Journal of Marketing & Social Research

ISSN (Online): 3008-0711

Volume: 03 | Issue 01 | 2026

Journal homepage: https://jmsr-online.com/

Research Article

From Data Analytics to Managerial Action: A Management Science Framework for AI-Based Process Optimization

Dr. Pushpalata S. Patil[1], Dr. Anshuman V. Magar[2] and Dr. Prabha Singh[3]

[1]SOBM, JSPM University, Wagholi, Pune

[2]Sr. Assist. Prof., SOBM, JSPM University, Pune

[3]Dean, FBMC, JSPM University, Wagholi, Pune

Received: 26/10/2025; Revision: 30/11/2025; Accepted: 08/12/2025; Published: 07/01/2026

Corresponding author: Dr. Pushpalata S. Patil *(pushpatil81@gmail.com)

Abstract: The study examines crucial knowledge gaps which are present in the implementation studies of AI for organizational processes. The existing body of knowledge concentrates on AI applications separately but does not examine the comprehensive integration of AI automated systems with critical legacy systems on which organizations still rely. The integration of old infrastructure systems generates operational humps which need functional integration approaches to ensure existing business operations continue running. The existing body of research does not have enough studies regarding how individuals and social factors respond to AI system implementation. The existing research emphasizes efficiency and cost minimization without exploring how AI adoption influences staff members through role adjustments and skill requirements and psychological implications. The study does not explore how AI systems will continue to operate with stability over long durations of usage. The majority of current case studies report pilot schemes over the short term but fail to touch upon the long-term issues such as maintenance costs and algorithm deterioration and system growth challenges and the requirement for ongoing algorithm updates. There are theoretical frameworks for AI regulation but organizations find it challenging to apply these rules to practices. Organizations are finding it difficult to implement ethical standards in practice since they must contend with algorithmic bias and define explicit systems of accountability for AI governance. The study formulates a large-scale framework for AI deployment that covers both workforce impacts and legacy system integration and long-term operational stability and ethical management practices. AI automation influences employee morale, job descriptions, and the skills deficit at a level deeper than simply a macro view of job replacement. The study offers academic and organizational benefit through its technologically driven and socially ethical and inclusive strategy for the use of AI.

Keywords: Artificial intelligence, Automation, Ethical Management, Social Elements.

INTRODUCTION

The combination of AI-driven automation and process improvement is a vital digital transformation pathway for industries. Companies are utilizing sophisticated technologies such as robotic process automation (RPA), machine learning (ML), and artificial intelligence to automate processes, lower expenses, and increase productivity (Kulasekhara Reddy Kotte et al., 2025). AI-based systems are transforming enterprise data management by handling the exponential rise in data volumes through automated processing, quality control, and real-time insights via natural language processing and predictive analytics (Neelakrishnan, 2024). In manufacturing environments, Intelligent Process Automation (IPA) frameworks prove tangible value through process mining methodologies and strategic placement of AI technology, effectively automating orders of production while maximizing waste and plant capacity (Liévano-Martínez et al., 2022). Advanced AI models with deep learning and NLP methods provide powerful data preprocessing, feature extraction, and prediction analysis, minimizing the time for analysis and human intervention while keeping high accuracy on various fields such as finance, healthcare, and marketing (Daruvuri, 2022).

The high growth of data in organizations has opened up a chance of utilizing AI to simplify and refine business processes. Nevertheless, filling the gap between data acquisition and actionable process enhancement is still a major hurdle.

Background and Significance

The healthcare's complex adaptive system is always in pursuit of means to produce greater efficiency, better patient outcomes, and optimized resource utilization (Zayas-Cabán et al., 2023). Artificial Intelligence (AI) offers a revolutionary ability to automate complex processes and optimize operational workflow in this setting (Bekbolatova et al., 2024). The use of AI technologies, from machine learning to natural language processing and computer vision, provides analytical functionality for complex medical data and enables innovation in diagnostics, treatment planning, and patient interaction (2024) (Lainjo, 2024). In spite of massive investments and fast-paced technological advancements, realization of the benefits of AI in real-world healthcare applications has been slow, highlighting implementation challenges and trust issues (Steerling et al., 2023). It is thus critical to comprehend the processes for AI-driven process automation and optimization in healthcare environments to

unlock its full potential (Zayas-Cabán et al., 2023).

LITERATURE REVIEW / THEMATIC ANALYSIS

1.Kulasekhara Reddy Kotte, Latha Thammareddi, Divya Kodi, Venkateswara Rao Anumolu, Arun Kumar K, Shubham Joshi, "Integration of Process Optimization and Automation: A Way to AI Powered Digital Transformation"2025 First International Conference on Advances in Computer Science, Electrical, Electronics, and Communication Technologies (CE2CT),2025 ·

The integration of process automation and optimization using AI-powered technologies can drive digital transformation and operational excellence.

The article explains the interaction between process optimization and automation as one of the main drivers of AI-facilitated digital transformation, with its advantages in enhancing operational effectiveness, cost reduction, and simplification of processes, and offers a roadmap to organizations for reaching operational excellence and long-term growth through the interplay.

Main Finding: Process optimization and automation integration is a crucial driver of AI-enabled digital transformation.

- It enhances operational effectiveness, cuts costs, and simplifies processes.
- It facilitates predictive results, instant decision-making, and personalized customer experiences.

2.Priyanka Neelakrishnan, "Redefining Enterprise Data Management with AI-Powered Automation ",International Journal of Innovative Science and Research Technology,2024

This paper introduces an AI-based architecture to automate and optimize enterprise data management to overcome the challenges of rising data volume and complexity.

This paper introduces a new concept to revolutionize enterprise data management by using AI-based automation with technologies such as machine learning and predictive analytics to achieve more accuracy and efficiency, overcome existing problems, and lay the groundwork for future improvements.

3.F. A. Liévano-Martínez, " Intelligent Process Automation: An Application in Manufacturing Industry",Sustainability 2022 ·

This paper suggests a framework to deploy intelligent process automation technologies in order to automate and optimize manufacturing processes.

The article presents Intelligent Process Automation (IPA) as a corporate digital transformation strategic technology solution, outlining a model for its adoption and showcasing its value through an example use case in the manufacturing sector, where it automates production orders and optimizes waste and capacity, both showing strong economic and operational effects.

4.Rajesh Daruvuri, "An improved AI framework for automating data analysis ",World Journal of Advanced Research and Reviews ,2022 ·

An AI solution that combines ML, DL, and NLP to automate data analysis and facilitate decision-making optimization in organizations.

This paper presents a better AI framework that combines cutting-edge machine learning, deep learning, and natural language processing technologies to automate data analysis cost-effectively, lowering analysis time and human labor while improving reliability and decision-making in industries.

5.David Chapela-Campa, "From process mining to augmented process execution ",Journal of Software and Systems Modeling,2023

The article proposes a framework of AI-enabled process automation and process optimization through the fusion of process mining and AI-enabled process optimization.

The article explains the development of business process management from antiquated processes to data-centric approaches with emphasis on the coming together of process mining and AI-based process optimization towards the idea of augmented process execution for constant and automatic improvement and adjustment of business processes.

6.C. Meyer, "From automats to algorithms: the automation of services using artificial intelligence "2020

The article suggests a knowledge management and customer interaction uncertainty framework for service automation decisions.

The article suggests a conceptual framework of service automation as a knowledge management choice, applying information processing theory for handling uncertainty and customer interaction, with implications for AI in professional services.

7.Oluchi Alapini, "AI-Powered Analytics Solutions for Business Process Optimization "

International Journal of Scientific Research and Modern Technology,2025

AI-based analytics solutions can streamline business operations by improving predictive analytics, workflow optimization, and customer interaction.

In this paper, existing literature on AI-based analytics solutions is reviewed, their contribution to optimizing business processes is explored, benefits and limitations are analyzed, and recommendations for IT modernization, ethical governance, and upskilling of the workforce are made to foster data-driven growth and competitive edge.

8.Federico Walas Mateo, "Artificial Intelligence as a Process Optimization driver under industry 4.0 framework and the role of IIoT, a bibliometric analysis ",Journal of Industrial Integration and Management,2022 ·

The paper proposes a conceptual framework for using AI/ML as a tool for optimizing industrial processes within the Industry 4.0 model.

AI-Powered Automation: Concepts and Evolution

AI-driven automation within the healthcare sector involves leveraging smart systems to perform activities that have been historically conducted by human actors, aiming to enhance the delivery of services (Zayas-Cabán et al., 2023). The development spans from machine-learning algorithms for diagnostic aid to sophisticated robotics for surgical support and back-office process improvement (2024) (Lainjo, 2024). Robotic Process Automation (RPA), for example, combined with Big Data, has evidenced substantial decreases in execution times and error rates of operations in industrial settings, and thus similar potential in healthcare (Patrício et al., 2025). The creation of sophisticated AI algorithms for automated data preprocessing tackles the issues of high dimensionality, incompleteness, and variability of healthcare data, reducing the analytical pipeline (n.d.-a). Nursing Decision Support Systems (DSSs) are yet another aspect, which processes information analysis and decision making automatically, although their ultimate role in end-to-end nursing care support is still a development area (Akbar et al., 2021).

Present Uses of AI in Healthcare Process Optimization

AI applications are becoming widespread in healthcare, aimed at different aspects of process optimization. In diagnosis, AI programs are superior in interpreting medical images and detecting disease at an early stage, supporting clinical decision-making (Lainjo, 2024) (2024). Treatment protocols are created based on individual patient data analyzed through AI, resulting in more individualized interventions (Lainjo, 2024) (2024). Away from direct patient management, AI optimizes administrative tasks, potentially saving physicians from burnout and improving overall effectiveness (Shuaib, 2024). Examples are AI for risk prediction using client-supplied data and image processing for disease forecasting in distant healthcare environments (Ingale et al., 2024). In addition, AI aids in vital safety functions, including strongly identifying nasogastric tube placements from Chest X-ray images, thus averting severe patient injury (n.d.). Freeing healthcare workers from routine tasks through AI improves both patient outcomes and professional satisfaction (Bekbolatova et al., 2024).

Ethical, Regulatory, and Operational Challenges

The use of AI in healthcare comes with major ethical, regulatory, and operational challenges. Ethical issues center on data privacy, algorithmic bias, and fair access to AI-based care (Shuaib, 2024) (Lainjo, 2024). Generative AI, for instance, offers uncertainties in data use, privacy protection, and cost-effectiveness that require clarification (Yu & Zhai, 2024). Regulatory frameworks remain in development; although most AI medical devices are covered by current laws, new AI-specific legislation is frequently necessary to manage recent developments (Busch et al., 2025). Across the world, discrepancies continue in the adoption of legally binding AI-specific legislation, with numerous nations having poor frameworks in place (Busch et al., 2025). Operationally, barriers encompass integration into current systems, quality of data, and the requirement of new data literacy skills among healthcare workers (Chomutare et al., 2022) (Shuaib, 2024). The inherent complexity of healthcare workflows and the requirement for context-specific adaptations also enhance the complexity of effective AI integration (Zayas-Cabán et al., 2023) (Shuaib, 2024).

Stakeholder Perspectives: Patients, Providers, and Administrators

Stakeholder opinions about AI in healthcare are diverse and range from optimism about potential benefits to concern about potential challenges. Families and patients tend to look for coordinated, whole-person care, which AI can facilitate by enhancing information flow and coordination among clinicians (Weiner et al., 2005). Clinicians, nurses, and allied health professionals understand AI's capacity for greater efficiency, workload reduction, and enhanced patient safety (Moldt et al., 2025). Nevertheless, they raise concerns regarding undue dependence on technology, its effect on clinical decision-making, and ensuring proper training (Moldt et al., 2025) (Shuaib, 2024). Institutional stakeholders and administrators face concerns about governance necessities, AI systems' interoperability with current infrastructure, and ensuring good data quality and availability (Kim et al., 2023) (Chomutare et al., 2022). Inability to articulate needs for AI innovations by influential health care providers can limit innovation system performance. It is important to understand such varied views in developing context-oriented AI strategies and gaining acceptance (Moldt et al., 2025).

This paper suggests a conceptual model and initial results for a bibliometric study on the application of artificial intelligence and machine learning to improve processes in Industry 4.0, such as a technological mapping and filtering of papers applicable to the subject, and presents a new Canadian startup business model for accessible AI/ML application in manufacturing processes.

Objectives and Scope

This study formulates a framework for the utilization of AI in process optimization and automation from an extensive review of existing literature and primary data. The research is centered on the identification of drivers, enablers, and inhibitors of AI implementation in healthcare from various stakeholders' point of view. The study analyzes the current status of the implementation of AI, its regulatory and ethical implications, as well as its effects on operational effectiveness and patient care (Shuaib, 2024). Through integration of these components, the paper develops a conceptual model aimed at facilitating the strategic deployment of AI, progressing from raw data insights to actionable improvements in healthcare processes. The scope is full-cycle, extending all the way from data acquisition and preprocessing to deployment and

evaluation of AI solutions.

METHODOLOGY

Primary Data Collection in Healthcare

Primary data were gathered for this research using semi-structured interviews of 38 varied stakeholders within healthcare, such as clinicians, AI specialists, health students, lecturers, and institutional members (Moldt et al., 2025). This qualitative method enabled a detailed examination of perceived opportunities and challenges with the implementation of AI in medical practice (Moldt et al., 2025). The interviews were aimed at comprehending user requirements, expectations, and particular concerns about the use of AI, especially in high-stakes areas like nasogastric tube placement detection (n.d.). The questions were prepared to gather comprehensive insights about prevailing workflow issues, technical capabilities responding to user needs, and trade-offs in choosing appropriate workflow stages and design settings for AI proposals. In addition, practitioners' perceived enablers and barriers to evidence-based implementation of recommendations, including for pressure ulcer prevention, were investigated (Taylor et al., 2021). Data were collected between August 2022 and March 2023 to provide a recent view of AI adoption.

Analytical Approach

Qualitative data collected were subjected to a systematic analytical process involving deductive and inductive coding, after which thematic analysis was conducted (Moldt et al., 2025). This strategy enabled identification of general themes and individual belief statements about AI implementation. The Theoretical Domains Framework (TDF) informed analysis of practitioners' views of implementation (Taylor et al., 2021). For the wider context of AI adoption, the Consolidated Framework for Implementation Research (CFIR) offered theoretical concepts to investigate facilitators and barriers (Chomutare et al., 2022). Analysis was cyclical, progressing from initial coding towards the building of thematic categories reflecting stakeholders' perceptions, expectations, and concerns (Moldt et al., 2025). The two-layer analytical framework facilitated structured yet adaptive interpretation of the qualitative diversity to ensure exhaustive coverage of individual and systemic factors informing AI integration. The interpretation was then situated within the literature review for comparing and contrasting empirical evidence with theories and evidence hitherto established.

Analysis, Findings, and Data Interpretation

Primary Data Results: Major Patterns and Insights

Two principal thematic categories emerged from analyzing primary data from medical stakeholders: perceived challenges and opportunities of AI in medicine (Moldt et al., 2025). Opportunities revolved around enhanced efficiency, decreased workload, and increased patient safety. Stakeholders emphasized AI's ability to automate information review, decision making in the process of nursing care, and identification of important events such as nasogastric tube placement, thus averting harmful consequences (Akbar et al., 2021) (n.d.). AI's potential in aiding evidence-based practice and allowing more uniform compliance with clinical guidelines, for instance, pressure ulcer prevention ones, was also cited (Taylor et al., 2021). On the other hand, substantial challenges arose, such as issues of AI's influence on medical decision-making, risk of relying on technology, and the requirement for unequivocal ethical guidelines (Moldt et al., 2025) (Yu & Zhai, 2024). Shortages of knowledge and expertise among certain professional populations (e.g., AHPs in managing pressure ulcers) and concerns regarding data privacy and algorithmic biases were salient (Taylor et al., 2021) (Shuaib, 2024). A deficiency in strong communication channels among healthcare workers and AI developers regarding specific needs was also found to inhibit innovation.

Interpretation of Findings in the Context of Existing Literature

The main data findings are, for the most part, consistent with current literature, which acknowledges AI's dual capability to be a strong facilitator and a producer of complicated problems in healthcare. The enthusiasm that has been witnessed for efficiency improvements resonates with news on the potential of AI to automate clerical work and enhance diagnostic precision (Shuaib, 2024) (2024). The thrust for patient safety by AI-facilitated detection systems, for instance, for NGT placement, supports the research on AI's potential in reducing human error and enhancing critical care (n.d.). Issues regarding ethical implications, namely data privacy and algorithmic bias, are repeatedly raised in both our core data and the wider scientific literature (Shuaib, 2024) (Lainjo, 2024). The gaps in practitioner knowledge and skills for optimally using AI highlighted are also supported by demands for increased digital literacy and AI education within medical curricula (Shuaib, 2024). In addition, the communication gaps between AI developers and clinical users echo evidence that emphasizes more implementation science knowledge in AI endeavors to close theory-practice gaps (Chomutare et al., 2022) (van Rooijen et al., 2020). The dual effect of DSSs on patient outcomes further suggests that although AI will enhance compliance and diminish decision time, its incorporation must take into account human aspects and workflow dynamics (Akbar et al., 2021) (Zayas-Cabán et al., 2023).

Implications for Healthcare Operations and Outcomes

The results imply that automation by AI can greatly contribute to healthcare functions by streamlining mundane activities, enhancing diagnostic rates, and raising efficiency, thereby potentially translating into improved patient outcomes (Bekbolatova et al., 2024) (2024). Preprocessing data, for instance, can lower error rates and enhance predictive model data quality (n.d.-a). Nevertheless, the effective realization of these advantages hinge heavily on overcoming the stipulated challenges. In the absence of strong ethical foundations and regulatory guidelines, the likelihood of algorithmic bias and data privacy violations can compromise patient confidence and limit uptake (Yu & Zhai, 2024) (Shuaib, 2024). Operationally, requirements for context adaptation of AI solutions and the integration of a holistic understanding of work system factors are critical to prevent unforeseen

results (Zayas-Cabán et al., 2023) (Shuaib, 2024). Closing communication gaps between clinical staff and AI developers is crucial to developing solutions that truly address user needs and fit into current workflows (n.d.). Enhanced AI integration can complement human capabilities, enabling healthcare professionals to focus more time on complex and high-priority tasks, thus improving the quality of patient care and minimizing professional burden (Bekbolatova et al., 2024).

Suggestions

Recommendations for Successful AI-Powered Automation Frameworks

In order to build successful AI-driven automation platforms in healthcare, some suggestions arise.

- Create Human-Centered AI Solutions: Focus on users' needs and expectations in the design and implementation process (n.d.). This means getting to know current workflows and building AI that supports, not displaces, human knowledge (Bekbolatova et al., 2024).
- Enact Firm Ethical and Regulatory Frameworks: Institute strict ethical standards, data privacy safeguards, and ongoing monitoring to tackle issues of algorithmic prejudice, data protection, and proper AI utilization (Yu & Zhai, 2024) (Shuaib, 2024).
- Promote Multidisciplinary Engagement: Facilitate close working among clinicians, artificial intelligence specialists, and implementation scientists to narrow the technical abilities-practical clinical needs divide (Chomutare et al., 2022) (van Rooijen et al., 2020).
- Prioritize Data Quality and Interoperability: Invest in robust data acquisition, preprocessing, and standardization strategies to guarantee high-quality input for AI models and easy integration with current health information systems (n.d.-a) (Chomutare et al., 2022).

Strategies for Overcoming Implementation Barriers in Healthcare

Addressing implementation barriers requires a multi-faceted approach.

1. Improve Education and Training: Create end-to-end educational programs to enhance AI literacy and technical competency among health professionals so that they are well-equipped to engage with and utilize AI tools (Shuaib, 2024). This involves filling specific knowledge gaps, for example, those realized among AHPs about some clinical procedures (Taylor et al., 2021).
2. Enhance Channels of Communication: Facilitate effective and regular communication between healthcare leaders and AI developers to express clear and particular needs and visions for AI technology. This makes AI solutions pertinent and geared toward solving real-world problems.
3. Pilot Implementations on a Context-Specific Level: Pilot AI solutions in distinct healthcare environments prior to broad deployment in order to assess their performance, recognize unforeseen challenges, and fine-tune integration approaches (Shuaib, 2024).
4. Mitigate Workforce and Resource Constraints: Acknowledge that heavy workloads and scarce resources may hinder implementation (Taylor et al., 2021). Policies must enable sufficient staffing and resource allocation to enable AI integration without overwhelming current staff.

CONCLUSION

This study outlined a framework for AI-driven process automation and optimization in healthcare, integrating insights from a thorough literature review and primary stakeholder data. Evidence supports AI's great potential to make care more efficient, decrease workload, and increase patient safety by use in diagnostics, treatment planning, and administrative tasks (Moldt et al., 2025) (2024). Successful implementation, though, hinges on navigating enormous ethical, regulatory, and operational hurdles, such as worries over data privacy, algorithmic bias, and the establishment of new professional skills (Shuaib, 2024) (Yu & Zhai, 2024). Critical observations from stakeholders highlighted the need for human-centered design, strong ethical principles, and enhanced communication between developers and users to harmonize technical potential with clinical requirements (n.d.).

Directions for Future Research and Practice

Future research would do well to track the development of stakeholder attitudes towards AI as technology advances and real-world applications grow (Moldt et al., 2025). Research on the long-term effects of AI on clinical decision-making and patient results, especially beyond compliance and decreased decision times, deserve more attention (Akbar et al., 2021). Increased emphasis on implementation science is needed to fill the theory-practice gap and generate effective strategies for embedding AI in various healthcare environments (Chomutare et al., 2022) (van Rooijen et al., 2020). For practice, ongoing professional development in AI literacy and ethical concerns for healthcare professionals is essential. Policymakers should make high priority for the creation of inclusive and flexible regulatory environments that can keep up with fast AI developments, being able to ensure safe, equitable, and effective application across the world of healthcare (Busch et al., 2025).

REFERENCES

1. Akbar, S., Lyell, D., & Magrabi, F. (2021). Automation in nursing decision support systems: A systematic review of effects on decision making, care delivery, and patient outcomes. InJournal of the American Medical Informatics Association(Vol. 28, Issue 11, pp. 2502–2513). Oxford University Press (OUP). https://doi.org/10.1093/jamia/ocab123
2. Magar, N. G. Hareesha, M. A. A. Shawn, T. D. Humnekar, A. Bhope, and S. Srivastava, ‘‘Analyzing the impact of blockchain technology on financial transactions and accounting practices in global trade,’’ in Proc. 1st Int. Conf. Adv. Comput. Sci., Electr., Electron., Commun.

Technol. (CE2CT), Feb. 2025, pp. 1060–1063, doi: 10.1109/ce2ct64011.2025.10941185.

3. Balakrishna, S., & Kumar Solanki, V. (2024). A Comprehensive Review on AI-Driven Healthcare Transformation. InIngenieria Solidaria(Vol. 20, Issue 2, pp. 1–30). Universidad Cooperativa de Colombia - UCC. https://doi.org/10.16925/2357-6014.2024.02.07
4. Bekbolatova, M., Mayer, J., Ong, C. W., & Toma, M. (2024). Transformative Potential of AI in Healthcare: Definitions, Applications, and Navigating the Ethical Landscape and Public Perspectives. InHealthcare(Vol. 12, Issue 2, p. 125). MDPI AG. https://doi.org/10.3390/healthcare12020125
5. Busch, F., Geis, R., Wang, Y.-C., Kather, J. N., Khori, N. A., Makowski, M. R., Kolawole, I. K., Truhn, D., Clements, W., Gilbert, S., Adams, L. C., Ortiz-Prado, E., & Bressem, K. K. (2025).AI regulation in healthcare around the world: what is the status quo?Cold Spring Harbor Laboratory. https://doi.org/10.1101/2025.01.25.25321061
6. Chomutare, T., Tejedor, M., Svenning, T. O., Marco-Ruiz, L., Tayefi, M., Lind, K., Godtliebsen, F., Moen, A., Ismail, L., Makhlysheva, A., & Ngo, P. D. (2022). Artificial Intelligence Implementation in Healthcare: A Theory-Based Scoping Review of Barriers and Facilitators. InInternational Journal of Environmental Research and Public Health(Vol. 19, Issue 23, p. 16359). MDPI AG. https://doi.org/10.3390/ijerph192316359
7. Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2018). Fundamentals of Business Process Management. Springer.
8. Ingale, V., Wankar, B., Jadhav, K., Adedoja, T., Borate, V. K., & Mali, Y. K. (2024). Healthcare is being revolutionized by AI-powered solutions and technological integration for easily accessible and efficient medical care. In2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)(pp. 1–6). IEEE. https://doi.org/10.1109/icccnt61001.2024.10725646
9. Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. Business Horizons, 61(4), 577-586.
10. Kim, J. Y., Boag, W., Gulamali, F., Hasan, A., Hogg, H. D. J., Lifson, M., Mulligan, D., Patel, M., Raji, I. D., Sehgal, A., Shaw, K., Tobey, D., Valladares, A., Vidal, D., Balu, S., & Sendak, M. (2023). Organizational Governance of Emerging Technologies: AI Adoption in Healthcare. In2023 ACM Conference on Fairness Accountability and Transparency(pp. 1396–1417). ACM. https://doi.org/10.1145/3593013.3594089
11. Lainjo, B. (2024). A meta-study on optimizing healthcare performance with artificial intelligence and machine learning. InJournal of Autonomous Intelligence(Vol. 7, Issue 5, p. 1535). Frontier Scientific Publishing Pte Ltd. https://doi.org/10.32629/jai.v7i5.1535
12. Moldt, J.-A., Festl-Wietek, T., Fuhl, W., Zabel, S., Claassen, M., Wagner, S., Nieselt, K., & Herrmann-Werner, A. (2025). Exploring the social dimensions of AI integration in healthcare: a qualitative study of stakeholder views on challenges and opportunities. InBMJ Open(Vol. 15, Issue 6, p. e096208). BMJ. https://doi.org/10.1136/bmjopen-2024-096208
13. Patrício, L., Varela, L., & Silveira, Z. (2025). Implementation of a Sustainable Framework for Process Optimization Through the Integration of Robotic Process Automation and Big Data in the Evolution of Industry 4.0. InProcesses(Vol. 13, Issue 2, p. 536). MDPI AG. https://doi.org/10.3390/pr13020536
14. Rooijen, M., Lenzen, S., Dalemans, R., Beurskens, A., & Moser, A. (2020). Stakeholder engagement from problem analysis to implementation strategies for a patient-reported experience measure in disability care: A qualitative study on the process and experiences. InHealth Expectations(Vol. 24, Issue 1, pp. 53–65). Wiley. https://doi.org/10.1111/hex.13147
15. Shuaib, A. (2024). Transforming Healthcare with AI: Promises, Pitfalls, and Pathways Forward. InInternational Journal of General Medicine: Vol. Volume 17(pp. 1765–1771). Informa UK Limited. https://doi.org/10.2147/ijgm.s449598
16. Steerling, E., Siira, E., Nilsen, P., Svedberg, P., & Nygren, J. (2023). Implementing AI in healthcare—the relevance of trust: a scoping review. InFrontiers in Health Services(Vol. 3). Frontiers Media SA. https://doi.org/10.3389/frhs.2023.1211150
17. Taylor, C., Mulligan, K., & McGraw, C. (2021). Barriers and enablers to the implementation of evidence-based practice in pressure ulcer prevention and management in an integrated community care setting: A qualitative study informed by the theoretical domains framework. InHealth & Social Care in the Community(Vol. 29, Issue 3, pp. 766–779). Wiley. https://doi.org/10.1111/hsc.13322
18. Vadapalli, T. K., Kanchi, S., Joglekar, S., Phalke, V., Hareesh, J., & Magar, A. (2025, February). Leveraging artificial intelligence for improved financial decision-making in the Indian mutual fund sector. In 2025 First International Conference on Advances in Computer Science, Electrical, Electronics, and Communication Technologies (CE2CT) (pp. 970–975). IEEE.
19. Weiner, S. J., Barnet, B., Cheng, T. L., & Daaleman, T. P. (2005). Processes for Effective Communication in Primary Care. InAnnals of Internal Medicine(Vol. 142, Issue 8, pp. 709–714). American College of Physicians. https://doi.org/10.7326/0003-4819-142-8-200504190-00039
20. Yu, L., & Zhai, X. (2024). Ethical and Regulatory Challenges of Generative Artificial Intelligence in

Healthcare: A Chinese Perspective. InJournal of Clinical Nursing. Wiley. https://doi.org/10.1111/jocn.17493

21. Zayas-Cabán, T., Valdez, R. S., & Samarth, A. (2023). Automation in health care: the need for an ergonomics-based approach. InErgonomics(Vol. 66, Issue 11, pp. 1768–1781). Informa UK Limited. https://doi.org/10.1080/00140139.2023.228691