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LEVERAGING ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN DIGITAL MARKETING STRATEGIES TO ENHANCE COMPETITIVENESS IN ALGERIAN ENTERPRISES: A CASE STUDY OF VENUS COMPANY

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ABSTRACT

This study explores the role of Artificial Intelligence (AI) in enhancing the competitiveness of Algerian companies through its integration into digital marketing strategies. The research focuses on the case of Venus Company, which has adopted several AI-based tools such as data analytics, predictive modeling, and personalized advertising systems. Using a descriptive-analytical methodology supported by quantitative data, the study reveals that AI technologies significantly improve marketing performance indicators, including customer engagement, cost efficiency, and market adaptability. The findings demonstrate that AI enhances decision-making precision, facilitates customer relationship management, and strengthens the company's competitive positioning in an increasingly digitalized market. The research concludes with recommendations for Algerian enterprises to invest strategically in AI-driven marketing innovations and develop internal competencies capable of leveraging these technologies for sustainable competitive advantage.

KEYWORDS

Artificial Intelligence, Digital Marketing, Competitiveness, Algerian Companies, Venus Company, Data Analytics

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General Introduction:

In the era of the Fourth Industrial Revolution, Artificial Intelligence (AI) has emerged as a transformative force reshaping business models, marketing practices, and competitive dynamics across the globe. The increasing integration of AI technologies into marketing strategies has revolutionized how organizations collect, interpret, and act upon data to engage customers, optimize resources, and strengthen their competitive position in dynamic markets. The convergence of AI and digital marketing has thus become a cornerstone for achieving sustainable growth and organizational competitiveness.

Digital marketing today has transcended traditional advertising and communication functions to become a data-driven system that leverages AI capabilities such as machine learning, natural language processing, predictive analytics, and recommendation systems. These tools enable firms to analyze consumer behavior in real time, personalize content, and make evidence-based decisions that enhance customer satisfaction and loyalty. Consequently, AI adoption is no longer a technological option but a strategic necessity for enterprises seeking to maintain competitiveness in an increasingly digitalized global economy.

In Algeria, the process of digital transformation is steadily progressing, supported by government initiatives promoting innovation, technological entrepreneurship, and knowledge-based economic diversification. However, many Algerian enterprises still face challenges in fully integrating AI technologies due to limited technical expertise, insufficient digital infrastructure, and organizational resistance to change. Despite these constraints, some forward-looking firms—such as Venus Company—have started to adopt AI-driven solutions to enhance their marketing performance and competitiveness in both domestic and regional markets.

Venus Company, an Algerian enterprise operating in the consumer goods sector, has undertaken initiatives to modernize its marketing systems by implementing AI applications in customer data analytics, predictive modeling, and targeted digital campaigns. This practical orientation makes the company an ideal case study for understanding the opportunities and challenges associated with AI adoption in the Algerian context.

The present study seeks to analyze how the integration of AI technologies into digital marketing strategies can enhance competitiveness in Algerian enterprises. Specifically, it aims to examine the impact of AI adoption on marketing efficiency, customer engagement, and innovation capacity within Venus Company. The research also explores the institutional factors influencing the effectiveness of AI deployment, such as organizational readiness, technical capabilities, and employee attitudes toward technology.

To achieve these objectives, the study adopts a descriptive and analytical quantitative methodology, employing a structured questionnaire distributed among marketing and IT staff at Venus Company. Statistical tools, including correlation and regression analyses, were used to evaluate the relationships between AI adoption, digital marketing performance, and competitiveness indicators. The results provide empirical insights into how AI-driven marketing contributes to achieving sustainable competitive advantage in an emerging economy context.

The significance of this research lies in its dual contribution:

- (1) it enriches academic understanding of AI-based marketing and competitiveness in developing markets, and
- (2) it provides practical recommendations for Algerian firms and policymakers seeking to promote digital transformation and technological innovation.

This paper is organized as follows:

- The first chapter presents the theoretical framework and literature review on AI and digital marketing strategies.
- The second chapter outlines the research methodology and empirical design adopted in the study.
- The third chapter provides the results of the survey conducted at Venus Company and discusses their implications.
- Finally, the paper concludes with key findings, managerial and policy recommendations, and directions for future research.

Chapter One: Theoretical Framework and Literature Review

1.1 Introduction:

Artificial Intelligence (AI) has rapidly become one of the most influential technological advancements of the 21st century, profoundly transforming business operations, marketing strategies, and competitive dynamics across industries. In the marketing domain, AI has evolved from a supportive analytical tool into a strategic capability that enables firms to achieve higher precision, personalization, and performance. This chapter provides the theoretical background and literature review necessary to understand the integration of AI into digital marketing strategies and its implications for competitiveness, with a focus on its application within Algerian enterprises.

1.2 Concept of Artificial Intelligence.

AI refers to the ability of machines and computer systems to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and decision-making (Russell & Norvig, 2021). The concept has evolved from early rule-based systems to advanced machine learning and deep learning models capable of processing large volumes of data autonomously.

From a business perspective, AI serves as a strategic enabler that enhances data-driven decision-making, operational efficiency, and innovation. Contemporary marketing research positions AI as an integral component of digital transformation, influencing customer interaction, market segmentation, and brand management (Kotler, Kartajaya, & Setiawan, 2021).

1.3 Artificial Intelligence in Digital Marketing.

Digital marketing involves the use of digital channels and technologies to promote products and services, enhance customer relationships, and drive business growth. The integration of AI into digital marketing represents a paradigm shift in how organizations interact with consumers and analyze market data. According to Davenport et al. (2020), AI-driven marketing leverages algorithms, predictive analytics, and natural language processing to optimize marketing strategies.

Key AI applications in digital marketing include:

- ✓ Customer Data Analytics: AI enables the analysis of vast datasets to identify trends, predict customer behavior, and personalize marketing messages.
- ✓ Predictive Modeling: Machine learning algorithms forecast customer preferences and purchasing patterns.
- ✓ Chatbots and Virtual Assistants: Enhance customer service by providing instant and intelligent responses.
- ✓ Programmatic Advertising: Automates the purchase of ads in real time, targeting specific audiences.
- ✓ Recommendation Systems: Personalize content and product recommendations based on consumer behavior.

Empirical studies (e.g., Chatterjee et al., 2021) confirm that AI adoption in marketing increases customer satisfaction, loyalty, and return on investment (ROI). Furthermore, AI-driven automation allows marketers to shift focus from routine tasks to strategic analysis and creativity.

1.4 AI and Organizational Competitiveness.

Competitiveness refers to an organization's ability to maintain or improve its market position through innovation, efficiency, and customer satisfaction. Porter's (1985) theory of competitive advantage emphasizes differentiation and cost leadership as the two main sources of competitiveness. AI contributes to both dimensions by enabling cost reduction through automation and by fostering innovation through intelligent customer engagement.

According to Shankar (2022), AI enhances competitiveness by:

- ✓ Improving operational efficiency through data optimization.
- ✓ Increasing innovation capacity by identifying emerging trends.
- ✓ Enhancing market responsiveness via predictive insights.
- ✓ Enabling personalization that differentiates products and services.

In emerging economies like Algeria, AI can serve as a catalyst for competitiveness by modernizing marketing systems, fostering customer-centric strategies, and encouraging knowledge-based decision-making (Benhabib, 2023).

1.5 Digital Transformation in Algerian Enterprises.

The digital transformation process in Algeria has accelerated in recent years, driven by national initiatives promoting innovation, e-commerce, and digital entrepreneurship. However, the integration of AI technologies remains uneven. According to the Ministry of Knowledge Economy (2024), the main obstacles include limited technical expertise, lack of infrastructure, and insufficient awareness of AI's strategic potential.

Despite these challenges, leading Algerian enterprises such as Venus Company have begun implementing AI-driven marketing systems. This demonstrates an emerging awareness of the importance of AI as a competitive tool in the Algerian economic environment. Studies conducted in the North African region highlight that firms investing in AI and analytics exhibit higher adaptability and improved decision-making than those relying on traditional marketing methods (World Bank, 2023).

1.6 Theoretical Foundations.

The study draws upon several theoretical frameworks that explain the relationship between technology adoption and competitiveness:

- The Resource-Based View (RBV):

Proposes that sustainable competitive advantage arises from unique, valuable, and inimitable resources. AI, as an organizational capability, constitutes a strategic resource that enhances data processing and innovation (Barney, 1991).

- Technology Acceptance Model (TAM):

Suggests that perceived usefulness and ease of use determine employees' acceptance of new technologies (Davis, 1989). This framework helps explain organizational attitudes toward AI integration.

- Dynamic Capabilities Theory:

Argues that firms achieve competitiveness through their ability to integrate, build, and reconfigure internal competencies to address rapidly changing environments (Teece, 2018). AI strengthens these capabilities by enabling adaptive decision-making.

1.7 Previous Studies.

Several international and regional studies have explored AI's impact on marketing and competitiveness:

- Huang & Rust (2021): Found that AI redefines marketing roles, replacing human intuition with data-driven insights.
- Mikalef et al. (2022): Demonstrated that AI capabilities mediate the relationship between digital transformation and firm performance.
- Benhabib (2023): Highlighted the potential of AI to enhance competitiveness in North African SMEs, stressing the importance of training and innovation culture.
- Laidouci (2024): Emphasized that Algerian firms adopting AI in digital marketing experience higher efficiency and customer engagement.

These findings underline the necessity for Algerian enterprises to invest strategically in AI infrastructure and skill development to remain competitive.

1.8 Conceptual Framework.

The conceptual framework guiding this research is based on the interaction between AI adoption, digital marketing performance, and organizational competitiveness. The framework assumes that AI adoption positively influences digital marketing efficiency, which in turn enhances the overall competitiveness of the enterprise.

AI Adoption → Digital Marketing Performance → Competitiveness

Organizational readiness, employee competence, and technological infrastructure serve as moderating variables affecting this relationship.

1.9 Conclusion of Chapter One.

This chapter has presented the theoretical foundation for understanding how AI technologies shape digital marketing and competitiveness in modern enterprises. The literature reveals a consensus that AI enhances marketing efficiency, customer interaction, and strategic decision-making. However, its effective implementation requires adequate infrastructure, skilled human capital, and supportive organizational culture.

The next chapter will discuss the methodological framework adopted in this study, outlining the research design, population, sampling, data collection tools, and statistical methods used to analyze the empirical relationship between AI adoption and competitiveness within Venus Company.

Chapter Two: Research Methodology and Design.

2.1 Introduction.

This chapter presents the methodological framework adopted to examine the integration of Artificial Intelligence (AI) technologies into digital marketing strategies and their impact on organizational competitiveness within Venus Company. The research design, population and sampling, data collection instruments, and analytical techniques are discussed in detail to ensure methodological transparency and scientific rigor. The methodology aims to combine descriptive, analytical, and empirical approaches to provide both theoretical understanding and practical insights.

2.2 Research Design.

The study employed a descriptive–analytical quantitative design to explore the relationship between AI adoption, marketing performance, and competitiveness. The descriptive aspect helped in identifying the existing level of AI integration and understanding employees' perceptions, while the analytical dimension assessed the relationships among the study variables using statistical tests such as correlation and regression analysis.

This mixed methodological approach allows the study to not only describe the phenomenon but also explain causal relationships, thereby ensuring both breadth and depth of analysis.

2.3 Research Objectives.

The main objectives of the study are as follows:

- To examine the extent to which AI technologies are integrated into digital marketing strategies within Venus Company.
- To analyze the impact of AI adoption on marketing performance indicators such as efficiency, personalization, and decision-making accuracy.

- To evaluate how AI contributes to enhancing the company's competitiveness in the Algerian market.
- To identify challenges and institutional factors influencing the effectiveness of AI implementation.

2.4 Research Questions.

Based on the above objectives, the study addresses the following key research questions:

- What is the current level of AI integration in digital marketing strategies at Venus Company?
- How does AI adoption influence marketing efficiency and customer engagement?
- To what extent does AI improve the competitiveness of Venus Company?
- What are the main challenges and institutional factors affecting AI implementation in Algerian enterprises?

2.5 Research Hypotheses.

In light of the literature review and theoretical framework, the study formulated the following hypotheses:

- H1: AI adoption positively influences marketing efficiency at Venus Company.
- H2: AI enhances decision-making and customer engagement in digital marketing.
- H3: AI adoption contributes significantly to improving organizational competitiveness.
- H4: Institutional readiness and employee competence moderate the relationship between AI adoption and competitiveness.

2.6 Population and Sampling.

The study's target population consists of employees working in the marketing, IT, and management departments of Venus Company.

A purposive sampling method was adopted to ensure the inclusion of respondents directly involved in digital marketing or technology-related activities.

- Population size: 100 employees
- Sample size: 72 valid responses (representing a 72% response rate)

This sample size is statistically adequate for correlation and regression analyses, as it satisfies the minimum requirements for multivariate analysis (Hair et al., 2021).

2.7 Data Collection Instrument.

The primary data collection tool was a structured questionnaire, designed based on validated instruments from prior studies (Huang & Rust, 2021; Mikalef et al., 2022).

The questionnaire was divided into four sections:

- Section A – Demographic Information: Gender, age, educational level, and years of experience.
- Section B – AI Awareness and Understanding: Measuring employees' knowledge and perceptions of AI applications.
- Section C – AI Role in Marketing Performance: Assessing the contribution of AI to decision-making, efficiency, and personalization.
- Section D – Challenges and Organizational Readiness: Evaluating institutional preparedness and barriers to AI implementation.

All items were measured using a five-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

2.8 Validity and Reliability of the Instrument.

To ensure measurement accuracy, content validity was established by consulting academic experts and professionals in digital marketing and AI.

Construct validity was confirmed through factor analysis, and reliability was tested using Cronbach's Alpha, with coefficients exceeding the acceptable threshold ($\alpha > 0.70$), confirming internal consistency.

Table1. Validity and Reliability of the Instrument.

Section	Number of Items	Cronbach's Alpha	Reliability level
AI Awareness	3	0.81	Good
AI Role in Marketing performance	4	0.88	Excellent
Organizational Readiness	3	0.79	Acceptable
Overall Instrument	10	0.86	Excellent

Source: Author's own elaboration based on field survey data and SPSS analysis (2025).

2.9 Data Analysis Techniques

Data were analyzed using Statistical Package for the Social Sciences (SPSS v26). The following statistical methods were employed:

- Descriptive Analysis: To summarize demographic variables and mean scores for each item.
- Cronbach's Alpha Test: To assess reliability and internal consistency.
- Pearson Correlation Analysis: To measure the strength and direction of relationships among variables.
- Regression Analysis: To test the research hypotheses and determine the predictive power of AI adoption on marketing performance and competitiveness.
- ANOVA (Analysis of Variance): To evaluate variations between demographic groups, where relevant.

2.10 Ethical Considerations.

Ethical research standards were strictly observed. Participation in the study was voluntary, and all respondents were informed about the purpose of the research. Data confidentiality was ensured, and no personal identifiers were collected. The study complied with ethical guidelines of scientific research and data protection.

2.11 Limitations of the Study.

While the research provides valuable insights, it is subject to certain limitations:

- The study focuses on a single case (Venus Company), which may limit generalizability to other sectors.
- Data were collected through self-reported questionnaires, which may involve subjective biases.
- The research is cross-sectional in nature; longitudinal data could provide deeper insights into the long-term impact of AI adoption.

Despite these limitations, the study offers a strong empirical foundation for understanding AI-driven marketing competitiveness in Algerian enterprises.

2.12 Conclusion of Chapter Two

This chapter presented the methodological foundation of the study, detailing the research design, objectives, hypotheses, data collection tools, and analytical procedures. The next chapter will present the empirical results and analysis, including descriptive statistics, reliability testing, correlation, and hypothesis testing, to evaluate the impact of AI technologies on digital marketing performance and competitiveness within Venus Company.

Chapter Three: Empirical Study – Results and Analysis.

3.1 Introduction.

This chapter presents the empirical results of the study conducted at Venus Company to assess the integration of Artificial Intelligence (AI) technologies into digital marketing strategies and their impact on competitiveness. The chapter provides a detailed statistical analysis of the data collected through the structured questionnaire described in Chapter Two. The findings are discussed in relation to the study's hypotheses and the existing literature, offering both empirical validation and theoretical interpretation.

3.2 Demographic Characteristics of Respondents.

The demographic section of the questionnaire aimed to capture relevant background information on the respondents, including gender, age, education level, and years of experience. These variables help contextualize perceptions and attitudes toward AI adoption.

Table 2. Demographic Characteristics of Respondents.

Variable	Category	Frequency	Percentage.
Gender	Male	42	58%
	Female	30	42%
Age	20–30 years	22	30%
	31–40 years	28	39%
	41–50 years	14	19%
	51+ years	08	12%
Education	Bachelor's Degree	33	46%
	Master's Degree	27	38%
	PhD	12	16%
Experience	Less than 5 years	20	28%
	5–10 years	23	32%
	More than 10 years	29	40%

Source: Author's own compilation based on questionnaire data collected from Venus company (2025).

Interpretation:

The sample shows a diverse and balanced demographic structure, ensuring representativeness. The majority of respondents possess significant professional experience and academic qualifications, strengthening the reliability of the data collected.

3.3 Descriptive Analysis of the Main Variables.

3.3.1 Awareness and Understanding of AI

Table 3. Awareness and Understanding of Artificial Intelligence.

Statement	Mean	Std. Deviation	Interpretation
Employees have a clear understanding of AI concepts.	4.12	0.77	High
AI is essential for the company's success.	4.35	0.69	Very High
The company provides sufficient AI training.	3.28	0.95	Moderate

Source: Author's field survey analysis using SPSS descriptive statistic (2025).

Analysis:

Respondents demonstrated a high level of awareness about AI's importance for strategic success, although training opportunities remain limited. This indicates a need for capacity-building programs to enhance digital literacy and technical competence.

3.3.2 Role of AI in Digital Marketing Performance.

Table 4. Role of AI in Digital Marketing Performance.

Statement	Mean	Std. Deviation	Interpretation
AI improves decision-making accuracy.	4.21	0.73	High
AI reduces marketing and operational costs.	4.07	0.81	High
AI enhances data analysis and reporting.	4.40	0.64	Very High
AI supports personalized digital campaigns.	4.32	0.70	Very High

Source: Author's own elaboration based on field data, see also Huang & Rust (2021) for theoretical alignment.

Analysis:

Results reveal that AI has a significant positive impact on marketing performance. Employees perceive AI as a strategic tool that improves accuracy, efficiency, and personalization, aligning with previous research emphasizing data-driven marketing transformation (Huang & Rust, 2021).

3.3.3 Organizational Readiness and Challenges.

Table 5. Organizational Readiness and Challenges.

Statement	Mean	Std. Deviation	Interpretation
The organization faces resistance to change.	3.85	0.88	Moderate–High
Technical expertise is insufficient for AI integration.	4.10	0.72	High
The company has a clear AI implementation strategy.	3.20	1.01	Moderate

Source: Author's empirical result based on field questionnaire and SPSS output(2025).

Analysis:

Although awareness of AI benefits is high, institutional readiness remains moderate. Resistance to change and lack of technical expertise constitute significant barriers to full AI integration. Overcoming these challenges is crucial for achieving sustainable competitiveness.

3.4 Reliability Analysis (Cronbach's Alpha).

Table 6. Reliability Analysis (Cronbach's Alpha).

Section	Number of Items	Cronbach's Alpha	Interpretation
AI Awareness	3	0.81	Good
AI Role in Marketing Performance	4	0.88	Excellent
Organizational Readiness	3	0.79	Acceptable
Overall Questionnaire	10	0.86	Excellent

Source: Author's SPSS output and statical analysis (2025).

Interpretation:

Cronbach's Alpha values exceed the acceptable threshold of 0.70, indicating high internal consistency and confirming that the questionnaire items are reliable and measure the intended constructs accurately.

3.5 Correlation Analysis

The correlation analysis was conducted using Pearson's correlation coefficient to measure the strength and direction of relationships between the main variables.

Table 7. Correlation Analysis.

Variables	Correlation (r)	Significance (p)	Interpretation
AI Awareness → AI Efficiency	0.74	< 0.01	Strong positive correlation
AI Efficiency → Operational Performance	0.78	< 0.01	Strong positive correlation
AI Awareness → Competitiveness	0.61	< 0.01	Moderate positive correlation
AI Efficiency → Competitiveness	0.71	< 0.01	Strong positive correlation

Source: Author's statistical calculation using SPSSv26(2025).

Analysis:

The results confirm strong, positive, and statistically significant relationships among the study variables. Higher levels of AI awareness and efficiency are directly associated with improved marketing performance and organizational competitiveness.

3.6 Regression Analysis and Hypothesis Testing

To test the research hypotheses, regression analysis was applied to evaluate the predictive power of AI adoption on competitiveness.

Table 8. Regression Analysis and Hypothesis Testing.

Hypothesis	Test Used	Result	Significance	Conclusion
H1: AI adoption → Marketing Efficiency	Regression	$\beta = 0.78$	$p < 0.01$	Supported
H2: AI → Decision-Making & Engagement	Correlation	$r = 0.74$	$p < 0.01$	Supported
H3: AI → Competitiveness	Regression	$\beta = 0.71$	$p < 0.01$	Supported
H4: Institutional Readiness moderates AI impact	Correlation	$r = 0.68$	$p < 0.01$	Supported

Source: Author's estimation using regression and correlation output SPSS(2025).

Interpretation:

All hypotheses were statistically supported. The results indicate that AI adoption significantly enhances marketing performance, decision-making, and competitiveness. Institutional readiness and employee competence further strengthen this effect, demonstrating that both technological and human factors are key to successful AI integration.

3.7 Discussion of Findings

The empirical results confirm the findings of prior research (Mikalef et al., 2022; Shankar, 2022), suggesting that AI plays a vital role in improving digital marketing performance and achieving competitive advantage.

At Venus Company, AI adoption has led to:

- ✓ Improved decision-making precision and data analysis capabilities.
- ✓ Enhanced customer personalization and targeted campaigns.
- ✓ Reduced operational costs through process automation.
- ✓ Increased competitiveness and responsiveness to market dynamics.

However, challenges persist in terms of technical infrastructure, training, and organizational culture. To maximize AI's potential, companies must invest in employee skill development, AI governance, and a long-term digital strategy.

3.8 Summary of Chapter Three.

This chapter presented the empirical findings of the study, combining descriptive, reliability, correlation, and regression analyses. The results support all research hypotheses, confirming that AI adoption significantly enhances marketing performance and competitiveness in Algerian enterprises. The discussion highlighted both the benefits and challenges associated with AI integration, offering insights for practical application and policy development.

The next chapter will focus on the interpretation of findings, implications, and recommendations for improving AI-based marketing strategies in Algerian enterprises, emphasizing sustainable competitiveness and innovation.

Chapter Four: Discussion, Conclusion, and Recommendations.

4.1 Introduction

This chapter presents a comprehensive synthesis of the empirical results obtained in the previous sections, linking them with theoretical frameworks and prior literature. The discussion focuses on how Artificial Intelligence (AI) technologies contribute to enhancing digital marketing strategies and competitiveness within Venus Company. It further provides theoretical, managerial, and policy implications, before concluding with practical recommendations and future research directions.

4.2 Discussion of the Main Findings

4.2.1 AI Awareness and Organizational Readiness

The findings revealed that employees at Venus Company exhibit a strong awareness of the importance of Artificial Intelligence and its strategic potential. However, the company's institutional readiness for full AI integration remains moderate due to limited technical expertise and insufficient training programs.

This outcome aligns with the Technology Acceptance Model (TAM) (Davis, 1989), which emphasizes that both perceived usefulness and ease of use influence technology adoption.

In this context, the company's management must invest in building internal competencies and providing continuous professional development to enhance technological adoption.

4.2.2 Impact of AI on Marketing Efficiency.

The study demonstrated that AI technologies have significantly improved decision-making accuracy, data management, and customer engagement. These findings corroborate Huang and Rust (2021) and Davenport et al. (2020), who assert that AI transforms marketing from an intuition-based activity into a data-driven process.

At Venus Company, AI applications such as predictive analytics, personalized advertising, and automated campaign management have enabled more efficient targeting, reduced costs, and improved responsiveness to customer behavior.

Therefore, AI plays a central role in supporting Porter's (1985) concept of competitive advantage through both cost leadership (via efficiency) and differentiation (via personalization and innovation).

4.2.3 AI as a Source of Competitiveness.

The regression analysis confirmed a strong and statistically significant relationship between AI adoption and organizational competitiveness ($\beta = 0.71$, $p < 0.01$).

This supports the Resource-Based View (RBV) (Barney, 1991), which identifies strategic resources—such as data, algorithms, and digital capabilities—as key sources of sustainable competitive advantage.

In Venus Company, AI functions as a strategic resource that is valuable, rare, and difficult to imitate, allowing the firm to strengthen its market position and adapt to evolving consumer expectations.

The evidence further supports the Dynamic Capabilities Theory (Teece, 2018), which argues that organizations gain competitiveness through their ability to sense opportunities, seize them, and reconfigure internal resources efficiently — all of which are facilitated by AI.

4.2.4 Challenges and Limitations in AI Adoption.

Despite positive results, several barriers to AI integration were identified:

- ✓ Limited technical expertise: Employees lack advanced analytical and programming skills required for AI-based tools.
- ✓ Resistance to change: Organizational culture remains partially resistant to automation, fearing job substitution.
- ✓ Data quality and infrastructure: Incomplete digital systems limit the effectiveness of AI applications.
- ✓ Strategic gaps: Absence of a long-term AI roadmap weakens alignment between digital initiatives and overall business objectives.

These challenges are consistent with Benhabib (2023), who found similar obstacles in North African enterprises due to infrastructural and human capital constraints.

4.3 Theoretical Implications.

The study makes significant theoretical contributions by integrating multiple frameworks into a coherent understanding of AI-driven competitiveness:

- ✓ Resource-Based View (RBV): Confirms that AI is a non-substitutable and valuable asset, enhancing differentiation and efficiency.
- ✓ Technology Acceptance Model (TAM): Highlights the importance of user perception and institutional readiness in technology adoption.
- ✓ Dynamic Capabilities Theory: Demonstrates that AI reinforces adaptive and innovative capacities necessary for sustaining competitiveness in dynamic markets.

The study thus contributes to contextualizing Western theories within the Algerian economic environment, providing evidence of their applicability to emerging economies.

4.4 Managerial and Practical Implications.

The empirical findings yield several actionable insights for Algerian enterprises and decision-makers:

- ✓ Strategic Integration:
- ✓ AI adoption must be embedded within corporate strategy to ensure alignment with overall organizational goals.
- ✓ Human Resource Development:
- ✓ Regular training programs in data analytics, AI tools, and digital strategy should be institutionalized to enhance internal expertise.
- ✓ Infrastructure Investment:
- ✓ Upgrading IT infrastructure and data management systems is essential for optimizing AI applications.
- ✓ Organizational Culture:
- ✓ Companies should cultivate a culture of innovation that encourages employees to embrace digital transformation rather than resist it.
- ✓ Customer-Centric Strategy:

Using AI to deliver personalized marketing experiences enhances brand loyalty and customer satisfaction.

4.5 Policy Implications.

At the macroeconomic level, this study highlights the need for a national strategy for AI development in Algeria. Policymakers should:

- ✓ Establish AI innovation hubs and incubators to support research and development.
- ✓ Offer fiscal incentives for private companies investing in digital transformation.
- ✓ Promote university–industry collaborations to strengthen knowledge transfer.
- ✓ Develop AI governance frameworks that ensure transparency, data protection, and ethical use.

These measures would accelerate Algeria's transition toward a knowledge-based economy and reinforce its competitiveness at regional and global levels.

4.6 General Conclusion.

This research confirms that Artificial Intelligence serves as a transformational driver in enhancing digital marketing strategies and competitiveness among Algerian enterprises.

The case study of Venus Company demonstrates that integrating AI into marketing operations leads to tangible improvements in efficiency, decision-making, and customer engagement.

While AI adoption brings significant advantages, it also requires strategic planning, skill development, and infrastructural investment to achieve sustainable success.

By providing empirical evidence within a developing economy, this study bridges an important gap in the literature and offers a model for AI-enabled competitiveness adaptable to other Algerian and North African firms.

4.7 Recommendations.

Based on the analysis, the following recommendations are proposed:

- ✓ Develop organizational AI roadmaps aligned with long-term strategic goals.
- ✓ Invest in employee training and digital literacy, especially in data analytics and machine learning.
- ✓ Adopt ethical AI principles to ensure transparency, fairness, and accountability.
- ✓ Enhance cross-sector collaboration between firms, universities, and government agencies.
- ✓ Monitor performance metrics to evaluate the long-term impact of AI integration on competitiveness.

4.8 Directions for Future Research

To expand on the findings of this study, future research could:

- ✓ Conduct comparative analyses across different sectors to identify variations in AI adoption.
- ✓ Employ longitudinal methods to measure the long-term impact of AI on marketing performance.
- ✓ Combine quantitative and qualitative approaches to explore behavioral and managerial factors in greater depth.
- ✓ Investigate the role of ethical and responsible AI in shaping consumer trust and brand reputation.

4.9 Final Reflection.

Artificial Intelligence is no longer a futuristic concept but a strategic reality shaping global and regional competitiveness.

For Algeria, embracing AI in digital marketing represents not only a technological evolution but also an opportunity to reposition its enterprises within the digital economy.

Sustaining this transformation requires a balance between innovation, ethics, and human development — ensuring that technological progress contributes to inclusive and sustainable economic growth.

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