ARTIFICIAL
INTELLIGENCE ADVERTISING
AMONG HUAWEI MOBILES
USERS IN HENAN, CHINA
BASED ON THE UTAUT
MODEL**



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SULTAN IDRIS EDUCATION UNIVERSITY

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ABSTRAK

Pertumbuhan pesat pengiklanan yang dipacu oleh AI memerlukan pemahaman yang jelas tentang penerimaan pengguna untuk kejayaan pasaran jangka panjang. Walau bagaimanapun, kajian sedia ada tidak mempunyai rangka kerja berkenaan penerimaan iklan AI oleh pengguna telefon pintar Huawei di Wilayah Henan, yang menghalang pembangunan strategi yang disasarkan. Kajian ini, yang berasaskan model UTAUT yang diperluas, bertujuan untuk: (1) Meneliti hubungan antara faktor UTAUT (Jangkaan Prestasi, Jangkaan Usaha, Pengaruh Sosial, Keadaan yang Memudahkan, Kreativiti Iklan, Persepsi Pengguna, Niat Perilaku, dan Tingkah Laku Pengguna) dan pengiklanan AI di Henan, China; (2) Menyelidik peranan perantaraan Niat Perilaku antara pemboleh ubah bebas (Jangkaan Prestasi, Jangkaan Usaha, Pengaruh Sosial, Keadaan yang Memudahkan, Kreativiti Iklan, Persepsi Pengguna) dan pemboleh ubah bersandar (Tingkah Laku Pengguna); (3) Menilai kesan moderasi Jantina, Umur, dan Pengalaman terhadap hubungan ini; dan (4) Membangunkan rangka kerja konsep yang lebih halus untuk penerimaan iklan AI, berasaskan konstruk UTAUT yang diperluas dan penemuan empirikal dari pasaran Henan. Kajian ini menggunakan reka bentuk penyelidikan kuantitatif yang menerapkan persampelan rawak berstrata. Sebuah soal selidik dalam talian telah digunakan, yang menghasilkan 500 borang kaji selidik yang diedarkan dan 500 respons yang sah berjaya dikumpulkan daripada pengguna Huawei, seterusnya mencapai kadar respon 100%. Analisis SPSS menunjukkan kebolehpercayaan yang tinggi, dengan semua konstruk memenuhi ambang Cronbach's alpha ($\alpha \geq 0.70$). Pemodelan Persamaan Struktural (SEM) mengesahkan model tersebut, yang mengesahkan bahawa semua hubungan pemboleh ubah adalah signifikan, kecuali jangkaan usaha yang dikawal oleh umur dan niat perilaku. Kreativiti Iklan ($B=0.284$) mempunyai kesan perantaraan yang paling kuat, sementara Pengalaman Penggunaan ($B=0.063$) memberi kesan paling besar terhadap keadaan yang memudahkan dan niat perilaku. Hasil akhir adalah rangka kerja penerimaan iklan AI, UTAUT- advertising, memberikan panduan praktikal untuk reka bentuk iklan AI, memberi tumpuan kepada kebolehgunaan, kreativiti, pengawalseliaan yang telus, dan pembangunan industri.





USER ACCEPTANCE OF ARTIFICIAL INTELLIGENCE ADVERTISING AMONG HUAWEI MOBILE USERS IN HENAN, CHINA BASED ON THE UTAUT MODEL

ABSTRACT

The rapid growth of AI-driven advertising requires a clear understanding of user acceptance for long-term market success. However, existing research lacks a framework addressing Huawei smartphone users' acceptance of AI advertising in Henan Province, hindering the development of targeted strategies. This study, based on the extended UTAUT model, aims to: (1) Examine the relationship between UTAUT factors (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception, Behavioral Intention, and User Behavior) and AI advertising in Henan, China; (2) Investigate the mediating role of Behavioral Intention between independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and the dependent variable (User Behavior); (3) Evaluate the moderating effects of Gender, Age, and Experience on these relationships; and (4) Develop a refined conceptual framework for AI advertising acceptance, based on extended UTAUT constructs and empirical findings from the Henan market. This study employed a quantitative research design utilizing stratified random sampling. An online questionnaire was administered, resulting in 500 distributed surveys and 500 valid responses collected from Huawei users, achieving a 100% response rate. SPSS analysis showed good reliability, with all constructs meeting the Cronbach's alpha threshold ($\alpha \geq 0.70$). Structural Equation Modeling (SEM) validated the model, confirming that all variable relationships were significant, except for the age-moderated relationship between Effort Expectancy and Behavioral Intention. advertising Creativity ($B=0.284$) had the strongest mediating effect, while among the moderators, User Experience ($B=0.063$) had the most significant impact on facilitating conditions and behavioral intention. The final output is an AI advertising acceptance framework, UTAUT-advertising, offering practical insights for AI ad design, focusing on usability, creativity, transparent regulation, and industry development.





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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
RQ	Research Question
RO	Research Objective
PE	Performance Expectancy
EE	Effort expectancy
SI	Social Influence
FC	Facilitating Conditions
CP	Consumer Perception
AC	Advertising Creativity
BI	Behavioral Intention
UB	User Behavior
TRA	Theory of Reasoned Action
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
UTAUT	The Unified Acceptance and Use of Technology
Min	Minimum
Max	Maximum
SD	Standard Deviation
M	Mean



N	Number
SE	Standard Error
R	Range
St.D	St. Deviation
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
RFI	Relative Fit Index
RMSEA	Root Mean Square of Approximation
CR	Composite Reliability
NFI	Normed Fit Index
CFI	Comparative Fit Index
TLI	Tucker-Lewis Index





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CHAPTER 1

INTRODUCTION

1.1 Introduction



In the rapidly evolving field of advertising, Artificial Intelligence (AI) has emerged as a powerful tool for enhancing the effectiveness and precision of marketing strategies. AI-driven advertising allows brands to shift from traditional, static promotional methods to personalized, data-driven strategies that adapt to individual consumer behaviors and preferences (Buran et al., 2021). By analyzing vast amounts of consumer data, AI can predict demand, optimize content delivery, and increase engagement, all of which play a crucial role in improving conversion rates (Bag et al., 2022). As a result, AI advertising has become a central component of marketing strategies for brands across industries, including the highly competitive smartphone sector (M.-H. Huang & Rust, 2021).





For global brands like Huawei, the effective use of AI advertising has proven to be essential in maintaining market dominance. Huawei has integrated AI into its advertising strategies, allowing the brand to customize content based on consumer data from specific regions and cultural contexts (Cai & Liu, 2024). This capability has significantly enhanced the relevance of Huawei's marketing campaigns, making them more impactful and engaging for diverse consumer bases. However, despite the growing importance of AI in advertising, there remains a lack of research focused on the specific factors influencing consumer acceptance of AI-driven advertisements, particularly for Huawei mobile phone users in Henan Province, China (Y. Zhang et al., 2025).



This study addresses this gap by expanding the Unified Theory of Acceptance and Use of Technology (UTAUT) model (Hewavitharana et al., 2021) to include two new soft cultural constructs, advertising Creativity and Consumer Perception. These constructs are particularly relevant in the context of AI advertising, as they help to capture the nuanced ways in which consumers in different regions perceive and engage with advertising. While UTAUT traditionally focuses on performance expectancy, effort expectancy, social influence, and facilitating conditions, this study integrates the additional variables of advertising Creativity and Consumer Perception to provide a more comprehensive understanding of the factors that influence consumer acceptance of AI advertising.





The hypothesis guiding this research is that these extended UTAUT constructs, along with traditional UTAUT factors, play a significant role in shaping user acceptance of AI advertisings. Specifically, it is hypothesized that advertising Creativity will positively influence Behavioral Intention, and Consumer Perception will mediate the relationship between advertising Creativity and User Behavior. The study also posits that Usage Experience, Gender, and Age moderate the relationship between the independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and User Behavior. By applying this expanded UTAUT model, this research aims to develop a refined conceptual framework for understanding AI advertising acceptance in the context of Huawei's marketing strategies.

Adopting a quantitative research design, this study implemented stratified random sampling to secure balanced representation across key demographic and usage segments of Huawei mobile phone users in Henan Province, China. Data were collected through a structured online questionnaire administered to 500 eligible respondents, ensuring standardized measurement and comparability across strata. This approach strengthened the precision of estimates and improved the generalizability of the results to the target population. The resulting evidence offers rich, practice-oriented insights into the factors that drive acceptance of AI advertising, clarifying which attributes of AI enabled messages and delivery contexts most influence users' receptivity. These



insights translate into concrete implications for practitioners, informing how to prioritize message elements, tailor content to distinct user segments, and refine supporting features and user experience, so that AI driven advertising strategies can be designed to be more effective, engaging, and responsive to user expectations.

1.2 Research Background

The integration of Artificial Intelligence (AI) into advertising strategies has revolutionized the marketing landscape, particularly in the realm of consumer engagement (Hamamah et al., 2024). AI enables brands to go beyond traditional advertising methods by leveraging data analytics, machine learning algorithms, and real-time consumer insights (Degen et al., 2023). This shift from static to dynamic, personalized advertising is essential in today's market, where consumers demand tailored experiences and more relevant content (Behare et al., 2025). In the smartphone industry, where competition is fierce, AI-driven advertising has become a pivotal strategy for brands to gain a competitive edge (Tyagi & Tyagi, 2024).

Huawei, a global leader in smartphone manufacturing, has embraced AI to enhance its advertising capabilities. By integrating AI into its marketing strategies, Huawei has been able to personalize advertisings based on consumer preferences, regional differences, and cultural contexts (Cai & Liu, 2024). For instance, in Henan



Province, Huawei employs AI to analyze local consumer data, ensuring that its advertisements resonate with the region's specific cultural and economic characteristics (Hu, 2024). This AI-driven personalization has helped Huawei improve its brand visibility and foster stronger consumer relationships, particularly in competitive markets where consumer attention is hard to capture.

However, despite the widespread adoption of AI in advertising, there is a significant gap in understanding how AI-driven advertising affects consumer behavior, especially in the context of Huawei mobile phone users. Most existing research has primarily focused on AI advertising's general applications or on Western brands and markets (Sun et al., 2025). These studies have provided valuable insights but have not specifically addressed how AI advertising influences consumer behavior in regions like Henan, China, nor have they explored the role of cultural factors in shaping user acceptance of AI advertising. This research aims to fill this gap by focusing on the factors that influence AI advertising acceptance, with a particular emphasis on the soft cultural constructs of advertising Creativity and Consumer Perception.

The rationale for including these new constructs stems from the need to capture the softer, more subjective dimensions of consumer engagement. advertising Creativity, which refers to the originality and appeal of the advertisements, plays a critical role in determining how consumers perceive and engage with advertising. Studies have shown that creative advertisements are more likely to capture consumer attention and positively





influence brand perception (Dall'Olio & Vakratsas, 2023; K V et al., 2021). Similarly, Consumer Perception, which encompasses the trustworthiness, relevance, and appropriateness of the advertisings, is also a key determinant of user acceptance (Battista et al., 2021). By integrating these constructs into the UTAUT model, this study provides a more holistic view of the factors that shape user acceptance of AI-driven advertising.

The adoption of AI in advertising, particularly for Huawei smartphones, is increasingly important for the company's ability to maintain its competitive advantage (Rojniruttikul, 2025a). As AI technologies continue to evolve, understanding how AI advertising impacts consumer behavior is crucial for developing targeted marketing strategies that resonate with users across diverse markets (Wilson et al., 2024). This research explores these dynamics by applying an extended UTAUT model that includes advertising Creativity and Consumer Perception, examining how these factors, in conjunction with traditional UTAUT variables such as Performance Expectancy, Effort Expectancy, and Social Influence, influence Behavioral Intention and User Behavior.

This study utilizes stratified random sampling to collect data from Huawei users in Henan Province, China, with an online survey reaching 500 valid respondents. The data analysis, using Structural Equation Modeling (SEM), confirmed that all variable relationships were significant, with advertising Creativity showing the strongest mediating effect. The findings of this research contribute to the development of a





refined conceptual framework for AI advertising acceptance, offering actionable guidance for brands looking to optimize their AI-driven advertising strategies.

1.3 Problem Statement

The rapid advancements in artificial intelligence (AI) and its widespread adoption in advertising have the potential to revolutionize consumer engagement through personalized experiences. However, while AI advertising has demonstrated considerable promise, particularly in the context of consumer interactions and engagement, there remains a significant gap in understanding its effectiveness, especially within the unique cultural, economic, and social dynamics of various global markets. Research focusing solely on the application of AI advertising in isolated regions, particularly China, has been insufficient. Existing studies often overlook the comparative aspects of AI-driven advertising across diverse markets, failing to address how AI advertising strategies integrate within countries and compare between them (Khamoushi, 2024a). Furthermore, studies that do explore AI in advertising tend to focus on Western markets, neglecting the distinct characteristics of markets in Asia, particularly the Huawei user base in China, and the broader implications for global marketing strategies (S. Khanal et al., 2025).





While AI advertising's role in improving consumer engagement has been recognized in studies across Western markets, there is limited empirical evidence addressing its specific impact on Huawei mobile phone users, particularly in Henan Province, China. Huawei, as a global leader in smartphone manufacturing, faces unique challenges in effectively implementing AI advertising strategies tailored to its diverse consumer base, both in China and abroad (Zhouming, 2023). Despite the success of AI-driven advertising in engaging users in different regions, the global implementation of these strategies remains an underexplored area of research (Ramachandran et al., 2025a). The lack of understanding of how different cultural and socio-economic contexts shape consumer acceptance of AI advertisings is a critical gap in the literature (Gonella et al., 2024).



Moreover, current research fails to comprehensively apply the Unified Theory of Acceptance and Use of Technology (UTAUT) to AI advertising for Huawei mobile phones. Although the UTAUT model has been widely used in technology acceptance research, its application to AI advertising remains scarce (Pramanik & Jana, 2025). This gap in the literature limits our understanding of how traditional UTAUT factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions interact with newly proposed constructs, such as advertising creativity and consumer perception, to influence user acceptance. The growing importance of AI advertising in the context of Huawei's marketing strategy emphasizes the need for a robust framework that explores the intersection of these constructs in both domestic





and international markets (Liao & Yang, 2023).

Despite Huawei's strong market presence, particularly in the Chinese market, it faces considerable challenges in adapting its AI advertising strategies to global markets (Rojniruttikul, 2025b). The diverse consumer behavior across regions such as Europe, Southeast Asia, and North America necessitates a tailored approach to AI advertising (Khamoushi, 2024b). Additionally, factors like advertising creativity and consumer perception, two crucial constructs newly integrated into the extended UTAUT model, are particularly important in understanding how AI advertising resonates with different cultural backgrounds and consumer expectations.



Considering these challenges, this study posits that a deeper understanding of AI advertising's impact on consumer acceptance is needed to optimize Huawei's marketing strategies, especially considering the competitive pressures it faces globally. This research will not only extend the UTAUT model by incorporating these new soft cultural constructs but will also compare the effectiveness of AI advertising strategies across diverse global markets, offering actionable insights for marketers aiming to leverage AI technologies to enhance consumer engagement and brand loyalty on a global scale.





1.4 Research Purpose

The primary purpose of this study is to comprehensively analyze and empirically validate the mechanism through which AI-driven advertising influences user acceptance and subsequent usage behavior (UB) among Huawei mobile users in Henan, China. By utilizing a critically extended Unified Theory of Acceptance and Use of Technology (UTAUT) framework, this research seeks to resolve the critical theoretical fragmentation regarding the integration of non-utilitarian persuasion factors (advertising Creativity and Consumer Perception) into core technology acceptance models, thereby generating novel, context-specific insights that bridge the gap between computational efficiency and genuine human response in digital marketing.



1.5 Research Objective

Based on the purpose outlined above, the specific objectives of this study are directly aligned with the research questions, from RQ1 to RQ4 and hypotheses from H1 to H18. These objectives are designed to systematically test the proposed conceptual model and resolve the defined research problems. The specific objectives are:

RO1: To examine the relationship between UTAUT main factors (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising





Creativity, Consumer Perception, Behavioral Intention and User Behavior) and AI advertising in Henan, China.

RO2: To examine the mediating role of mediator variable (Behavioral Intention) between independent variable (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and dependent variable (User Behavior).

RO3: To evaluate the moderating effect of moderator variable (Gender, Age and Experience) among independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception), mediator variable (Behavioral Intention) and dependent variable (User Behavior).

RO4: To develop a refined conceptual framework for AI advertising acceptance based on extended UTAUT constructs and the empirical findings derived from the Henan market.



Table 1.1

A Link Between Problem Statement & Objectives and Research Questions

Problem Statement	Research Gap	Research Objectives	Research Questions
Especially in the specific market environment of Henan Province, the relationship between the main factors of the UTAUT model and AI advertising remains unclear, which limits our comprehensive understanding of local consumer behavior. Research on AI tools in social organizations highlights the importance of social influence and Performance Expectancy on user acceptance in a regional context (Khamoushi, 2024).	Scholars studied the application of the UTAUT model in the public acceptance of driverless buses in China, emphasizing the influence of factors such as personal innovativeness and perceived risk (J. Chen et al., 2020). The study showed the effectiveness of the UTAUT model in specific technology applications in China but did not involve the field of artificial intelligence advertising. Therefore, there is still a research gap in the analysis of the applicability of the UTAUT model for artificial intelligence advertising in Henan Province.	RO1: To examine the relationship between UTAUT main factors (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception, Behavioral Intention and User Behavior) and AI advertising in Henan, China.	RQ1: How do the main factors of UTAUT (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception, Behavioral Intention and User Behavior) relate to AI advertising in Henan, China?
Currently, most studies on technology acceptance and use focus on direct relationships, while ignoring the potential mediating mechanisms between independent and dependent variables (Jadil et al., 2021). The lack of exploration of mediator variable has led to a lack of in-depth understanding of the paths that influence consumer behavior (Kabir et al., 2021).	The existing literature lacks analysis of the role of mediating variables between independent variables and dependent variables, which makes the understanding of the relationship mechanism of variables incomplete and hinders the further development of the theory (Uddin et al., 2020).	RO2: To examine the mediating role of the mediator variable (Behavioral Intention) between independent variable (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and dependent variable (User Behavior).	RQ2: What is the mediating role of the mediator variable (Behavioral Intention) between independent variable (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and dependent variable (User Behavior)?
Although moderating variables are mentioned in many technologies' acceptance models, their moderating effects in complex variable relationships are insufficiently studied. In particular, the	In the framework of the relationship between independent variables, mediating variables and dependent variables, the role of moderator variables lacks systematic research, which leads to insufficient	RO3: To evaluate the moderating effect of moderator variable (Gender, Age and Experience) among independent variables (Performance Expectancy, Effort Expectancy, Social	RQ3: What is the moderating effect of moderator variable (Gender, Age and Experience) among independent variables (Performance Expectancy, Effort Expectancy, Social Influence,

Problem Statement	Research Gap	Research Objectives	Research Questions
possible moderating effects between independent variables, mediating variables, and dependent variables have not been explored in depth . (Cabrera-Sánchez et al., 2021)	understanding of the complex relationship between the variables' mutual influence (J. Chen et al., 2020).	Influence, Facilitating Conditions, advertising Creativity, Consumer Perception), mediator variable (Behavioral Intention) and dependent variable (User Behavior).	Facilitating Conditions, advertising Creativity, Consumer Perception), mediator variable (Behavioral Intention) and dependent variable (User Behavior).
Although AI advertising is developing rapidly around the world, there is a lack of a systematic theoretical framework to guide its application in different market environments, resulting in a lack of theoretical support for industry practices, which affects the further promotion and optimization of AI advertising (Fetaji, 2023).	There is currently no comprehensive framework specifically for AI advertising, which means that research in this field lacks systematic theoretical guidance, limiting the effective application and innovative development of AI advertising (Blut et al., 2022a).	RO4: To develop a refined conceptual framework for AI advertising acceptance based on extended UTAUT constructs and the empirical findings derived from the Henan market.	RQ4: How can a new conceptual framework for Artificial Intelligence advertising be developed based on UTAUT constructs and empirical findings?



1.6 Research Question

As detailed in the purposes and RO, this research formulated seven research questions (RQ) to be addressed by the study. The research questions are as follows:

RQ1: How do the main factors of UTAUT (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception, Behavioral Intention and User Behavior) relate to AI advertising in Henan, China?

RQ2: What is the mediating role of the mediator variable (Behavioral Intention) between independent variable (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception) and dependent variable (User Behavior)?

RQ3: What is the moderating effect of moderator variable (Gender, Age and Experience) among independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, Consumer Perception), mediator variable (Behavioral Intention) and dependent variable (User Behavior).

RQ4: How can a new conceptual framework for Artificial Intelligence advertising be developed based on UTAUT constructs and empirical findings?

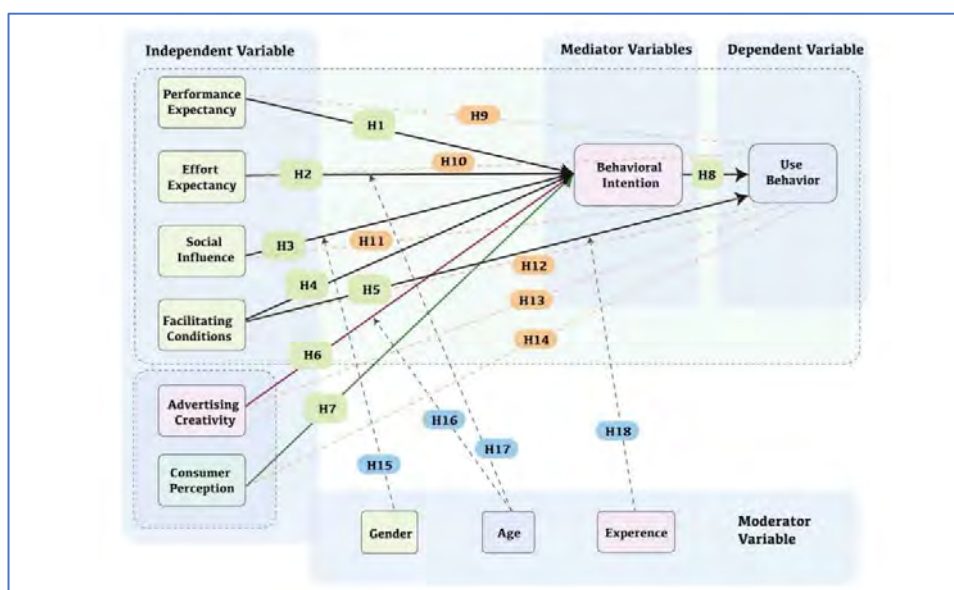


1.7 Research Hypothesis

The rapid growth of artificial intelligence (AI) in advertising has shown great potential to enhance consumer engagement through personalized experiences. However, despite its widespread adoption, the effectiveness of AI-driven advertising in specific contexts, such as Huawei mobile phones, remains underexplored, particularly in non-Western markets like China. This study seeks to extend the Unified Theory of Acceptance and Use of Technology (UTAUT) model by incorporating two additional constructs: Advertising Creativity and Consumer Perception, to better understand the factors influencing consumer acceptance of AI advertising. The hypotheses below have been developed based on this theoretical framework (as follow Figure 1.1).

Figure 1.1

Original Research Hypothesis Relationship Diagram



The hypotheses in this study are developed through an extension of the UTAUT model, which has been extensively used to study technology acceptance. The traditional UTAUT constructs, included Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC), have been widely applied in various contexts. However, the specific application of these constructs to AI-driven advertising for consumer products like Huawei mobile phones has not been adequately examined. As AI advertising involves both technological and cultural factors, this study introduces two new constructs, advertising Creativity and Consumer Perception, to address this gap. These constructs are derived from the literature on consumer behavior in advertising, where creativity and perception have been shown to play critical roles in shaping engagement and trust (Jabeen et al., 2024; J. Kim et al., 2025). This extension of the UTAUT model is aimed at providing a more comprehensive understanding of the factors influencing AI advertising acceptance in both Western and non-Western markets.

While AI advertising has been extensively researched, especially in the context of Western brands and markets, there remains a significant gap in the literature regarding its application to non-Western markets, particularly for Huawei mobile phones. Research on AI advertising for Huawei has been scarce, and there is a lack of studies that apply the UTAUT model to this context. Moreover, current studies have not sufficiently explored the impact of advertising Creativity and Consumer Perception on AI advertising acceptance, particularly in the case of Huawei smartphones. This study

aims to fill this gap by integrating these two new constructs into the UTAUT framework and empirically testing their influence on Behavioral Intention (BI) and User Behavior (UB) in the context of AI advertising. By doing so, this study will not only contribute to the theoretical development of the UTAUT model but also provide practical insights for marketers aiming to optimize AI advertising strategies in diverse global markets, including both China and Western countries.

Based on above justification, the following are the alternative hypotheses of the study:

RQ1: How do the main factors of UTAUT relate to AI advertising in Henan, China?

H1: Performance Expectancy positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H2: Effort Expectancy positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H3: Social Influence positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H4: Facilitating Conditions positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H5: Facilitating Conditions positively affects AI advertising's user behavior on Huawei mobile phone users.

H6: advertising Creativity positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H7: Consumer Perception positively affects AI advertising's behavioral intention on Huawei mobile phone users.

H8: Behavioral intention positively affects AI advertising's user behavior on Huawei mobile phone users.

RQ2: What is the mediating role of the mediator variable between the independent variable and the dependent variable?

H9: Behavioral Intention mediates between Performance Expectancy and Usage Behavior.

H10: Behavioral Intention mediates between Effort Expectancy and Usage Behavior.

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H11: Behavioral Intention mediates between Social Influence and Usage Behavior.

H12: Behavioral Intention mediates between Facilitating Conditions and Usage Behavior.

H13: Behavioral Intention mediates between advertising Creativity and Usage Behavior.

H14: Behavioral Intention mediates between Consumer Perception and Usage Behavior.

RQ3: What is the moderating effect of the moderator variable among the independent variables, mediator variable and dependent variable?

H15. Gender moderates the relationship between social influence and behavioral intention, making the relationship between the two different among different gender groups.

H16. Age moderates the relationship between advertising creativity and behavioral intention, making the relationship between the two different among different age groups.

H17. Age moderates the relationship between effort expectancy and behavioral intention, making the relationship between the two different among different age groups.

H18. Experience moderates the relationship between facilitating conditions and behavioral intention, making the relationship between the two different among different experience levels.

1.8 Conceptual Frameworks

The conceptual framework of this study combines multiple classic theoretical models to explore the impact of AI advertising on user acceptance from a theoretical and practical perspective. The core variables in the research model are closely related to the following theories: Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), and Innovation Diffusion Theory (IDT).



This chapter elaborates on the correspondence between each variable and the theory to establish a theoretical foundation.

1.8.1 Technology Acceptance Model (TAM)

Performance Expectancy pertains to consumers' perceptions of whether technology or products enhance work or life efficiency, serving as a crucial factor in technology acceptance. In the Technology Acceptance Model (TAM), users' favorable opinion of technology significantly influences their acceptance (Zou et al., 2025). The relative advantage in IDT concurrently reinforces the Performance Expectancy variable, indicating that the efficacy and benefits of technology can enhance user adoption behavior. This study employs Performance Expectancy to assess users' perceptions of the functional benefits of Huawei mobile phones as presented in artificial intelligence marketing. Effort Expectancy pertains to users' perceptions of the ease of understanding and utilizing technology. In the Technology Acceptance Model (TAM), perceived ease of use refers to the Facilitating Conditions and learning expenses associated with technology utilization, a term that closely relates to Effort Expectancy (Ibrahim & Shiring, 2022).

Moreover, the user-friendliness of IDT underscores the significance of technological intuitiveness (Abdulkareem, 2024). This study examines users'





perceptions of the usability of Huawei mobile phones based on Effort Expectancy, considering the information presented in artificial intelligence marketing. Consumer perception encompasses users' comprehensive assessment of items, including their utility and user-friendliness. In the Technology Acceptance Model (TAM), perceived usefulness and perceived ease of use are the foundation of user acceptance of technology (Tao et al., 2022). This study employs consumer perception to examine alterations in consumers' cognition of Huawei smartphones following exposure to artificial intelligence commercials.

1.8.2 Theory of Reasoned Action and Theory of Planned Behavior



Social influence measures the influence of users' behavioral tendencies due to social pressure (Leow et al., 2021). In TRA and TPB, subjective norms explain the influence of social groups (such as family and friends) on user behavior (Tran et al., 2023). This study hypothesizes that AI advertising can have a positive effect on user acceptance of Huawei mobile phones by enhancing social acceptance and user group identification. Behavioral intention is a direct predictor of user acceptance and use of technology. In TRA and TPB, behavioral intention is jointly influenced by attitude, subjective norms, and perceived behavioral control (X. Li et al., 2023a). This study hypothesizes that the promotion effect of AI advertising on Huawei mobile phone behavioral intention is reflected in users' acceptance of advertising content and positive attitude towards the





product. Usage behavior is a direct result of behavioral intention. In TRA, users' behavior is driven by their behavioral intention (Alaklabi & Kang, 2022). This study explores the actual effect of AI advertising in driving users to buy Huawei mobile phones through usage behavior.

1.8.3 Innovation Diffusion Theory (IDT)

Facilitating conditions refer to whether users believe that external resources and environment support the use of technology (Buraimoh et al., 2022). In IDT, compatibility and visibility indicate the importance of external conditions, while perceived behavioral control in TPB further emphasizes the supporting role of the availability of external resources on behavior (Rabeah Md Zin, 2024a). This study explores how facilitating conditions can optimize users' willingness to accept Huawei mobile phones through artificial intelligence advertising.

Advertising creativity is reflected in the novelty and relevance of advertising, which can enhance users' perceived value of products. According to the relative advantage and visibility theory in IDT, advertising creativity can enhance users' attention and acceptance of products. This study focuses on how artificial intelligence technology affects users' attitudes towards Huawei mobile phones through advertising creativity. IDT points out that user characteristics (gender, age, and experience) may





have a moderating effect on technology acceptance (Harnadi et al., 2025). This study introduces gender, age, and experience as moderating variables to analyze the differential effects of these factors on the effectiveness of artificial intelligence advertising.

The Unified Theory of Acceptance and Use of Technology (UTAUT) is the underlying theory of technology acceptance for this study (Moreno & Arbaiza, 2020). UTAUT was selected after an extensive review of various technology acceptance models and forms the basis of the conceptual framework for this study (Aytekin et al., 2022a). Developed by Venkatesh, Morris, Davis, and Davis in 2003 and expanded by Venkatesh, Thong, and Xu in 2012, UTAUT incorporates eight different theories and models related to technology acceptance (Al Aufa et al., 2020). This integration resulted in a comprehensive framework designed to understand undergraduate acceptance and usage behaviors of technologies such as M-Heutagogy (Aytekin et al., 2022b).

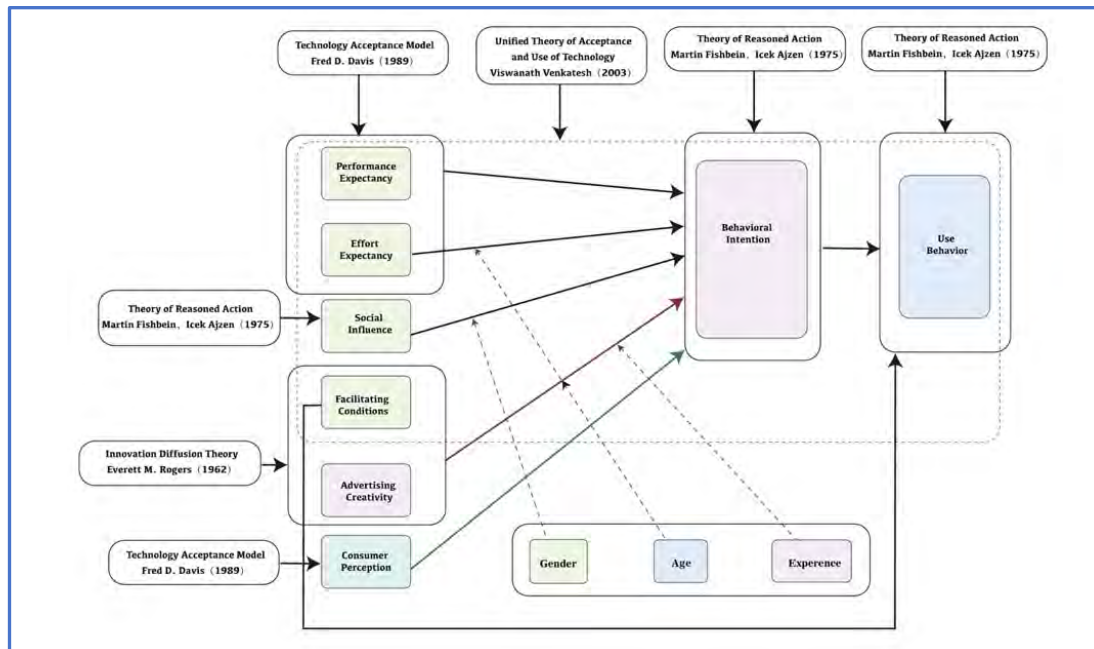
Several theories have been established to understand and predict technology user acceptance. These theories include the Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen (1975), the Theory of Planned Behavior (TPB) proposed by Ajzen (1991), the Technology Acceptance Model (TAM) proposed by Davis (1989), the combined TAM and TPB theory (C-TAM-TPB) proposed by Taylor and Todd (1995a), the Diffusion of Innovations Theory (IDT) proposed by Rogers (1983), the Social Cognitive Theory (SCT) proposed by Campeau and Higgins (1995), the Motivational



Model (MM) proposed by Deci and Ryan (1985), and the PC Usage Rate Model (MPCU) proposed by Thompson, Higgins, and Howell (1991). The UTAUT model created by Venkatesh et al. (2003) combines these theories to develop UTAUT2.

The UTAUT model is used to investigate user acceptance of Huawei mobile phones. It utilizes four main structures: performance expectancy, effort expectancy, social influence and Facilitating Conditions (Mensah & Khan, 2024a). These structures serve as independent variables to investigate user acceptance of Huawei mobile phones through the mediating variable of behavioral intention (Rojniruttikul, 2025c). Behavioral intention is the core of the conceptual framework and is influenced by Gender, Age, Experience and Voluntariness of Use (Almisad & Alsalam, 2020). In addition, two new independent variables are included - advertising Creativity and Consumer Perception (Abdelfattah et al., 2022).

This study uses the Technology Acceptance Model (TAM) for Performance Expectancy, Effort Expectancy, and consumer perceptions; the Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) for social influence, behavioral intentions, and usage behavior; and the Diffusion of Innovation Theory (IDT) for facilitating conditions, advertising creativity, and moderating variables. These theories together construct the conceptual framework of the study and support the variable relationships and research hypotheses in the model. (See Figure 1.2 below)

Figure 1.2*Conceptual Framework for This Study***1.9 Study Limitations**

Although this investigation was carried out with a method that was thorough, it is important to highlight several limitations. In the area of artificial intelligence advertising and user acceptability frameworks, it is possible that removing these constraints in subsequent studies could significantly increase the findings' empirical depth, generalizability, and robustness. It is feasible to accomplish this.



1.9.1 Sample Generalizability and Regional Constraints

This study's sample is confined to Huawei mobile phone users in Henan Province, China, which introduces regional limitations. While Henan represents a significant and diverse demographic within China, findings based on this cohort may not fully capture the behaviors, preferences, or acceptance patterns of mobile users in different geographical or cultural contexts. The regional focus, though insightful for localized marketing strategies, may limit the applicability of results to broader populations, including global markets or users of other smartphone brands. To enhance the external validity and generalizability of these findings, future research should expand the sample to include a more diverse array of participants across multiple regions, encompassing varied cultural, economic, and technological backgrounds (Claessens et al., 2023; Deffner et al., 2022).

1.9.2 Limitations of Cross-Sectional Data in Causal Inference

This study employs a cross-sectional research design, which, while suitable for examining correlations and providing a snapshot of user behaviors and perceptions, restricts the ability to infer causality. The relationships observed between variables such as Performance Expectancy, Behavioral Intention, and Usage Behavior may be influenced by unmeasured confounding factors, and the directionality of effects





remains ambiguous. Longitudinal data, capturing behavioral trends and changes over time, would offer a more rigorous basis for causal inference and help distinguish enduring behavioral patterns from transient responses. Future research employing longitudinal or experimental designs could thus provide stronger evidence of causative pathways, further enriching the theoretical and practical contributions of the UTAUT-based framework in AI advertising contexts (Jadil et al., 2021).

1.9.3 Potential Biases in Self-Reported Data

This research relies on self-reported questionnaire data to measure key constructs, such as Behavioral Intention and User Perception. Although self-report measures are commonly used and allow for efficient data collection, they are susceptible to various biases, including social desirability bias, recall bias, and response acquiescence. Participants may overstate positive responses or underreport behaviors perceived as socially undesirable, thereby skewing results and potentially inflating correlations. Additionally, reliance on self-report measures may limit the precision with which constructs are measured, as participants' perceptions do not always align with actual behavior. To mitigate these limitations, future studies should consider integrating alternative data sources, such as behavioral tracking, observational studies, which would allow for a more objective and nuanced understanding of user acceptance and interaction with AI-driven advertising (Blut et al., 2022a).





1.10 Importance of Research

This investigation can refine and extend the UTAUT model by incorporating and empirically testing these moderating variables, providing a model for studying technology acceptance. The theoretical significance of this research lies in its contribution to the understanding of consumer behavior in the context of AI advertising, specifically within the Chinese market. By employing the Unified Theory of Acceptance and Use of Technology (UTAUT) model, this study extends the applicability of this framework to the domain of AI-driven marketing (Ghabban et al., 2025).



It explores the nuances of how AI advertising influences consumer perceptions and acceptance, thereby enriching the existing literature on technology acceptance models (Brown, M., & Lee, S., 2021). The research findings have significant managerial consequences, providing strategic insights for enhancing AI-driven advertising strategies to align with the specific tastes of Chinese customers. Ultimately, these results create a solid basis for future research aimed at incorporating emerging technology into established consumer behavior models, thus enhancing the theoretical discourse.



1.10.1 For Marketers and Technology Companies

The practical significance of this research is multifaceted. For marketers and technology companies, a clear understanding of how moderating variables, including age, gender, user experience, and contextual factors, alter the effects of core predictors on behavioral intention and usage behavior enables the design of more targeted and effective advertising strategies. These insights inform evidence-based segmentation and message framing, guide the calibration of personalization intensity and creative formats, and support smarter choices about channels and timing to match users' readiness and capabilities. In practice, tailoring AI advertising to distinct demographic segments, while proactively addressing perceived risks including privacy, fairness, and over targeting and the voluntariness of engagement, can build trust, reduce resistance, and increase consumer interaction and acceptance.

Embedding autonomy cues, including transparent data practices, clear opt in and opt out options, and easy controls over recommendation features, helps preserve user agency and strengthens intent to adopt. Beyond campaign optimization, these findings also inform product and UX decisions that remove friction along the customer journey, align AI features with user goals, and improve conversion and retention. Together, these actions enhance resource allocation and return on investment, while fostering sustainable, long-term acceptance of AI mediated advertising.



1.10.2 For Huawei Company

Huawei Company can benefit from the findings since they can provide actionable insights into the success of their artificial intelligence advertising campaigns. This will assist the company in refining its marketing approaches in order to improve consumer acceptability and brand loyalty in Henan. (Rodgers et al., 2021). The ability of Huawei to adjust its artificial intelligence advertising efforts to better fit the expectations and preferences of its target audience is made possible by the company's understanding of the main aspects that influence customer acceptance (Prentice et al., 2020).



1.10.3 Policymakers and Industry Regulators

Policymakers and industry regulators may also benefit from this study by gaining a deeper understanding of the implications of AI advertising, thereby guiding the development of regulations that balance innovation with consumer protection (Kashefi et al., 2024). The findings provide a robust empirical foundation for policy makers to develop regulations that govern the use of AI in advertising. As AI advertising continues to evolve, understanding its impact on consumer acceptance is crucial for crafting policies that protect consumer interests while encouraging technological innovation. The research sheds light on how AI advertising might influence consumer decision-making, leading to unintended consequences such as manipulation or bias.



Policy makers can use these insights to establish guidelines that ensure advertising practices are fair of consumer autonomy. Regulators can leverage the research to review and strengthen data protection standards within the advertising industry.

The study's exploration of AI's role in shaping consumer perceptions and behaviors underscores the need for ethical considerations in advertising. Policy makers can use the research to define ethical boundaries for AI usage in advertising, promoting responsible practices that prioritize consumer well-being. As AI advertising becomes more prevalent, industry regulators benefit from the research's examination of consumer acceptance to monitor market trends and identify potential areas of non-compliance or consumer harm. This proactive approach can help regulators maintain industry integrity and public trust. Finally, the research can serve as a basis for public awareness campaigns, educating consumers about AI advertising and their rights. This empowers consumers to make informed decisions and engage with AI advertising in a knowledgeable and critical manner.

Moreover, this research can inform other technology and telecommunications companies looking to leverage AI in their marketing efforts, providing a blueprint for how to effectively engage consumers through advanced advertising technologies (Ejjami, 2024). Ultimately, this research contributes to the broader goal of optimizing AI applications in marketing to foster positive consumer experiences and drive business growth (Qi & Ploeger, 2021).

1.11 Scope of Study

This study focuses on examining the factors influencing user acceptance of AI-driven advertising on mobile devices, with a specific emphasis on Huawei mobile phones in the Chinese market. Given the rapid advancements in artificial intelligence and its transformative impact on digital advertising, understanding the determinants of consumer acceptance is essential for optimizing marketing strategies and enhancing brand engagement. The study is grounded in the Unified Theory of Acceptance and Use of Technology (UTAUT), enriched with additional constructs , advertising Creativity and Consumer Perception, to provide a comprehensive framework tailored to the unique dynamics of AI-enhanced advertising.

The research is geographically limited to China, a critical market for Huawei where cultural, social, and economic factors shape consumer behavior in unique ways. This regional focus allows for an in-depth exploration of how local norms, values, and social structures influence the acceptance of AI-powered advertisements. By concentrating on this market, the study provides insights specific to Chinese consumers, acknowledging that findings may have limited generalizability to other cultural or regional contexts.

The scope of this study is also confined to mobile advertising, recognizing the increasing reliance of consumers on mobile devices for daily activities and their

frequent interactions with digital content through smartphones. Mobile advertising, driven by AI, represents a rapidly evolving field that leverages personalization, data analytics, and machine learning to deliver targeted content. This research seeks to explore how these technological advancements shape consumer perceptions and behaviors, with a focus on key factors such as Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, advertising Creativity, and Consumer Perception.

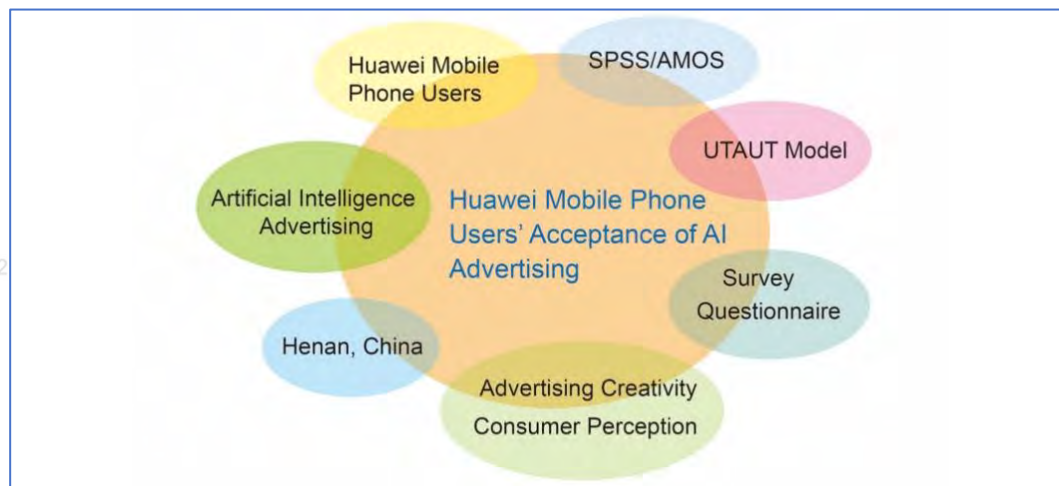
By adopting this focused scope, the study aims to contribute both theoretically and practically. Theoretically, it extends the UTAUT model within the specific context of AI advertising, offering a framework that integrates traditional technology acceptance constructs with advertising-specific factors. Practically, it provides actionable insights for advertisers, particularly Huawei, enabling them to design more effective, user-centered AI-driven advertisements. This targeted scope ensures that the study remains rigorous and manageable, allowing for a thorough exploration of the factors most relevant to user acceptance of AI advertising within Huawei's mobile ecosystem.

In summary, this study's scope is precisely delineated to examine the acceptance of AI advertising within the Huawei user base in China, with particular attention to how technological attributes, creative executions, and cultural context jointly shape user perceptions, intentions, and subsequent behavior. The investigation concentrates on the mechanisms through which perceived usefulness, effort expectations, personalization

intensity, informativeness, and aesthetic appeal interact with cultural norms, privacy attitudes, and trust in platforms to influence behavioral intention and actual usage. The single-brand, single-market focus affords depth, contextual specificity, and tighter control over confounding ecosystem factors, thereby enabling fine-grained insights into drivers of acceptance within a coherent technological environment.

Figure 1.3

Scope of Study for This Research



1.12 Delimitation of Study

This study is delimited by a series of intentional boundaries, set to focus the research scope on the most relevant factors influencing user acceptance of AI-driven advertising for Huawei mobile devices within the Chinese market. These delimitations are carefully crafted to ensure the study's feasibility, clarity, and focus, while providing a robust



framework that addresses the specific research questions.

Firstly, the study is limited to the Chinese market, a context where Huawei has a dominant presence and where cultural, social, and technological factors play a unique role in shaping consumer behavior. While this geographic focus enables an in-depth analysis of AI-driven advertising acceptance within a specific market, it inherently restricts the generalizability of findings to other regions with different cultural or economic characteristics. By choosing China as the sole focus, the study acknowledges the potential for varying acceptance factors in global markets and therefore recommends caution when extrapolating the results beyond the local context.



Secondly, the research is confined to Huawei mobile users, excluding other brands in the mobile phone industry. This delimitation is based on Huawei's significant market share and brand loyalty in China, which may influence user perceptions of AI-driven advertising differently compared to other brands. Limiting the study to Huawei users allows for a concentrated examination of factors that directly impact Huawei's advertising effectiveness, though it may limit the applicability of findings to other brands. Future studies may consider a broader brand comparison to explore how AI-driven advertising acceptance may vary across different mobile brands.

Thirdly, this study focuses on key constructs derived from the Unified Theory of Acceptance and Use of Technology (UTAUT), specifically Performance Expectancy,





Effort Expectancy, Social Influence, and Facilitating Conditions. While other acceptance models and additional variables could offer further insights, UTAUT's core constructs are chosen for their proven relevance in technology acceptance research and their alignment with the study's primary objectives. This delimitation allows for a more targeted investigation, though it acknowledges the potential impact of additional constructs not included within the UTAUT framework.

Additionally, the study examines AI-driven advertising exclusively within the context of mobile advertising rather than other digital platforms, such as desktop or social media. Mobile advertising is selected due to its high user engagement and relevance in the current digital landscape, particularly in China, where mobile internet usage dominates. By focusing on mobile devices, this study provides specific insights into a rapidly growing advertising channel, though it may not fully capture the dynamics of AI advertising on other platforms.

Lastly, the research methodology is limited to quantitative survey data, collected through self-reported measures. This delimitation is chosen to enable a broad analysis across a large sample, offering statistical insights into user acceptance factors. However, this approach may introduce limitations such as response bias or a lack of in-depth qualitative insights. Future studies could incorporate mixed methods approaches, including interviews or observational data, to gain a deeper understanding of the nuanced factors influencing AI advertising acceptance.





In conclusion, these delimitations define the study's boundaries, ensuring that the research remains focused on its core objectives. While they limit the generalizability of the findings, they also enhance the study's internal coherence and manageability, providing a well-defined framework for exploring AI-driven advertising acceptance among Huawei users in China. These boundaries highlight areas for future research, which could expand upon this study's findings by addressing additional variables, broader geographic regions, and diverse methodologies.

1.13 Operational Definitions



To ensure clarity and consistency throughout this study, key constructs and variables are defined operationally in alignment with the research framework. These operational definitions provide measurable criteria for each concept, facilitating a precise examination of the factors influencing user acceptance of AI-driven advertising on Huawei mobile devices in the Chinese market.





1.13.1 Performance Expectancy

Performance Expectancy refers to the degree to which users believe that AI-driven advertisings will enhance their engagement or provide value, such as through personalized content that aligns with their interests. In this study, Performance Expectancy is measured by assessing users' perceived relevance, informativeness, and usefulness of AI-enhanced advertising, using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). This construct is critical to understanding how perceived benefits drive user acceptance of AI advertising.



1.13.2 Effort Expectancy

Effort Expectancy is defined as the perceived ease with which users can interact with and understand AI-driven advertisings. In the case of Huawei mobile phones, this construct is particularly relevant because Huawei has designed its AI advertising to be intuitive and user-friendly. Huawei's AI-powered advertising are embedded in a seamless user experience, allowing users to engage with personalized content effortlessly. The user interface of Huawei's mobile devices, combined with AI-powered recommendations that automatically tailor advertising to individual preferences, enhances the ease of interaction. This minimizes the effort required for users to engage with the ad content, making it feel natural and integrated into their browsing experience.





Therefore, Effort Expectancy is hypothesized to positively influence user acceptance of Huawei's AI-driven advertisings, as users who perceive the advertising as easy to interact with are more likely to find them appealing and engage with them.

1.13.3 Social Influence

Social Influence measures the extent to which users' acceptance of AI-driven advertisings is influenced by the opinions and behaviors of their peers, family members, or social networks. This construct recognizes the impact of social norms, particularly within a collectivist society like China, where peer perceptions often shape individual behaviors. Social Influence is measured by users' agreement with statements reflecting the importance of others' opinions in their decision to engage with AI advertisings.



1.13.4 Facilitating Conditions

Facilitating Conditions refer to the perceived availability of resources, infrastructure, and technical support that enable users to engage effectively with AI advertisings on Huawei devices. This includes factors such as device compatibility, network stability, and user support. Facilitating Conditions are operationally defined by user evaluations of the reliability and accessibility of these technical supports, indicating whether users feel empowered to utilize AI-driven advertising features without impediments.





1.13.5 Advertising Creativity

Advertising Creativity is defined as the originality, aesthetic appeal, and engagement potential of AI-driven advertisings. It captures the user's perception of the ad's uniqueness and the degree to which it is visually and interactively stimulating. This construct is measured by assessing user responses to statements regarding the creativity, visual appeal, and engagement quality of the AI advertisings, using a Likert scale. High creativity scores are anticipated to enhance user interest and acceptance.

1.13.6 Consumer Perception



Consumer Perception is defined as a comprehensive user evaluation of the trustworthiness, relevance, and appropriateness of AI-driven advertising. It encompasses the user's assessment of how well the advertisement aligns with their personal preferences and the extent to which it demonstrates respect for their privacy. This construct is quantitatively measured by evaluating the degree of agreement with statements related to trust, relevance, and privacy protection. Higher scores indicate a more favorable consumer perception, which is anticipated to positively correlate with increased levels of acceptance toward AI-generated advertisements.





1.13.7 Behavioral Intention

Behavioral Intention refers to the user's deliberate intention to engage with AI-driven advertisings on Huawei mobile devices. In this study, Behavioral Intention is conceptualized as the extent to which users indicate a willingness to interact with or respond positively to AI-enhanced advertisings, which may include actions such as clicking on the ad, exploring additional product information, or considering a purchase based on the ad content. Behavioral Intention is a critical predictor of actual behavior, as established by the Theory of Planned Behavior and Unified Theory of Acceptance and Use of Technology, which posit that higher behavioral intention is likely to translate into actual engagement.



1.13.8 User Behavior

User Behavior denotes the actual actions users take in response to AI-driven advertisings, representing the observed outcome of Behavioral Intention. In this study, User Behavior is operationalized as measurable interactions with AI-enhanced advertisings, such as ad clicks, the amount of time spent engaging with the ad content, and conversion behaviors (visiting a product page or making a purchase). This construct provides an objective measure of engagement, distinguishing it from the subjective intentions captured in Behavioral Intention. User Behavior is essential to understanding





the real-world impact of AI-driven advertisings on consumer actions, offering insights into the effectiveness of these advertising in driving desired outcomes.

These definitions not only provide a rigorous framework for the study, but also facilitate the replicability and comparability of future research on AI-driven advertising in different contexts. Each of these constructs was quantitatively measured through structured survey instruments designed to capture nuanced responses. By operationally defining these variables, this study ensured that each construct was measurable and consistent across participants, allowing for reliable data analysis and interpretation.

In this study, User Acceptance is defined as the user's attitude and behavioral tendency to accept and adopt Huawei mobile phone products under the influence of artificial intelligence advertising. Specifically, User Acceptance includes the user's cognition of the information conveyed by artificial intelligence advertising and product functions, the degree of recognition of the brand image, and the purchase intention formed by the user on this basis. This definition is based on the core ideas of the Technology Acceptance Model (TAM) and advertising effectiveness theory, combined with the application background of artificial intelligence technology and the actual market situation of Huawei mobile phones in Henan.

Organizations develop marketing strategies to achieve their market objectives. These strategies are characterized by the systematic planning and implementation





methods that they employ. These techniques are utilized to influence the attitudes and actions of target consumers about products or services, which ultimately leads to an improvement in the competitiveness of the market. The defining of marketing strategies was the subject of this study, which was carried out accordingly. The operational definition of marketing strategies is based on the Marketing Mix Theory and consumer behavior theory. This is done with the intention of taking into consideration the marketing environment and research background of Huawei mobile phones in the Henan market. In addition to this, the definition is broadened by including the characteristics of advertising that is based on artificial intelligence.



1.14 Conclusion

Chapter 1 lays the foundation for this study by systematically introducing the basic aspects of the study of user acceptance of AI advertising in the context of Huawei mobile devices in the Chinese market. This chapter outlines the research motivation, clarifies the research questions, and describes the objectives, research questions, and hypotheses, all of which are indispensable to guide the investigation. By establishing a clear conceptual framework, this chapter provides a structured approach to examine how specific factors influence consumer engagement with AI advertising. This paper introduces operational definitions for the concepts of performance expectancy, effort expectancy, social influence, facilitating conditions, advertising creativity, consumer





perception, behavioral intention, and user behavior, ensuring their clarity and consistency, and providing measurable standards to support rigorous data collection and analysis. These definitions are tailored to capture the nuances of AI advertising acceptance, reflecting the study's commitment to theoretical depth and practical relevance.

In discussing limitations and delimitations, Chapter 1 also clarifies the boundaries of this study, enhancing the focus and applicability of the study. Limitations acknowledge potential limitations inherent in the methodology, while delimitations reflect a deliberate choice to focus the study on a manageable and meaningful scale, centered on the Chinese market and Huawei users. In addition, the implications of this study have been thoroughly reviewed, highlighting its potential contributions to multiple stakeholders, including academic researchers, industry practitioners, policymakers, and technology developers.

By addressing gaps in understanding the determinants of AI advertising acceptance, particularly within an influential technology market like China, this study seeks to generate actionable insights that guide more effective AI advertising strategies, elevate user engagement, and inform the next wave of AI-driven marketing innovations. The analysis is designed to translate empirical evidence into clear managerial implications, including more precise audience segmentation, calibrated personalization, transparent data practices, and creative choices that align with user expectations and





regulatory norms. In doing so, the study aims to support organizations in improving campaign efficiency, strengthening trust, and converting intention into actual adoption.

In summary, Chapter 1 establishes a comprehensive foundation that integrates theoretical reasoning with practical relevance and delineates the study's background, problem statement, objectives, research questions, scope, significance, key definitions, and organizing structure. This foundation prepares the ground for the chapters. It enables a focused exploration of AI advertising acceptance in a specific context while also positioning the work to contribute to broader knowledge at the intersection of technology adoption and digital advertising. Building on this platform, the subsequent chapters review and synthesize the literature, operationalize constructs and hypotheses, detail the research design and analysis procedures, report empirical findings, and discuss implications, limitations, and directions for future research.

