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MODELING THE CRITICAL SUCCESS FACTORS FOR EMPLOYING AI IN BUSINESS DEVELOPMENT: A M-TISM APPROACH

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ABSTRACT
The integration of Artificial Intelligence (AI) in business development is rapidly transforming organizational strategies, enhancing decision-making, and fostering innovation. However, the successful implementation of AI requires a deep understanding of the critical success factors (CSFs) that influence its effectiveness. This paper employs a Modified Total Interpretive Structural Modeling (M-TISM) approach to identify, model, and analyze the key CSFs for employing AI in business development. Through a systematic literature review and expert input, the study uncovers a set of interconnected factors such as technological infrastructure, leadership commitment, organizational culture, data management, and employee readiness. The M-TISM framework helps in illustrating the hierarchical relationships and interdependencies among these factors, offering a comprehensive understanding of the complex dynamics involved in AI adoption. The findings provide valuable insights for business leaders and decision-makers, offering strategic guidance on how to align organizational resources, culture, and processes for successful AI integration, thereby driving sustainable growth and competitive advantage in business development.
Keywords: Artificial Intelligence (AI), Business Development, Critical Success Factors (CSF), Modified Total Interpretive Structural Modeling (M-TISM), etc.

1. INTRODUCTION

In today's rapidly evolving business landscape, Artificial Intelligence (AI) is emerging as a transformative tool that reshapes business strategies, operations, and development initiatives. As companies strive to gain a competitive edge, AI has proven its potential to enhance decision-making, optimize processes, and unlock new avenues for growth (Singh et al., 2024; Priyanka et al., 2024; Wasi et al., 2024; Sharma et al., 2022; Sindhwani et al., 2024; Bansal et al., 2024; Gouda & Tiwari, 2024; Dhingra & Gupta, 2024; Astawa & Premayani, 2024; Usman et al., 2024; Vayyavur, 2024; Marjanovic et al., 2024; Hossain et al., 2024; Ebuka, 2024). However, the successful integration of AI into business development is not without challenges. Despite its promise, many organizations face significant hurdles in realizing the full potential of AI due to a lack of clarity regarding the critical success factors (CSFs) necessary for effective implementation (Marjanovic et al., 2024; Hossain et al., 2024; Ebuka, 2024; Dwivedi et al., 2024; Demir et al., 2024; Gulak, 2024; Rahim et al., 2024; Kulkov et al., 2024; Satomino et al., 2024; Soori et al., 2024; Yi-wen & Kai, 2024; Leng et al., 2024; Wang et al., 2024; Narkhede et al., 2024; Adigwe et al., 2024; Manuel et al., 2024; Shen & Zhou, 2024; Abulbdeh et al., 2024).

The identification and understanding of these CSFs are crucial for businesses aiming to harness AI's power. Factors such as technological readiness, leadership commitment, organizational culture, data management, and employee adaptability play pivotal roles in determining the success of AI initiatives. However, the interrelationships among these factors are often complex and multidimensional, making it difficult for decision-makers to identify the key drivers of success (Manuel et al., 2024; Shen & Zhou, 2024; Abulbdeh et al., 2024; Igbinenikaro & Adewusi, 2024; Choudhary, 2024; Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024; Yi-wen & Kai, 2024; Mohiuddin et al., 2024; Queiroz et al., 2024; Khan et al., 2023).

To address this gap, this paper applies a Modified Total Interpretive Structural Modeling (M-TISM) approach to systematically explore and model the CSFs for employing AI in business development (Igbinenikaro & Adewusi, 2024; Choudhary, 2024; Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024; Yi-wen & Kai, 2024; Mohiuddin et al., 2024; Queiroz et al., 2024). M-TISM, a powerful tool for understanding complex systems, allows for the identification, classification, and interpretation of the relationships among various factors, offering a structured view of how these elements interact and influence the successful adoption of AI (Khan et al., 2023; Ahmad et al., 2022; Javaid et al., 2022; Liu et al., 2022; Tsang et al., 2022; Rammer et al., 2022; Fan & Liu, 2021; Mhlanga, 2021; Peres et al., 2020; Popkova & Sergi, 2020; Lee, 2020; Vinuesa et al., 2020; Al Bashar & Khan, 2017) .

The objective of this study is twofold: first, to provide a comprehensive list of CSFs that influence AI implementation in business development, and second, to model these factors using the M-TISM approach to highlight their hierarchical relationships and interdependencies. By doing so, this paper aims to offer valuable insights for businesses, enabling them to make informed decisions about AI adoption and its strategic implementation. Ultimately, the research seeks

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to contribute to the ongoing discourse on AI integration in business, providing practical guidance for organizations looking to leverage AI for sustainable growth and competitive advantage.

2. LITERATURE REVIEW

The integration of Artificial Intelligence (AI) into business development has garnered significant attention in recent years, with numerous studies examining the critical success factors (CSFs) that influence its effective implementation (Choudhary, 2024; Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024). A foundational aspect of AI integration is the establishment of robust technological infrastructure. Recent research emphasizes the necessity for scalable and flexible IT systems that can accommodate the demands of AI applications (Queiroz et al., 2024; Khan et al., 2023). Effective data management practices are also highlighted, underscoring the importance of data quality, accessibility, and security in facilitating AI-driven decision-making processes (Marjanovic et al., 2024; Hossain et al., 2024). Organizational culture plays a pivotal role in AI adoption (Gulak, 2024; Rahim et al., 2024; Kulkov et al., 2024). Studies indicate that fostering a culture of innovation and openness to change is essential for the successful integration of AI technologies (Igbinenikaro & Adewusi, 2024; Choudhary, 2024; Khang et al., 2024; Chishti et al., 2024). Leadership commitment is equally critical; leaders must demonstrate a clear vision and provide the necessary resources to support AI initiatives (Ajiga et al., 2024; Yi-wen & Kai, 2024; Mohiuddin et al., 2024; Queiroz et al., 2024; Khan et al., 2023). The development of employee skills is another crucial factor. Research suggests that continuous training programs are vital to equip employees with the competencies required to work effectively with AI tools and methodologies (Singh et al., 2024; Priyanka et al., 2024; Wasi et al., 2024; Sharma et al., 2022; Sindhwani et al., 2024; Bansal et al., 2024). This investment in human capital ensures that the workforce can adapt to and leverage AI technologies effectively. Aligning AI initiatives with the organization's strategic objectives is essential for maximizing business value (Gouda & Tiwari, 2024; Dhingra & Gupta, 2024; Astawa & Premayani, 2024; Usman et al., 2024; Vayyavur, 2024). Studies advocate for a clear articulation of the value proposition of AI projects, ensuring that they address specific business needs and contribute to the organization's overall goals (Marjanovic et al., 2024; Hossain et al., 2024; Ebuka, 2024; Dwivedi et al., 2024; Demir et al., 2024; Gulak, 2024). Ethical considerations and governance frameworks are increasingly recognized as critical in AI integration (Leng et al., 2024; Wang et al., 2024; Narkhede et al., 2024; Adigwe et al., 2024; Manuel et al., 2024). The successful integration of AI into business development is contingent upon a multifaceted approach that encompasses technological readiness, organizational culture, leadership commitment, employee training, strategic alignment, and ethical governance (Choudhary, 2024; Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024). The studies reviewed herein provide valuable insights into these critical success factors, offering a foundation for organizations seeking to navigate the complexities of AI adoption and implementation (Yi-wen & Kai, 2024; Mohiuddin et al., 2024; Queiroz et al., 2024; Khan et al., 2023).

3. RESEARCH QUESTION: What are the critical success factors for employing AI in Business Development

4. RESEARCH OBJECTIVES: Model the critical success factors for employing AI in business development through a M-TISM approach

5. CRITICAL SUCCESS FACTORS FOR EMPLOYING AI IN BUSINESS DEVELOPMENT

Here are 10 critical success factors (CSFs) for employing AI in business development:

i. **Clear Strategic Vision**
Organizations must define a clear and actionable strategy for AI adoption, ensuring alignment with business goals and long-term objectives (Gouda & Tiwari, 2024; Dhingra & Gupta, 2024; Astawa & Premayani, 2024; Usman et al., 2024; Vayyavur, 2024; Marjanovic et al., 2024).

ii. **Robust Data Infrastructure**
High-quality, well-structured data and efficient data management systems are fundamental for the successful deployment of AI solutions (Singh et al., 2024; Priyanka et al., 2024; Wasi et al., 2024; Sharma et al., 2022; Sindhwani et al., 2024; Bansal et al., 2024).

iii. **Skilled Workforce**
Having a team with expertise in AI, data science, and domain knowledge ensures effective development and application of AI technologies (Marjanovic et al., 2024; Hossain et al., 2024; Ebuka, 2024; Dwivedi et al., 2024; Demir et al., 2024; Gulak, 2024).

iv. **Executive Support and Leadership**
Strong backing from top management is essential to secure resources, drive change, and build organizational commitment to AI initiatives (Rahim et al., 2024; Kulkov et al., 2024; Satomino et al., 2024; Soori et al., 2024; Yi-wen & Kai, 2024).

v. **Technology Readiness and Investment**
Adequate investment in AI tools, infrastructure, and research and development ensures the scalability and sustainability of AI-driven solutions (Leng et al., 2024; Wang et al., 2024; Narkhede et al., 2024; Adigwe et al., 2024; Manuel et al., 2024).

vi. **Integration with Existing Systems**
Seamless integration of AI technologies with existing processes and systems minimizes disruptions and

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enhances overall efficiency (Shen & Zhou, 2024; Abulbdeh et al., 2024; Igbinenikaro & Adewusi, 2024; Choudhary, 2024).

vii. **Ethical Considerations and Compliance**
Adherence to ethical guidelines, data privacy laws, and regulatory standards builds trust and ensures responsible use of AI (Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024).

viii. **Agility and Change Management**
Organizations need to adapt quickly to technological changes and foster a culture of innovation to maximize AI benefits (Yi-wen & Kai, 2024; Mohiuddin et al., 2024; Queiroz et al., 2024; Khan et al., 2023).

ix. **Collaborative Ecosystem**
Partnering with AI vendors, academic institutions, and technology providers helps in leveraging external expertise and resources (Khang et al., 2024; Chishti et al., 2024; Ochuba et al., 2024; Sharma & Gupta, 2024; Ajiga et al., 2024; Yi-wen & Kai, 2024; Mohiuddin et al., 2024).

x. **Continuous Monitoring and Optimization**
Regular evaluation of AI initiatives ensures alignment with business outcomes, enabling organizations to refine strategies and improve performance (Gulak, 2024; Rahim et al., 2024; Kulkov et al., 2024; Satomino et al., 2024; Soori et al., 2024; Yi-wen & Kai, 2024; Leng et al., 2024; Wang et al., 2024; Narkhede et al., 2024).

6. RESEARCH METHODOLOGY

Total Interpretive Structural Modelling (TISM) is a systems-based methodology (Sushil, 2017; Sangwa & Sangwan, 2022; Rizvi et al., 2019; Kumar & Aggarwal, 2021; Pal et al., 2022; Raut et al., 2023; Singh & Sharma, 2023) designed to identify and analyze the intricate relationships among various elements within a system. Building on the foundation of Interpretive Structural Modeling (ISM), TISM introduces an interpretive component that deepens the understanding of how factors interact with each other (Sushil, 2017; Sangwa & Sangwan, 2018; Rizvi et al., 2019; Kumar & Aggarwal, 2021; Pal et al., 2022; Raut et al., 2023; Singh & Sharma, 2023). This methodology is particularly effective in constructing a hierarchical structure of interactions, making it valuable for addressing problems characterized by high interdependence among elements (Raut et al., 2023).

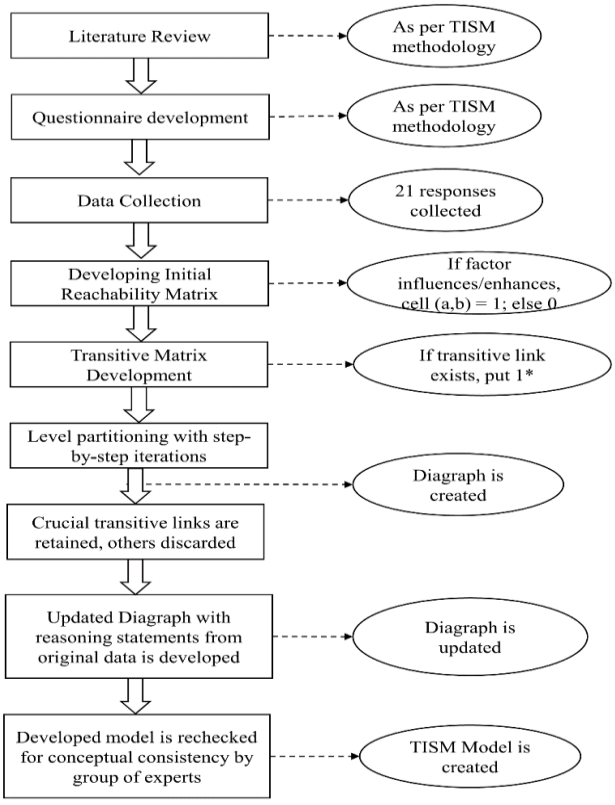

Figure 1: Flow of TISM Model

Interpretive Structural Modeling (ISM) is highly effective in analyzing complex situations where multiple elements are deeply interconnected (Rizvi et al., 2019). The TISM process consists of several key steps:

i. Identification of critical factors through a literature review.
ii. Establishment of contextual relationships among the factors.
iii. Interpretation of these relationships to understand their influence or enhancement.
iv. Conducting pairwise comparisons to assess the relationships.
v. Formulation of a reachability matrix based on these comparisons, followed by a check for transitivity.
vi. Partitioning the factors into hierarchical levels.
vii. Construction of a diagraph to represent the relationships.

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viii. Transformation of the diagraph into an interaction matrix, refining transitive links.
ix. Development of the TISM based on connective logic and interpretive insights, establishing directive links between the nodes.

This methodology enables a comprehensive mapping of the complex relationships, offering valuable managerial insights and enhancing the understanding of qualitative research. The following tables provide the reachability matrix and outline the levels of factors that influence buyers' purchase intentions for handicrafts.

7. TISM MODELING

Table 1: List of variables and their codes for TISM modeling

S. No.	Variable Code	Variables
1	1	Clear Strategic Vision
2	2	Robust Data Infrastructure
3	3	Skilled Workforce
4	4	Executive Support and Leadership
5	5	Technology Readiness and Investment
6	6	Integration with Existing Systems
7	7	Ethical Considerations and Compliance
8	8	Agility and Change Management
9	9	Collaborative Ecosystem
10	10	Continuous Monitoring and Optimization

8. ANALYSIS AND RESULTS

TISM Model

Table 2: Reachability Matrix

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
B1	1	1	1	0	0	0	0	0	0	0
B2	0	1	0	0	0	0	0	0	0	0
B3	0	1	1	0	0	0	0	0	0	0
B4	0	0	0	1	1	0	0	0	0	1
B5	0	0	1	1	1	0	1	0	0	1
B6	0	0	0	0	0	1	0	0	1	1
B7	0	1	1	1	0	0	1	0	0	0
B8	0	0	0	0	0	1	0	1	1	0
B9	0	0	1	0	0	1	0	0	1	0
B10	0	0	0	0	0	0	0	0	0	1

Table 3: Reachability Matrix with transitivity

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
B1	1	1	1	0	0	0	0	0	0	0
B2	0	1	0	0	0	0	0	0	0	0
B3	0	1	1	0	0	0	0	0	0	0
B4	0	1*	1*	1	1	0	1*	0	0	1
B5	0	1*	1	1	1	0	1	0	0	1
B6	0	1*	1*	0	0	1	0	0	1	1
B7	0	1	1	1	1*	0	1	0	0	1*
B8	0	1*	1*	0	0	1	0	1	1	1*
B9	0	1*	1	0	0	1	0	0	1	1*
B10	0	0	0	0	0	0	0	0	0	1

Table 4: Partitioning the Reachability Matrix into different levels

Variables	Reachability Set	Antecedent Set	Intersection Set	Level
a) Iteration 1				
B1	1,2,3	1	1	
B2	2	1,2,3,4,5,6,7,8,9	2	I
B3	2,3	1,3,4,5,6,7,8,9	3	
B4	2,3,4,5,7,10	4,5,7	4,5,7	
B5	2,3,4,5,7,10	4,5,7	4,5,7	
B6	2,3,6,9,10	6,8,9	6,9	
B7	2,3,4,5,7,10	4,5,7	4,5,7	
B8	2,3,6,8,9,10	8	8	
B9	2,3,6,9	6,8,9	6,9	
B10	10	4,5,6,7,8,10	10	II
b) Iteration 2				

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H1	1,3	1	1	
B3	3	1,3,4,5,6,7,8,9	3	III
B4	3,4,5,7	4,5,7	4,5,7	
B5	3,4,5,7	4,5,7	4,5,7	
B6	3,6,9	6,8,9	6,9	
B7	3,4,5,7	4,5,7	4,5,7	
B8	3,6,8,9	8	8	
B9	3,6,9	6,8,9	6,9	
c) Iteration 3				
B1	1	1	1	IV
B4	4,5,7	4,5,7	4,5,7	V
B5	4,5,7	4,5,7	4,5,7	V
B6	6,9	6,8,9	6,9	VI
B7	4,5,7	4,5,7	4,5,7	V
B8	6,8,9	8	8	
B9	6,9	6,8,9	6,9	VI
d) Iteration 4				
B8	8	8	8	VII

Table 5: List of variables and their levels in TISM

S. No.	Variable Code	Variables	Level in TISM
1	2	**Robust Data Infrastructure**	I
2	10	**Continuous Monitoring and Optimization**	II
3	3	**Skilled Workforce**	III
4	1	**Clear Strategic Vision**	IV
5	4	**Executive Support and Leadership**	V
6	5	**Technology Readiness and Investment**	V
7	7	**Ethical Considerations and Compliance**	V
8	6	**Integration with Existing Systems**	VI
9	9	**Collaborative Ecosystem**	VI
10	8	**Agility and Change Management**	VII

Diagraph- Figure 2 given below provides for the diagraph of the above TISM Model.

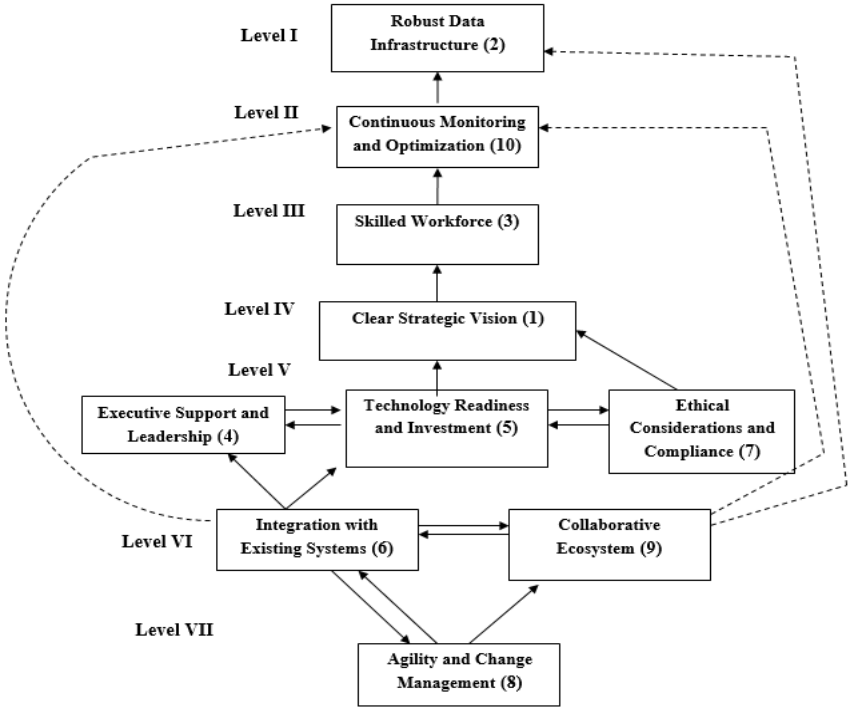

Figure 2: Model for TISM Framework

9. DISCUSSION

It can be seen from Figure 2 **Level VII** consists of variable 8 namely **Agility and Change Management** (8), which affects **Integration with Existing Systems** (6) level VI and gets affected by it. **Collaborative Ecosystem** (9) also affects **Integration with Existing Systems** (6) level VI and gets affected by it. **Agility and Change Management** (8) also affects **Collaborative Ecosystem (9).**

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Level VI comprises of **Integration with Existing Systems** (6), and **Collaborative Ecosystem** (9). **Integration with Existing Systems** (6) affects **Collaborative Ecosystem** (9) and **Collaborative Ecosystem** (9) in turn affects **Integration with Existing Systems** (6). **Collaborative Ecosystem** (9) also affects **Robust Data Infrastructure** (2) level I and **Continuous Monitoring and Optimization** (10) level II. On the other **Integration with Existing Systems** (6) affects **Continuous Monitoring and Optimization** (10) level II. It also affects **Executive Support and Leadership** (4) level V and **Technology Readiness and Investment** (5) level V.
Level V consists of **Executive Support and Leadership** (4), **Technology Readiness and Investment** (5), and **Ethical Considerations and Compliance** (7). **Executive Support and Leadership** (4) casts impact on **Technology Readiness and Investment** (5) and vice-versa. Similarly, there is a two way relationship between **Technology Readiness and Investment** (5) and **Ethical Considerations and Compliance** (7) and they both affect each other mutually. **Technology Readiness and Investment** (5) also impacts **Clear Strategic Vision** (1) level IV in business.
Level IV comprises of **Clear Strategic Vision** (1) and it affects **Skilled Workforce** (3) III. It gets affected by **Technology Readiness and Investment** (5) and **Ethical Considerations and Compliance** (7) level V.
Level III consists of Infrastructure Development (3) and it affects **Continuous Monitoring and Optimization** (10) level II and gets affected by **Clear Strategic Vision** (1) level IV.
Level II comprises of **Continuous Monitoring and Optimization** (10). It affects **Robust Data Infrastructure** (2) level I and gets impacted by **Collaborative Ecosystem** (9) VI and **Existing Systems** (6) level VI.
Level I consist of **Robust Data Infrastructure** (2) and gets impacted by **Continuous Monitoring and Optimization** (10) level II and **Collaborative Ecosystem** (9) Level VI.

10. PRACTICAL IMPLICATIONS

The findings of this study on modeling the critical success factors (CSFs) for employing AI in business development using the Modified Total Interpretive Structural Modeling (M-TISM) approach offer several practical implications for organizations aiming to integrate AI into their business strategies:

i. **Strategic Alignment of AI Initiatives**: The study highlights the importance of aligning AI projects with organizational goals. Business leaders can utilize the model to ensure that AI initiatives are not only technically feasible but also strategically relevant to their business development objectives. This alignment helps in maximizing the potential business value of AI and enhances long-term sustainability.
ii. **Investing in Technological Infrastructure**: The findings underscore the necessity for robust technological infrastructure. Organizations should prioritize investments in scalable IT systems, data management solutions, and cloud computing resources to support AI deployment. This will enable businesses to handle large datasets, integrate AI tools seamlessly, and ensure smooth AI operations.
iii. **Fostering an AI-friendly Organizational Culture**: A significant implication is the need for cultivating a culture that embraces innovation and change. Business leaders should encourage a mindset that views AI as a catalyst for growth rather than a threat. Creating an environment that values experimentation, continuous learning, and adaptability will be crucial for AI's successful implementation.
iv. **Leadership Commitment and Vision**: Effective AI implementation requires strong leadership that is committed to driving AI initiatives. The model emphasizes the role of leadership in securing resources, setting clear goals, and ensuring the AI strategy is communicated effectively across all levels of the organization. Leaders must also champion AI adoption to build confidence and commitment among employees.
v. **Investing in Employee Training and Skills Development**: For AI to be successfully integrated into business development, it is essential to develop the necessary skills among employees. Organizations must invest in training programs to enhance the workforce's capabilities in AI technologies, data analytics, and machine learning. This not only boosts employee readiness but also ensures they can maximize the benefits of AI applications.
vi. **Ethical and Governance Frameworks**: The study highlights the critical role of ethics and governance in AI deployment. Businesses should establish ethical guidelines and governance structures to ensure transparency, accountability, and fairness in AI decision-making processes. This is crucial for gaining stakeholder trust and avoiding potential risks associated with AI misuse.
vii. **Continuous Monitoring and Adaptation**: The dynamic nature of AI technology means that organizations must continuously monitor AI performance and make adjustments as needed. Businesses should establish feedback loops to track the effectiveness of AI initiatives, identify areas for improvement, and adapt strategies based on real-time data and insights.

By addressing these practical implications, businesses can better position themselves for successful AI integration, driving innovation, improving business development processes, and securing a competitive advantage in an increasingly AI-driven market.

11. ECONOMIC IMPLICATIONS

The adoption of Artificial Intelligence (AI) in business development carries significant economic implications that shape industries, influence labor markets, and drive global economic growth. Understanding these implications is crucial for organizations aiming to harness AI effectively. AI technologies automate routine and complex tasks, enabling businesses to achieve higher productivity levels. By streamlining operations, reducing errors, and optimizing resource utilization, AI contributes to cost savings and boosts overall economic efficiency. AI fosters innovation by

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providing insights through advanced analytics and predictive modeling.

Businesses can develop new products, services, and market strategies tailored to emerging consumer demands, thereby expanding into untapped markets and driving revenue growth. By leveraging AI-driven solutions, organizations can significantly reduce operational costs. Automation of repetitive tasks, optimization of supply chains, and predictive maintenance in manufacturing sectors lead to better allocation of resources and minimized wastage, positively impacting the bottom line. The integration of AI reshapes the labor market by automating certain roles while creating demand for new skill sets. There is a potential for economic disruption as traditional jobs become redundant, but the emergence of AI-centric roles fosters opportunities for upskilling and reskilling, driving a knowledge-based economy. AI adoption has the potential to widen economic disparities between organizations and nations. Companies and countries with access to AI technologies gain competitive advantages, creating economic gaps. Addressing these disparities through equitable access to AI tools is essential for balanced economic development. The growing reliance on AI drives significant investments in technology infrastructure, research, and development. Venture capital and public funding for AI startups contribute to economic activity, while financial institutions leverage AI for improved decision-making and risk management, enhancing economic stability. Economic implications are influenced by the regulatory landscape governing AI adoption. Policymakers must address ethical concerns, data privacy, and security issues, ensuring that economic benefits are not overshadowed by societal costs.

Clear guidelines promote trust and encourage investment in AI. AI adoption enhances the global competitiveness of businesses and economies. Countries that integrate AI into their industrial strategies achieve a technological edge, attracting foreign investments and stimulating economic growth on a macroeconomic scale. In healthcare, AI reduces costs by enhancing diagnostic accuracy and operational efficiencies in hospitals. In retail, AI-powered personalization increases sales and customer retention. In finance, AI improves fraud detection and automates financial advising, reducing operational costs. In manufacturing, predictive analytics minimize downtime, improving productivity and profitability. AI contributes to sustainable economic development by optimizing energy consumption, reducing carbon footprints, and enabling green innovations. These advancements align with global sustainability goals, fostering long-term economic stability. The economic implications of employing AI in business development are profound and multifaceted. While AI offers substantial benefits such as improved efficiency, innovation, and competitiveness, challenges like economic disparities, labor market shifts, and regulatory hurdles must be addressed. A strategic and inclusive approach to AI integration can maximize its economic potential while fostering equitable growth.

12. FUTURE RESEARCH IMPLICATIONS

The study of critical success factors (CSFs) for employing AI in business development using the M-TISM approach opens several avenues for future research:

i. **Industry-Specific Applications** Future studies can explore the CSFs for AI adoption across specific industries, such as healthcare, retail, manufacturing, and finance. Understanding unique sectoral requirements can provide tailored strategies for AI implementation.
ii. **Integration with Emerging Technologies** Research can focus on the interplay between AI and other emerging technologies such as blockchain, IoT, and quantum computing. Investigating these integrations could reveal synergistic opportunities for enhancing business development processes.
iii. **Longitudinal Impact Studies** Long-term studies on the economic, social, and organizational impacts of AI in business development would provide deeper insights into its sustained value and evolving challenges.
iv. **Global Comparative Analysis** Comparative studies across countries and regions can uncover how varying economic conditions, cultural contexts, and regulatory frameworks influence the adoption and effectiveness of AI in business development.
v. **Ethical and Regulatory Frameworks** Future research can delve into developing robust ethical and legal frameworks to guide AI adoption, ensuring responsible use while maximizing economic and social benefits.
vi. **AI-Driven Business Models** Investigations into new business models enabled by AI, such as subscription-based AI solutions or AI-as-a-Service (AIaaS), can provide insights into innovative revenue streams and operational paradigms.
vii. **Reskilling and Workforce Transition Strategies** Exploring strategies for workforce reskilling and managing the transition caused by AI-driven disruptions can offer practical solutions to mitigate job losses and economic inequalities.
viii. **Measuring AI's ROI** Developing methodologies to quantify the return on investment (ROI) of AI initiatives in business development would help organizations make data-driven decisions about AI adoption.
ix. **Sustainability and Green AI** Examining the role of AI in promoting sustainability, including the concept of "Green AI," which emphasizes energy-efficient AI systems, can align technology adoption with environmental goals.
x. **AI in Small and Medium Enterprises (SMEs)** Research focused on the adoption challenges and benefits of AI for SMEs can help bridge the gap between large corporations and smaller businesses, fostering equitable economic growth.

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Future research on AI in business development should address these diverse dimensions to build a comprehensive understanding of its implications and optimize its potential benefits. By pursuing these directions, researchers can contribute to shaping an inclusive, efficient, and innovation-driven economic landscape.

13. CONCLUSION

The study "Modeling the Critical Success Factors for Employing AI in Business Development: A M-TISM Approach" highlights the transformative potential of AI in reshaping business landscapes. By identifying and analyzing the critical factors that drive AI adoption, this research provides actionable insights for businesses, policymakers, and researchers. This paper emphasizes the importance of strategic alignment, technological preparedness, and inclusive implementation to maximize the benefits of AI while mitigating associated challenges. As businesses increasingly adopt AI-driven solutions, the findings of this study can serve as a foundational framework for guiding effective decision-making. Ultimately, leveraging AI in business development is not just a technological shift but an economic imperative that holds the potential to drive innovation, efficiency, and global competitiveness in the years to come.

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