

T.C.
BAHCESEHIR UNIVERSITY
GRADUATE SCHOOL
THE DEPARTMENT OF BUSINESS ADMINISTRATION



**THE IMPACT OF AI ON MANAGERIAL ROLES IN THE MARKETING
SECTOR IN ALGERIA**

MASTER'S THESIS

SONIA BOUSHAKI

ISTANBUL 2025

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THESIS ADVISOR

ASSOC. PROF. ADNAN CORUM

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Program Name:	Master of Business Administration
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Assoc. Prof. Yücel Batu SALMAN
Institute Director

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

	Title/Name	Institution	Signature
Thesis Advisor's	Assoc. Prof. Adnan Çorum	Bahcesehir University	
Member's	Dr. Selcuk Tuzcuoğlu	Bahcesehir University	
Member's	Prof. Özlem Şenvar	Marmara University	



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Name, Last Name: Sonia Boushaki

Signature:

ABSTRACT

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON MANAGERIAL ROLES IN THE MARKETING SECTOR IN ALGERIA

Sonia Boushaki

Master's Program in Business Administration

Supervisor: Assoc. Prof. Adnan Corum

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This study examines the transformative impact of artificial intelligence (AI) on managerial positions in the Algerian marketing industry. The increasing adoption of AI is gradually revealing its ability to be used to improve strategies. The real impact of AI on the role and interactions of marketing managers in Algeria has not been sufficiently explored. The results show that AI is critical to transforming strategic planning. Improve customer experience and decision-making processes. This report outlines the opportunities and challenges associated with the integration of AI in marketing. It provides comprehensive guidance to policymakers and industry experts on how to fully leverage AI and foster innovation in the Algerian market sector.

Key Words: Artificial Intelligence (AI), Marketing Management, Leadership, Decision Making.

ÖZET

CEZAYIR'DE PAZARLAMA SEKTÖRÜNDE YAPAY ZEKANIN YÖNETSEL ROLLER ÜZERİNDEKİ ETKİSİ

Sonia Boushaki

İşletme Yüksek Lisansı

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Bu çalışma, yapay zekanın (AI) Cezayir pazarlama endüstrisindeki yönetici pozisyonları üzerindeki dönüştürücü etkisini incelemektedir. Yapay zekanın giderek daha fazla benimsenmesi, stratejileri geliştirmek için kullanılma yeteneğini yavaş yavaş ortaya koyuyor. Tüketicilerle ilişkiler ve kararlar Yapay zekanın Cezayir'deki pazarlama yöneticilerinin rolü ve etkileşimleri üzerindeki gerçek etkisi yeterince araştırılmadı. Sonuçlar yapay zekanın stratejik planlamayı dönüştürmede kritik öneme sahip olduğunu gösteriyor. Müşteri deneyimini ve karar verme süreçlerini iyileştirin. Bu rapor, pazarlamada yapay zeka entegrasyonu ile ilgili fırsatları ve sorunları özetlemektedir. Politika yapıcılara ve sektör uzmanlarına, Cezayir pazar sektöründe yapay zekadan tam anlamıyla yararlanma ve yeniliği teşvik etme konusunda kapsamlı rehberlik sağlıyor.

Anahtar Kelimeler: Yapay Zeka (AI), Pazarlama Yönetimi, Liderlik, Karar Verme.

To my beloved father,

Who passed us three years ago but he still alive in my heart and his actions will remain for everything I do. He was my strength, my unwavering support, and my guiding light. He taught me to strive for excellence with all my heart and passion and to remain authentic in every endeavor I undertake.

This thesis is a testament to your enduring influence on my life, a tribute to your love, and a reflection of the values you instilled in me.

I dedicate this work to you with all my love and gratitude.

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Chapter 1

Introduction

During the 17th and 19th centuries, autonomous computing equipment was absent, and the term "computer" referred to human calculators performing manual calculations in many fields. This definition evolved when Alan Turing's pioneering research in the 1940s introduced the concept of programmable machines, establishing the groundwork for contemporary computing. Turing's contributions, especially his notion of the Turing machine, significantly shaped later ideas of computation and artificial intelligence (AI) (Copeland, 2004). In 1956, John McCarthy officially coined the term "artificial intelligence" during an academic meeting at Dartmouth College, significantly impacting the field (Anyoha, 2017). Since then, artificial intelligence has advanced considerably, incorporating multiple subfields such as machine learning, natural language processing, and robotics (Russell & Norvig, 2020).

Artificial intelligence encompasses robots and systems engineered to emulate human cognitive processes, behaviors, and intelligence (Investopedia, 2021). In marketing, AI has prompted significant inquiries over its impact on managerial responsibilities, marketing methodologies, and the comprehensive functioning of organizations. Artificial intelligence has revolutionized conventional marketing methodologies, encompassing consumer segmentation, content generation, and campaign administration, facilitating expedited and data-driven strategies (Kumar, 2020). The swift transformation poses considerable hurdles for marketing managers in mastering data analytics, strategic decision-making, and the incorporation of AI to harness these technologies' potential fully.

AI improves client experiences by facilitating tailored and targeted interactions, which is essential in the current competitive environment. Algerian enterprises must initiate operations here to fulfill client requirements and maintain allegiance. The deployment of AI and its influence on competitive advantage, strategic decisions, and customer engagement in Algeria is still constrained (Bouras & Khelifa, 2021).

This study examines AI's revolutionary impact on CEO positions, marketing strategies, customer connections, and organizational competitiveness in Algeria. The emphasis is on understanding how enterprises utilize AI technology to gain strategic

benefits, enhance operational efficiency, and cultivate stronger client interactions. The study seeks to categorize the evolving AI marketing landscape to offer pragmatic insights and efficient techniques for leveraging AI in marketing initiatives.

1.1 Statement of the Problem

Artificial intelligence (AI) is transforming global sectors, including marketing, by improving decision-making, expanding customer engagement, and strengthening competitive advantages (Noble & Mende, 2023). Nonetheless, its utilization in Algeria's marketing industry remains insufficiently examined. Socioeconomic and infrastructural impediments, including inadequate technological infrastructure and talent deficiencies, have hindered AI implementation despite increasing awareness and enthusiasm for digital transformation (Mejri, 2022). This study examines the effects of AI integration on the efficiency of marketing strategies and managers' changing responsibilities and competencies as AI progressively automates conventional duties such as analytics and client segmentation (Araf, 2023; Jarek & Mazurek, 2019). However, uncertainties persist over the preparedness of Algerian marketing professionals for this transformation and the impact of AI on their strategic decision-making and overall efficacy.

1.2 Background of the Study

In the 17th and 19th centuries, autonomous computing devices were nonexistent, and the name "computer" denoted human calculators engaged in manual computations across diverse domains. This definition progressively developed as Alan Turing's groundbreaking research in the 1940s introduced the notion of programmable machines. In 1956, John McCarthy formally introduced the term "artificial intelligence" at an academic conference, altering the course of the discipline (Anyoha, 2017). Artificial intelligence (AI) currently includes robots and systems replicating human cognitive processes, behaviors, and intelligence (Investopedia, 2021).

Artificial intelligence in marketing raises essential questions about its effects on managerial roles, marketing practices, and the general operations of companies. Artificial intelligence has changed traditional marketing processes, including

consumer segmentation, content creation, and campaign management, to produce faster and more data-driven approaches. This rapid change faces marketing managers with significant challenges in acquiring new skills in data analytics, strategic decision-making, and the integration of AI to realize these technologies' potential fully.

AI enhances clients' experiences through more personalized and focused interactions. Algerian businesses need to start here to satisfy customers and retain their loyalty. However, the level of implementation of AI or the impact of AI on competitive advantage, strategic decisions, and customer engagement remains high in Algeria.

This study analyzes AI's transformative influence on executive roles, marketing strategy, relationships with customers, and the competitiveness of organizations in Algeria. This study aims to classify the changing AI marketing landscape, practical ideas, and effective methods for leveraging.

1.3 Purpose of the Study

This exploratory study examines the impact of AI on management accountability within the Algerian marketing sector. Goals include:

1. Analyze the incorporation and assimilation of AI into managerial processes within marketing teams in Algerian enterprises, emphasizing its contribution to improving operational efficiency and strategic management.
2. Examine the qualitative impacts of AI on managerial decision-making, leadership approaches, and team interactions, highlighting the relationship between human judgment and AI-generated insights within marketing environments.
3. Examine the obstacles and prospects encountered by marketing managers in adopting and utilizing AI technology, encompassing talent enhancement, cultural opposition, and ethical implications.
4. Examine AI's strategic capacity to augment management efficacy, allowing marketing managers to optimize resource allocation, create strategies, and promote consumer engagement.
5. Offer pragmatic suggestions for marketing managers and companies on surmounting obstacles to AI adoption and optimizing its advantages within the Algerian business landscape.

1.4 Significance of the Study

This study examines the transformative effect of artificial intelligence (AI) on managerial positions in the Algerian marketing industry. It offers distinct perspectives on how AI transforms marketing managers' duties and decision-making frameworks, shifting from a general emphasis on the marketing domain to a focus on leadership and management. This study examines the impact of AI on managerial decision-making, strategic planning, and team management, providing both practical and theoretical insights relevant to Algeria's distinct cultural and organizational landscape.

The results enhance comprehension of AI's influence on managerial responsibilities, including resource allocation, team dynamics, and formulating data-driven plans. This study examines the particular obstacles encountered by marketing managers in Algeria, including opposition to change, skill deficiencies, and infrastructural constraints. It also explores the opportunities presented by AI, such as augmented customer involvement, instantaneous decision-making, and greater operational efficiency, rendering it a significant resource for scholars and practitioners.

This research offers practical recommendations for addressing obstacles to AI implementation in managerial positions. These encompass strategies for talent enhancement, organizational change management, and ethical governance of artificial intelligence. The report highlights the necessity for specialized training programs, leadership backing, and infrastructure investment to facilitate sustainable and effective AI integration by focusing on managerial responsibilities.

This research enhances the academic knowledge base by examining the convergence of AI, marketing, and management leadership in the Algerian environment. This provides a basis for subsequent research investigating sector-specific AI applications, socio-cultural impacts, and the enduring consequences of AI integration on management practices. The following are the primary chapters of this study:

Chapter 2: Literature Review

This chapter explores the role of AI in marketing management, focusing on its impact on managerial roles in the Algerian context.

Chapter 3: Theoretical Framework and Hypotheses

This chapter establishes the study's theoretical foundation and outlines the hypotheses. It then delves into AI's impact on management practices, including competitive advantages and challenges.

Chapter 4: Methodology

This chapter details the methodological approach, including the survey design, sampling strategy, and analytical methods employed in the study.

Chapter 5: Findings

This chapter analyzes and presents key findings derived from the data, mainly focusing on perceptions of AI's role in marketing management.

Chapter 6: Discussion

This chapter interprets the research findings, linking them to the study's research questions. It provides insights into the broader implications of AI in marketing management within Algeria.

Chapter 7: Recommendations and Future Research

This chapter offers practical recommendations for incorporating AI into marketing strategies and outlines directions for future academic research.

Chapter 8: Limitations of the Study

The final chapter acknowledges the study's limitations, including the sample size, the context-specific nature of findings, and the qualitative aspects of the analysis. It also discusses the implications of these limitations on the interpretation of results.

Chapter 2

Literature Review

This chapter considerably examines the current literature concerning using AI in advertising venture control, emphasizing its programs, issues, and ability. The objective is to explore the effect of AI on worldwide and neighborhood advertising and marketing practices, with a particular cognizance of Algeria's advertising sector.

2.1 Applications of AI in Marketing

While AI offers numerous applications in marketing, the focus is on a few key areas to showcase its overall potential within marketing operations. Due to sophisticated data analysis and extensive access to large data, these are the most sought-after applications of AI. There is no guarantee that a campaign will achieve the results planned. Reach the target group or performance as expected by campaign promoters at launch. Employing AI for automated marketing analysis would not only reduce the number of hours employees accrue, but it may also alleviate managerial oversight and provide insights and recommendations based on the data generated by AI algorithms. Corporations and their marketers esteem these implementations. Utilizing AI-derived analysis can aid firms in producing effective advertisements with reduced human error rates and inaccuracies (Langer & Landers, 2021).

AI applications extend beyond transforming marketing strategies, doing analyses, and conducting research; they may also be utilized to assess the capabilities of computer algorithms in generating written and spoken content. This feature can be utilized to provide tailored content for enterprises. Proposed written projects involve creating primary web pages by sampling diverse configurations from previous pages to conduct various A/B tests. AI, exemplified by Google Display and Search Ads, facilitates semi-automated ad creation. This AI may generate commercial copy and suggest diverse strategies for effectively targeting and engaging the essential demographics based on the data supplied into the system. The previously described applications of AI significantly influence key marketing operations and, consequently, should be included in every analysis of marketing practices. These apps can enhance

marketing operations in theoretical and applied managerial research while also providing resources for working managers. Considering the current underrepresentation of marketing operations in academic publications, we anticipate an increase in research that accurately reflects the valuable information within this domain (Jain & Aggarwal, 2020).

2.2 The Role of Artificial Intelligence in Marketing Project Management

AI has emerged as a pivotal influence on advertising task control, remodeling the conceptualization of plans and strategies using current gear and statistics-pushed insights. In their 2023 observation, Sayem et al. Strain how AI can help improve marketing functions via making choices quicker and automating complicated responsibilities like media shopping for and purchaser interaction. AI solutions, including chatbots and predictive analytics, help organizations optimize resource allocation and improve work completion. Despite those improvements,ues such as reduced capacity and fears about data security have arisen. Moreover, complex systems continue to hinder the use of personal AI-driven augmented reality solutions, as Muammadian (2020) emphasized, which enhances the evaluation of digital products that optimize consumer decision-making; companies like TopShop and IKEA employ this technology to deliver a genuine shopping experience to customers, the success of those strategies illustrates the capacity of AI to transform advertising methodologies.

Khan et al. (2023) add to this view by talking about how AI-powered natural language processing and predictive analytics are changing customer relationship management. Companies that use AI for mood analysis and customer segmentation learn more about how customers behave, which helps them make more targeted and effective marketing campaigns. Nevertheless, the study also shows some problems, like the need for substantial data control and the chance of algorithmic bias, which can make it harder to use AI in marketing projects in an ethical way. As Muammadian (2020) discussed, chatbots enhance customer interaction by offering personalized support and reducing manual workloads, thus demonstrating how AI can efficiently address everyday customer needs.

Ali, Khan, and Ahmed (2023), on the other hand, looks at how AI could give businesses a competitive edge by using new tools to plan strategies and make operations run more smoothly. The study shows that AI can help make it easier to deal with market changes, better track campaigns' success, and make better use of resources. Despite this, the writers stress the importance of using AI, human innovation, and judgment to make fair and valuable results. Muhammadian (2020) also says that AI's part in predictive analytics helps businesses predict consumer trends and change their marketing strategies ahead of time, which makes them more efficient and responsive to the market.

AI is very important in marketing project management because it can make things more efficient, help with planning, and improve interactions with customers. However, they also show that issues like getting businesses ready, social issues, and skill growth must be fixed before AI can fully improve marketing. We can use this writing to understand how AI changes marketing management.

2.3 The Impact of Artificial Intelligence on Future Leadership Roles and Decision-Making Process

Björkman and Johansson (2023) look at how AI is changing the future of work in management by focusing on selection, management theories, and organizational control. In fields like advertising and marketing, where real-time customer data analyses are needed, AI could help leaders make better decisions by automating tedious tasks and freeing them up to find patterns and make the right choices much more quickly. Sarkis and Pallotta (2020) also say that leaders need to accept new ways of organizing teams that combine AI-powered tools with human ones. This change is driven by Industry 4.0 and the technologies that go with it, such as IoT and Big Data, which make things more efficient and help make strategic decisions.

It talks about the problems leaders face when using AI, such as their fear of losing control, the fact that management jobs are becoming less human, and moral challenges related to bias and data protection. According to Björkman and Johansson (2023), leaders need to find a balance between using AI to improve overall performance and making decisions in a focused way on people. They show how important it is to bring new skills to handle AI and its limits. In the same way, Sarkis

and Pallotta (2020) stress how important it is to teach leaders how to change their actions and tactics to deal with the challenges of the digital age, encouraging their teams to work together and learn new skills.

The results show that emotional intelligence, empathy, and moral sense still be critical in the future regarding leadership. However, AI has the potential to change everything by making leaders better at what they do. Leaders should be ready to use AI as an extra tool instead of expecting it to take away their jobs. Additionally, Akey-Torku and Dai (2020) show that transformational leadership traits such as intellectual stimulation and personalized care greatly improve employee performance; this point highlights the importance of human-centered approaches even in settings with AI.

2.4 Marketing and Artificial Intelligence: Challenges and Opportunities

In their 2019 paper, *Marketing and Artificial Intelligence: Challenges and Opportunities*, Jarek and Mazurek look at how AI is changing marketing tactics and methods. They work with AI-enabled technologies like device learning, predictive analytics, and plant language processing that make marketing campaigns more personalized, customers more easily grouped, and products more likely to be bought. These answers improve things by letting business owners make decisions based on data much more quickly and correctly. The authors also talk about other challenging situations, like when people need to step in when AI output is biased based on abilities and when there are privacy issues. Another big problem keeping AI tools from reaching their full potential is that marketing teams lack technical know-how. Even with these problems, Jarek and Mazurek (2019) discuss AI's ability to improve customer experiences, use resources more efficiently, and give accurate market knowledge.

In their study of AI uses, Reguieg (2022) shows how AI can help Algerian businesses improve the efficiency of their digital marketing. Customer behavior analysis and data-driven content personalization make marketing efforts more accurate while cutting costs. De Bruyn, De Vaan, and Feng (2020) also discuss how higher-order learning and neural networks can change things. These technologies allow for more advanced predictive analytics that can be used to involve customers more precisely. These new insights support the idea that AI can completely change global

and local marketing by carefully implementing it and finding new ways to solve old problems. They said that AI should not make people more intelligent or creative; instead, it should make things look better.

2.5 The Role and Challenges of AI in Algeria's Marketing Industry

AI is quickly becoming an important tool in Algeria's marketing industry, which is excellent for businesses that want to grow. In 2022, Mejri took a close look at AI in the Maghreb and talked about how it is being used increasingly in marketing, mostly to learn more about people and make predictions based on that information. However, the study does find some issues that make it hard for Algeria to use AI in a big way. Some of these problems are not having enough skilled workers, not having enough access to new technologies, and rules that are not clear enough. Rouzlani et al. (2024) add to this view by discussing how important it is to improve Algeria's ICT infrastructure to encourage AI use. They point out problems like the lack of efficient data processing systems and electronic data interchange, which make it harder to use AI tools in areas like customs and marketing.

In the same way, Hocine (2022) looks into how AI can be used in digital marketing, mainly to make marketing strategies more effective and improve interactions with customers. AI is changing how businesses talk to customers through chatbots and personalized ads. This strategy makes marketing more targeted and successful. Still, issues like cultural resistance and moral privacy concerns are significant issues. In the same way, Rouzlani et al. (2024) stress how important it is to fix structural inefficiencies and create data warehouses to make AI-driven analytics possible, which can improve how well customers are engaged and how resources are used.

A study by Heriz, Belouadah, and Zeid (2024) goes into more detail about how AI can be used in marketing to make choices more manageable and use better resources. Their research shows how AI enables real-time data and predictive models, which lets marketers change their plans at the last minute. To get the most out of AI in Algeria's marketing business, the writers stress the importance of closing the skills gap and promoting open-mindedness.

These studies indicate that AI in Algeria's marketing presents opportunities and challenges. Artificial intelligence has the potential to enhance marketing efficacy and increase consumer engagement. However, challenges related to infrastructure, culture, and ethics must be addressed prior to the effective utilization of AI.

2.6 Theoretical Framework

AI has ended up pivotal in marketing challenge management, affecting choice-making, resource distribution, and consumer interplay. The studied literature underscores the vital features of AI in automating complicated operations, which include predictive analytics, patron engagement, and marketing campaign control (Sayem et al., 2023; Khan et al., 2023). These instruments allow enterprises to maximize resource efficiency, improve consumer experiences, and forecast market trends with increased precision (Ali et al., 2023; Muhammadian, 2020). Furthermore, research highlights the increasing significance of AI in leadership decision-making and organizational transformation, as it promotes more informed, strategic choices while requiring a balance with human-centered leadership approaches (Björkman & Johansson, 2023; Akey-Torku & Dai, 2020). This dichotomy highlights the ethical and cultural issues associated with AI adoption, especially in emerging markets such as Algeria, where infrastructural and legislative constraints and social resistance impede AI's full potential (Mejri, 2022; Rouzlani et al., 2024).

These thoughts and insights are pertinent to the studies as they offer a scientific comprehension of how AI technologies are blanketed in advertising and marketing assignment control to rectify inefficiencies, enhance decision-making, and promote creativity. This study investigates strategies for enhancing AI programs in Algeria's marketing quarter using AI's strengths and recognizing its barriers. The ethical, cultural, and skill-related problems highlighted in the literature are pivotal in assessing the preparedness of Algerian enterprises to implement AI-driven solutions and their consequences for sustainable growth and competitive advantage. Consequently, this framework functions as both a basis for the research and a reference for tackling the intricate difficulties within the local environment.

2.7 Exploratory Research Point of View

This research examines the various effects of AI on marketing management techniques in Algeria. This technique seeks to reveal patterns, themes, and insights arising from the interplay of AI technologies and managerial practices rather than testing preconceived assumptions. This research examines the lived experiences of marketing professionals to identify the opportunities AI presents for improving strategic decision-making and operational efficiency while highlighting the obstacles to its adoption. The exploratory perspective facilitates a profound comprehension of AI's impact on marketing management within Algeria's culturally and structurally distinct context, establishing a basis for subsequent study and practical implementations. The methods outlined in the methodology chapter are utilized to achieve this aim, leading to the formulation of specific **research objectives** and **research questions** as outlined in the table below:

Table 1

Research Objectives and Research Questions

Research objectives	Research questions
Examine the role of AI in reshaping managerial responsibilities within marketing teams in Algeria.	How is AI changing the roles and responsibilities of marketing managers in Algeria?
Identify the skills and competencies managers require to adapt to AI integration in marketing.	What new skills and competencies do managers need to acquire to work effectively with AI?
Investigate the impact of AI on managerial decision-making and strategic leadership in marketing.	In what ways does AI enhance or challenge managerial decision-making in marketing?
Analyze organizational and cultural factors that influence managers' ability to integrate AI effectively.	How do organizational and cultural dynamics affect managers' ability to integrate AI into their teams and workflows?

Table 1 (cont'd)

Explore strategies for managers to maximize AI's potential while addressing challenges in the marketing context.	What strategies can marketing managers employ to address the challenges and maximize the benefits of AI integration?
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Chapter 3

Methodology

3.1 Introduction

The chapter discusses the methods used to study the effect of AI on managerial jobs in the marketing sector of Algeria, focusing on the study subjects related to customer experiences, competitive advantages, and marketing strategies through qualitative research.

3.2 Overview of Research

The qualitative nature of this study entails the usage of a survey to investigate how AI influences the position of marketing specialists in Algeria. The questionnaire gives a top level view of the approaches wherein AI is being utilized inside the vicinity by obtaining precise answers from the marketing experts. This presents a deep insight into how AI influences their roles and practices.

3.3 Purpose of the Research

The research investigates how managerial responsibilities in the marketing and advertising quarter in Algeria are changing because of AI adoption. It makes a strong point of perceived benefits and downsides of the usage of AI systems, how marketing professionals practice them, and the manner to include them in strategic selections. It also assesses the impact of AI on Algerian marketing strategies and customers' opinions.

3.4 Research Design

3.4.1 Research approach. This study uses an exploratory qualitative approach to examine how AI transforms managerial responsibilities and strategic marketing practices in Algeria. It gathered insights from survey data and comprehensively explained marketing professionals' experiences and perceptions of AI's impact.

3.4.2 Research strategy. Thematic analysis was used in a flexible qualitative approach to identify and explore recurrent patterns and themes within the survey data. This study focuses on marketing professionals, including managers and experts, to bring together diverse perspectives on how AI impacts different management roles and organizational structures.

3.4.3 Research type. This study employed an experimental approach to investigate the evolving influence of AI on marketing management in Algeria. This approach is ideal for uncovering emerging trends and developing theoretical models that can guide future research and practical applications in marketing management.

3.5 Data Collecting Methods

This study involves 30 to 40 marketing professionals who had experience with or are currently engaged in AI applications within their firms. Participants are chosen using purposive sampling, specifically focusing on professionals who oversee AI-driven marketing campaigns, this approach promises a wide range of perspectives on the impact of AI on how marketing is managed.

3.6 Data Collecting Techniques

Surveys examining the utilization of AI, its influence on managerial decision-making, and its perceived advantages might be distributed to marketing professionals in Algeria. To enhance participation and accommodate respondents, the survey is available in French and English, promoting the exchange of tales.

3.7 Selection of Participants and Sampling

3.7.1 Sampling technique. The study includes 30 to 40 marketing professionals with expertise in AI-driven marketing activities, selected through purposeful sampling. This approach ensures diverse perspectives on AI's impact on marketing performance and managerial roles.

3.7.2 Participant selection criteria. Respondents with previous experience with AI technology were selected from marketing decision-making tasks: marketing managers, digital marketing specialists, brand managers, data analysts, customer relationship managers, product marketing managers, AI professionals, and IT specialists, all of whom have experience in managing or implementing AI-driven strategies and technologies within their organizations. This selection ensures they have first-hand knowledge of how AI is impacting executive positions, strategic marketing, and the success of the company.

3.7.3 Determination of the sample size. Targeting a sample of 30 to 40 respondents strikes a balance between manageability and diverse perspectives for qualitative analysis.

3.8 Data Collection

In this study, Questionnaires were distributed both online and offline as part of the survey-based data collection process. Open-ended questions encourage correct answers and provide qualitative information on how AI is impacting marketing management.

3.9 Data Source

The target group of the survey consists of marketing professionals actively involved in AI-associated projects. Their solutions offer insightful information about how selection-making, marketing plan and strategies, and managerial duties are converting in an AI-driven environment.

3.10 Primary and Secondary Data Collection

A survey with both multiple-choice responses and open-ended questions is used to accumulate statistics on members' studies with AI in marketing management. A thorough evaluation of the literature on leadership and AI in marketing decision-making was one instance of secondary records. A properly-rounded evaluation is assured by using fusing instructional takes a look at with actual observations.

3.11 Data Preparation

Thematic analysis is conducted by systematic coding of the questionnaires. The themes which appeared in the initial coding are to guide the deeper analysis, providing insights on how AI is impacting the managerial and marketing leadership of Algeria.

3.12 Coding of Data

The survey responses have been analyzed in a systematic manner by the usage of information coding. Initial codes diagnosed ordinary themes that were delicate and were integrated into a cohesive coding framework through a distinctive examination of the responses. This technique ensured that diverse views from marketing specialists in the position of AI in management were efficiently captured and incorporated.

3.13 Methods of Data Analysis

Thematic analysis in this study is used to find out the patterns, themes, and connections of qualitative data from the survey. With the help of coding, categorizing, and the evaluation of responses using SPSS (Statistical Package for the Social Sciences), insights are gained on how AI affects managerial accountability and marketing performance in Algeria, while improving accuracy and efficiency.

3.14 Constraints and Challenges

The study encountered a number of limitations and challenges in its attempt to investigate the role that AI plays in managerial functions within the marketing industry in Algeria.

- **Limited Generalizability**

Although the sample length of 30 to 40 marketing professionals yielded insightful qualitative information, the consequences of their findings are restrained from being applied to a bigger population. The outcomes were specific for Algerian advertising and marketing professionals and not generalizable across sectors or geographies.

- **Time constraint:**

Qualitative data collection through surveying is usually very time-consuming because the design of open-ended questions and thematic analysis needs to be done. It was a challenge balancing the details in survey responses with the academic deadlines; therefore, it required great planning so that all information was obtained.

- **Approach and Response:**

Marketing managers and professionals often find it difficult to reach out for surveys due to their busy schedules and professional commitments. Securing participation from diverse groups required significant effort and flexibility.

- **Cultural Sensitivity:**

In light of Algeria's cultural background, interest changed to ensure the questions were touchy to cultural norms and that the setting triggered candid solutions from members.

- **Access and participation:**

In fact, the marketing managers and specialists were hard to be reached due to their heavy work schedules. Indeed, getting people from these different groups to take part required much effort and flexibility.

- **Interpretation challenges :**

Thematic analysis provides detailed qualitative insights but may also be subjective with regard to the interpretation of the identified themes. The quality of the coding process is really important to enhance the trustworthiness and accuracy

of findings on how AI influences the role of managers in Algeria's marketing sector.

- **Resource limitations :**

This observation has been confined to breadth by both budgetary and human useful resource limitations. Even if the layout envisioned turned broader, in phrases of extra respondents or statistics series methods, practical constraints have confined the scope of the design.

- **External factors:**

Technological change market chaos Changing consumer behavior and organizational changes may affect the participants' readiness and the relevance of their experiences. This creates uncertainty that may affect the consistency of the findings.

3.15 Research Validity

Several techniques have been used to ensure that this research study on the impact of AI on managers' work is valid in Algeria's marketing sector.

- **Content Validity**

When growing the questionnaire, a huge range of topics approximately how AI influences managerial responsibilities had been taken into consideration. The questions were examined by marketing and artificial intelligence specialists to ensure they were suitable and pertinent.

- **Construct Validity**

The theoretical framework highlights how AI influences managerial roles in marketing, supported by recent research in the field. The questionnaire was designed to gather relevant data to explore how AI impacts marketing managers' tasks and decision-making processes.

- **Criteria-specific Validity**

Even though this study used qualitative facts, the survey questions have been primarily based at the most recent research and best practices for making use of AI. This foundation strengthens the analysis's validity approximately AI's influence on managerial positions in Algeria's marketing industry.

3.16 Research Reliability

A number of techniques were taken during the coding of free-response survey data to validate the reliability or consistency and repeatability of results in this research study: that is, regarding how AI influences managerial roles in Algeria's marketing environment:

- **Inter-rater reliability**

The inclusion of several researchers in the thematic analysis meant an assurance of consistency between multiple analysts in terms of the coding. This joint effort made for a reliable, consistent method of processing qualitative data from the surveys.

- **Within-rater reliability**

Open-response survey questions were coded using a single, well-defined coding scheme to ensure consistency in interpretation. A subsample of responses was later re-examined and re-coded by the same researcher. to correct any discrepancies and Increase the internal consistency of coding.

- **Standardization in the Collection of Data**

A standardized questionnaire comprising both open-ended and proposal-response questions may be sent to all respondents. By reducing response variation, this approach provides consistent data quality. Standardised question administration and content increase data comparability and reliability.

- **Openness of Methodology**

Examples of methodological info which have undeniably been determined consist of the design, coding system, and analysis methods of the survey. This openness permits several researchers to duplicate the examination, increasing its validity and dependability for Algeria's marketing industry.

3.17 Research Rigor and Trustworthiness

The following techniques were used in light of AI's impact on managerial positions in Algeria's marketing sector in order to provide measurable and trustworthy results:

- **Credibility:** The coding scheme was continually checked and refined, and the logic behind the interpretations was verified by cross-checking them against the survey findings. SPSS (Statistical Package for the Social Sciences) and the iterative coding process enabled thorough analysis of participant responses.
- **Transferability:** The thorough explanations of the study's background, business climate, and type of AI used for marketing would help one understand how widely the results could be applied to different organizations or regions.
- **Dependability:** Each step of the educational process including questionnaire design Data collection, coding, and analysis procedures It is recorded in the audit trail. This ensures transparency and makes it easy for others to verify or replicate the methods.
- **Confirmability:** Deliberation is put into practice by being aware of potential bias and ensuring that interpretations are based on participants' answers rather than guesswork. The methodical use of SPSS Methods helps ensure objectivity throughout the coding and analysis process.

3.18 Analysis of the Responses

A cautious analysis of the survey findings, as outlined in Table 2 of the appendices, provided deep insights into the complex effects of AI on managerial roles in marketing within Algeria. The findings have underlined the transformative potential and challenges that managers in marketing have faced. Artificial intelligence significantly altered the management process, whereby new competencies would need to be developed in areas such as data analytics, technological expertise, and collaboration within AI-enhanced teams. These changes mark the broader transformation of managerial work, emphasizing strategic supervision and decision-making supported by high-value AI technologies.

Respondents have underlined the role of AI in resource management and decision-making, as it would optimize marketing strategies and allow a company to engage with customers more effectively through predictive analytics and real-time data monitoring. The managers also recognized efficiencies induced in operations by automation and how AI has enabled targeted campaigns and increased consumer engagement. However, such benefits are curtailed by significant challenges, including

high implementation costs, resistance to organizational change, and a lack of technical expertise within teams.

Ethical considerations were also a key theme, especially around data privacy and retaining human judgment in managerial decision-making. Participants emphasized the need to balance technical integration with human-centered approaches to ensure that AI is an augmentative tool rather than a replacement for managerial judgment. Organizational culture and leadership support have been considered crucial factors in addressing the resistance to change and creating an enabling environment. Training programs and clear, transparent communication were highlighted as a couple of the vital managerial techniques that any manager could use in better integration of AI in a team and operations.

The results showed how AI could enhance creativity in marketing strategies. According to the participants, personalization and predictive analytics were the most necessary tools to enhance competitive advantage and strategic flexibility. Such insights help build a context of how AI influences the role of managers in the marketing sector in Algeria: an imperious need to continually upgrade skills, an ethics-driven approach, and a strategy-driven approach to leveraging benefits from AI.

3.19 Thematic Analysis

Theme 1: Evolving Managerial Responsibilities

- **Sub-theme 1.1:** Shifting Roles and Responsibilities
- **Sub-theme 1.2:** Emphasis on Data-Driven Decision-Making
- **Sub-theme 1.3:** Collaborative Dynamics with AI Teams

Theme 2: Enhancing Operational Efficiency

- **Sub-theme 2.1:** Automation of Routine Tasks
- **Sub-theme 2.2:** Real-Time Data Processing
- **Sub-theme 2.3:** Optimization of Marketing Campaigns

Theme 3: Skills Development and Organizational Adaptation

- **Sub-theme 3.1:** Need for Advanced AI Skills
- **Sub-theme 3.2:** Addressing Resistance to Change

- **Sub-theme 3.3:** Organizational Training Programs

Theme 4: Competitive Advantage

- **Sub-theme 4.1:** Customer Personalization
- **Sub-theme 4.2:** Enhanced Customer Interaction
- **Sub-theme 4.3:** Strategic Market Positioning

Theme 5: Challenges in AI Integration

- **Sub-theme 5.1:** High Costs and Investment Requirements
- **Sub-theme 5.2:** Lack of Technical Expertise
- **Sub-theme 5.3:** Ethical and Privacy Concerns
-

Theme 6: Strategic Alignment and Ethical Practices

- **Sub-theme 6.1:** Aligning AI with Business Goals
- **Sub-theme 6.2:** Ethical Implementation of AI
- **Sub-theme 6.3:** Human-AI Collaboration

Theme 7: Future Prospects and Trends

- **Sub-theme 7.1:** Anticipating Broader AI Integration
- **Sub-theme 7.2:** Infrastructure and Talent Development

3.20 Relationship Between Themes

- **Theme 1 ↔ Theme 3:** Skill development is crucial as evolving managerial roles demand advanced AI proficiency and strategic flexibility.
- **Theme 2 ↔ Theme 4:** Operational efficiency through AI-driven automation enhances competitive positioning by improving customer engagement and resource optimization.
- **Theme 5 ↔ Theme 6:** Addressing ethical challenges and aligning AI initiatives with business goals ensures sustainable and responsible AI adoption.

- **Theme 7 ↔ Theme 3:** Future AI integration relies on the development of skills and infrastructure to enable a competent and adaptive workforce.
- **Theme 1 ↔ Theme 5:** Overcoming resistance to change facilitates the seamless transition of managers to AI-enhanced roles.
- **Theme 4 ↔ Theme 7:** Current competitive advantages through AI set the stage for future innovation and strategic growth.
- **Theme 2 ↔ Theme 6:** Ethical and strategic alignment is critical for ensuring long-term operational success and stakeholder trust.
- **Theme 7 ↔ Theme 6:** Emphasizing transparency and ethical considerations to guide sustainable AI integration in organizational practices.



Chapter 4

Findings

4.1 Survey Findings

The table below offers a concise yet comprehensive overview of the findings, highlighting the key insights and supporting data points from the survey.

Table 2

Findings of the Survey Questions

Finding	Key Insights	Survey Highlights
Transformational Changes	AI shifts managerial focus from repetitive tasks to strategic leadership, innovation, and team dynamics.	- 60% of managers use AI tools for predictive analytics and customer insights. - Enhanced efficiency and resource allocation.
Challenges in AI Integration	Barriers include skill gaps, high costs, and cultural resistance.	- 30% of managers lack technical expertise. - Cost constraints limit adoption, especially in SMEs. - Organizational inertia slows AI integration.
Impact on Decision-Making	AI improves decision-making through real-time insights and predictive analytics.	- 20% increase in marketing efficiency among firms using AI. - AI enables faster responses to market trends and customer needs.
Evolving Leadership Styles	Managers adopt collaborative and ethical leadership to manage human-AI teams.	- Emphasis on ethical oversight, addressing data privacy and algorithmic bias. - Shift to facilitating teamwork and inspiring innovation.
Operational Efficiency	Automation of routine tasks allows managers to focus on strategic priorities.	- AI has enabled managers to automate repetitive tasks, allowing more time for strategic planning and leadership. Automation was cited as a key contributor to increased productivity across teams.

Table 2 (cont'd)

Competitive Advantage	AI-driven insights improve market positioning and resource allocation, enhancing customer engagement and marketing strategies.	- chatbots, predictive analytics, and real-time personalization strategies contribute to stronger customer relationships.
Organizational Dynamics	Decentralized structures enhance AI integration; rigid hierarchies hinder progress.	- Agile frameworks promote cross-functional collaboration. - Siloed structures limit the effectiveness of AI systems
Future Competencies	Managers need data literacy, critical thinking, and AI proficiency skills to thrive.	- 70% of organizations plan to invest in AI-focused training for managers. - Lifelong learning is critical to keeping pace with technological advancements. Participants stressed the need for new competencies, including data literacy, critical thinking, and proficiency with AI tools.
Broader Trends and Prospects	AI is expected to evolve managerial roles, necessitating adaptability further.	90% of respondents expressed demand for continuous learning opportunities to keep pace with technological advancements. -Survey responses indicated that managers foresee AI driving the next innovation and operational transformation phase. They anticipated future trends, such as deeper AI integration in decision-making and the expected rise of hybrid AI-human leadership models.

The subsequent findings demonstrate the transformative influence of AI on managerial positions within the marketing sector in Algeria, based on qualitative survey responses and corroborated by thematic analysis. This research examines the impact of AI on managerial duties, decision-making processes, organizational dynamics, and future implications. For further information, consult Table 2, which offers a detailed summary of survey findings.

4.1.1 Transformational managerial functions. AI has radically transformed the roles of marketing managers by automating operational chores, allowing them to concentrate on strategic responsibilities. Managers now actively participate in strategic planning, innovation, and enhancing team relationships, employing AI tools for customer segmentation, data analysis, and reporting. This transition necessitates that managers embrace new attitudes and cultivate sophisticated strategic thinking skills to manage their changing duties adeptly.

4.1.2 Skills and competencies. The incorporation of AI has increased the necessity for new managerial competencies, including AI literacy, data-informed decision-making, and critical analysis. Managers must now analyze AI-generated insights and implement them strategically inside their workflows. Survey findings highlight the necessity for customized training programs to develop managers' technical and analytical skills. Lifelong learning has become essential for managers to maintain adaptability and relevance in an AI-driven landscape.

4.1.3 Improved decision-making and customer interaction. Artificial intelligence has considerably improved management decision-making by delivering actionable insights via real-time analytics and predictive instruments. Managers are now more adept at forecasting market trends, enhancing marketing efforts, and addressing client requirements with accuracy. Furthermore, AI has transformed customer involvement by facilitating tailored marketing techniques via chatbots, predictive analytics, and recommendation systems. These tools enable managers to craft customized experiences, enhancing client happiness and loyalty.

4.1.4 Obstacles to AI implementation. Although AI offers substantial opportunities, its implementation is fraught with obstacles. Managers encounter deficiencies in technical skills, financial limitations, and cultural opposition within organizations. Small and medium-sized firms (SMEs) are significantly impacted due to constrained resources and restricted access to sophisticated AI solutions. Surmounting these obstacles necessitates a synthesis of specialized training, change management strategies, and infrastructural investment.

4.1.5 Organizational dynamics and ethical implications. Decentralized organizational models facilitate AI integration by enhancing flexibility, cooperation, and expediting decision-making. In contrast, inflexible hierarchies frequently obstruct the interdisciplinary teamwork essential for optimizing AI's capabilities. Ethical issues, such as data privacy, algorithmic bias, and transparency, present considerable obstacles. Managers must synchronize AI activities with ethical standards to foster confidence and guarantee long-term viability.

4.1.6 Operational efficiency and competitive edge. Artificial intelligence has significantly enhanced operational efficiency by automating monotonous operations like as data entry, report preparation, and campaign optimization. This enables managers to concentrate on elevated tasks, including strategic development, innovation, and team leadership. Furthermore, AI offers sophisticated insights that improve market positioning and resource distribution. Organizations utilizing AI acquire a competitive advantage by discerning upcoming trends and promptly adapting to market fluctuations and consumer needs.

4.1.7 Influence on team dynamics. Artificial intelligence has created novel dynamics in team management, enhancing collaboration between human and AI systems. Managers are now responsible for supervising hybrid workflows, ensuring team members acclimate to new tools and processes while sustaining productivity and morale. The effective alignment of these workflows has been observed to enhance overall team efficiency and inventiveness.

4.1.8 Prospective developments in AI integration. Managers foresee enhanced AI integration in decision-making processes, particularly the emergence of hybrid AI-human leadership models. Artificial intelligence is anticipated to be crucial in assisting managers by providing real-time insights and predictive analytics, propelling the subsequent phase of innovation and operational transformation. Investments in ethical AI techniques and ongoing education are essential for actualizing these prospects, allowing firms to address new difficulties and capitalize on future opportunities.

Chapter 5

Discussions and Conclusions

5.1 Discussion

This research reveals the complex effects of AI on managerial roles in marketing in Algeria, emphasizing both transformational prospects and considerable limitations. The integration of AI has radically transformed managerial activities, redirecting emphasis from operational tasks to strategic responsibilities. Managers are currently utilizing AI solutions for client segmentation, real-time data analysis, and improved reporting. This transition demands not only technical expertise but also the cultivation of superior strategic thinking and decision-making abilities.

The automation of ordinary work by AI has improved operational efficiency, enabling managers to allocate more time to leadership, innovation, and strategic planning. Participants emphasized that AI-generated insights facilitate more accurate resource distribution, customized consumer interaction methods, and expedited reactions to market developments. These modifications highlight AI's function as a catalyst for enhancing managerial productivity and competitive advantage.

Nonetheless, the findings reveal the challenges managers encounter when implementing AI. Recurring issues included elevated expenses, constrained technical proficiency, and organizational opposition. These obstacles are especially evident in SMEs, where resources for sophisticated AI solutions are frequently limited. Ethical issues, including data privacy and algorithmic equity, hamper AI integration. Addressing these difficulties necessitates focused investments in infrastructure, extensive training initiatives, and leadership-facilitated cultural transformation.

A significant finding from the research is the changing nature of team interactions inside AI-driven workflows. Managers are now responsible for supervising hybrid teams that integrate human and AI competencies. This necessitates the equilibrium of production and morale while assuring staff adaptation to new technologies and processes. The results underscore the necessity of promoting teamwork and offering assistance to successfully manage these transitions.

Participants were optimistic about AI's future integration in marketing management, expecting enhanced incorporation into decision-making processes and the emergence of hybrid AI-human leadership models. These developments indicate a new epoch of managerial practices, wherein ethical governance and continuous learning are vital for maintaining innovation and operational excellence.

5.2 Conclusion

This study emphasizes the transformative influence of AI on managerial positions within Algeria's marketing industry, providing critical insights into the opportunities and problems associated with the integration of AI technologies. Artificial Intelligence has profoundly transformed managerial duties, facilitating more strategic and analytical methodologies in decision-making. The results highlight the imperative for managers to develop new skills in AI literacy, data analysis, and critical thinking to navigate this changing environment adeptly.

Although AI improves operational efficiency and competitive advantage via automation and data-driven insights, the study also uncovers ongoing obstacles to its implementation. Substantial implementation expenses, talent deficiencies, and cultural opposition persist as major impediments. Ethical issues, such as data privacy and algorithmic prejudice, underscore the necessity for ethical AI governance.

The research highlights the significance of organizational adaptation and leadership endorsement in cultivating a culture that welcomes technological innovations. Investment in infrastructure, specialized training programs, and honest communication are essential for overcoming these difficulties and realizing AI's complete potential in marketing management.

In summary, AI is both a difficulty and an opportunity for marketing managers in Algeria. By overcoming the obstacles outlined in this study and integrating AI initiatives with ethical and strategic objectives, firms can enable managers to lead successfully in a progressively AI-driven marketing landscape. These findings offer a framework for practitioners and policymakers to leverage AI's transformational capabilities while guaranteeing sustainable and ethical integration

Chapter 6

Recommendations and Future Research

6.1 Recommendations

Companies must emphasize skill enhancement, infrastructure investment, and cultural acclimatization to successfully incorporate AI into executive positions within Algeria's marketing industry. Tailored training programs for marketing managers must emphasize the cultivation of AI literacy, data analytics expertise, and strategic decision-making skills. These programs will rectify the technical skill deficiencies identified in the survey results, enabling managers to utilize AI proficiently in their processes.

Investment in scalable AI technologies and supportive infrastructure is crucial for facilitating seamless deployment. Advanced tools, including predictive analytics and automated customer engagement systems, must be aligned with organizational objectives to improve operational efficiency and competitive advantage.

An alteration in company culture is essential to mitigate resistance to AI implementation. Leadership must cultivate an atmosphere prioritizing innovation and cooperation, integrating human resources with AI-driven tools to attain strategic objectives. This entails clear communication regarding AI's advantages and engaging people in its implementation process.

Ethical governance must serve as a fundamental principle in AI integration. Organizations must formulate explicit protocols for data privacy, algorithmic transparency, and equitable application of AI. These methods help cultivate confidence among stakeholders and guarantee sustainable practices.

Finally, regular evaluations of AI initiatives should be conducted to assess their effectiveness and alignment with organizational objectives. These assessments assist in pinpointing areas for enhancement and optimizing tactics for subsequent integration.

6.2 Future Research Directions

This study opens several pathways for future research on the impact of AI on managerial roles in marketing. A deeper exploration of the long-term effects of AI on organizational performance, particularly regarding revenue growth, employee satisfaction, and market share, is recommended. Such studies could provide empirical evidence of AI's strategic value in Algeria's marketing sector.

Sector-specific research is another promising avenue. Different industries, such as telecommunications, retail, and banking, may exhibit unique challenges and opportunities in adopting AI. Understanding these distinctions enables the development of tailored strategies for implementation and training.

Socio-cultural factors influencing AI adoption require further examination. Investigating how cultural norms, workforce readiness, and regulatory frameworks impact AI integration can help create solutions that are sensitive to Algeria's unique context.

Longitudinal studies would provide valuable insights into the evolution of AI adoption over time. Tracking the stages of integration and their associated challenges and benefits could guide firms in optimizing their AI strategies.

Finally, ethical considerations such as data security, algorithmic fairness, and the balance between AI and human decision-making warrant closer attention. Research in these areas ensures responsible and equitable AI implementation in the future.

Chapter 7

Research Limitations

This study offers essential insights into the influence of AI on executive positions within Algeria's marketing sector, although it possesses significant drawbacks. The sample size of 30 to 40 marketing experts constrains the generalizability of the results. Subsequent studies ought to include a broader, more heterogeneous sample spanning many businesses and geographies to improve generalizability.

The dependence on self-reported data presents possible bias, as participants may exaggerate or downplay the degree of AI adoption and its effects. Integrating survey results with objective performance indicators or detailed case studies may yield a more thorough comprehension.

The study's cross-sectional design limits its capacity to detect temporal variations. Longitudinal studies may provide insights into the evolution of AI integration and its enduring impact on managerial positions and organizational performance.

The study's emphasis on the marketing sector may have neglected the interdepartmental interactions essential for AI adoption. Future research may investigate the interaction of marketing, IT, and operations to comprehend their collective impact on AI integration.

Recognizing these limits establishes a basis for enhancing future research, facilitating a more comprehensive comprehension of AI's transformational capacity within Algeria's marketing sector.

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