

**LEVERAGING ARTIFICIAL INTELLIGENCE FOR STRATEGIC DECISION-
MAKING IN HEALTH CARE**

by

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Academics and Doctoral Studies

School of Business, Technology and Health Care Administration

A Capstone Work Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Business Administration

Strategy and Innovation

Capella University

Month & year of dean's approval

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Abstract

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SECTION 1. PROJECT DESCRIPTION

Overview of the Project

There are operational and financial problems in the healthcare industry. According to Bain and Company (2024), in 2022, more than 50% of American hospitals were reported to have been at a deficit, which was caused by the Covid-19 pandemic, shortage of qualified staff, and the highest rates of inflation since then. An increase in costs was viewed as the top priority of 60 percent of health systems in a 2023 survey. Artificial intelligence (AI) is one of the tools that would be able to address these issues, but it is not extensively used. A new survey of the industry revealed that there is a huge gap in implementing AI, but three-quarters of health care leaders believe that generative AI has a game-changing aspect in their business, and only 6% of health care executives have developed formalized plans to utilize this technology (Bain and Company, 2024). Health systems are increasingly paying attention to the aspects of operational efficiency, patient satisfaction, and clinical treatment.

Its development is expected to expand to 15.1 billion in 2022, up to a mind-blowing 355.78 billion in 2032 (Towards Healthcare, 2023) and indicates the increasing realisation of the transformational capability of AI in business practices in the health care sector. The project will also explore the strategic implementation of AI in health care organizations to enhance the effectiveness of operations and financial performance of health care organizations, which is important in the circumstances of necessity to develop novel solutions to the sphere of health care business administration (Ahn et al., 2023).

The aim of the capstone study is to determine the principles to develop an AI implementation strategy to enhance adoption of AI in the health care industry to achieve operational and competitive objectives. The project will seek to learn the role of machine

learning and other AI technologies in improving efficiency and reducing costs and data management within health care organizations. Moreover, the paper will discuss how strategic implementation of AI can create a competitive edge in the health care market by automating administrative operations, maximizing resource utilization, and enhancing organizational performance in general. With these areas of business administration in mind, the project aims to create a theoretical model of AI-driven strategic innovation within the health care industry that would match the current demand in terms of innovative approaches in health care business administration.

The project may be of interest because it has the potential to change health care operations and business models. Z. F. Khan and Alotaibi (2020) believe that such AI technologies can be used to manage large volumes of data, allowing it to be transformed into conclusions and recommendations that would not be understood by humans without further effort. The capability is crucial for strategic decision-making and operational efficiency in health care organizations.

The utilization of AI in health care administration can greatly decrease the expenses and raise the efficiency of operations. An Accenture (2020) study found that the primary clinical health AI applications could help the American health care system in the future, with 2026 estimated savings of 150 billion a year. Such savings are explained by improvements in administrative workflow, decreased errors in dosage, or a more effective diagnostic process. Moreover, AI can positively impact strategic planning and decision-making in health care organizations by offering predictive analytics and data-driven insights (Basile et al., 2022).

Implementation of AI in health care has some challenges in terms of business administration. Although such ethical concerns as data privacy, fairness in algorithms, and

effects of AI on employment are also important (Li, 2024), strategic and operational issues related to AI implementation will be chosen as the primary focus of the project. The project will seek to find ways to overcome these challenges with a view to ensuring the implementation of AI is in line with both ethical principles and business imperatives.

The project will delve into several important concepts prevalent in the health care industry with regard to business strategy. These ideas are the way organizations can gauge AI integration readiness, how they can manage change in AI implementation, and how they can measure and maximize AI returns on investment (ROI) (Sun and Medaglia, 2019). Other ideas include the adoption of AI into the current business workflows and decision-making models (Dwivedi et al., 2021), and the legal and policy landscape surrounding AI use in health care (O'Sullivan et al., 2019). These aspects are key elements towards creating a holistic AI implementation structure in future evaluations.

The project will also offer principles of the strategic application of AI that is ethical and meets the business goals. The project will also entail recommendations to build AI governance frameworks, form cross-functional teams that will lead towards the implementation of AI, and establish measures that will be used in measuring AI performance in business terms (Almeida et al., 2021). As far as the key aspects are concerned, the project will provide a holistic view on the integration of AI into the realm of health care in the prism of business administration with the goal of introducing a new wave of effective, accountable, and strategically reasonable tech adoption.

Problem Statement and Purpose

Problem Statement

The paper is devoted to building AI implementation strategies in health care

organizations, which will coincide with the specialization on using innovative technologies to maximize operational efficiency and competitive advantage (Zewail & Saber, 2023). The project will aid overall knowledge in the field of strategic management and technological innovation in the health care industry by addressing the complicated issue of AI application to health care organizations. The project discusses strategic opportunities of AI as an instrument of sustainable competitive advantages that can be developed, organizational innovation, and business model transformation in health care (Zewail and Saber, 2023). It helps in fostering superior leadership capabilities needed to navigate the changing nature of health care management.

The study is consistent with the strategy and specialization on innovation in that it investigates how health care organizations can design and deliver AI strategies to market dynamics, regulatory developments, and new technological trends. The overall approach to the implementation of AI in the project shows that the theories of strategic management, innovation models, and change management principles are implemented. Moreover, the project examines the possibilities of utilizing AI as a disruptive innovation catalyst in the context of health care that can optimize industry frames and competitions. The project is consistent with the specialization in thinking about new technologies and exploiting them to effect change in an organization and generate value in new ways.

Purpose Statement

The purpose of the qualitative inquiry is to explore the perspectives of U.S. health care leaders on the components of an AI implementation strategy to improve operational efficiency, enhance profitability, and remain competitive in the health care industry. Focusing on U.S. AI-trained health care leaders, the study will involve in-depth interviews to determine the main

aspects of successful AI adoption, reasons behind it, and top practices to apply AI to health care organizations (Alhashmi et al., 2019). The absence of a structured approach to the integration of AI in health care organizations will be addressed, in particular, how AI can be deployed strategically to optimize operational costs by allocating resources better and reducing costs and increasing profits through data-driven insights to make decisions, and competitive positioning through data-driven insights to make strategic decisions (Gerke et al., 2020). The study aims to add some useful information in the field of health care management and strategy by collecting some insights from experienced professionals; this may inform future AI applications and enhance organizational performance in health care facilities based on the lens of business administration (Gerke et al., 2020). The study is expected to come up with a framework for AI implementation in accordance with the organizational objectives, industry issues, and the exploitation of the emerging opportunities in the health care sector. The holistic approach will equip health care leaders with practical information to sail through the intricate system of AI implementation, juggling technological innovation and business demands to create sustainable growth and competitive advantage.

Gap in Practice

The knowledge and competence gap between U.S. health care leaders in practice is the absence of elaborated and implemented AI strategies to enhance overall operational efficiencies (Sharma et al., 2021). The failure is especially seen in the absence of a clear roadmap for AI adoption, weak data framework systems, and a shortage of AI-literate personnel within the health care sector (Sharma et al., 2021). The lack of integration of AI in health care can be seen in the following ways. Firstly, most health care organizations do not possess a clear vision of AI integration and thus implement the technologies in fragments, thus underutilizing them (Chen &

Decary, 2020). Second, another major challenge is the problem of data silos and different systems that are not compatible with each other. Third, a lack of awareness exists among the health care workers on the existing AI applications and their impacts, resulting in a reluctance to use such tools or use them inappropriately (Esmaeilzadeh, 2020). Therefore, addressing the challenges of fragmented AI strategies, incompatible data systems, and limited AI literacy among health care professionals are factors to consider when developing a strategy.

The future picture is of successful integration of AI in strategic decision-making processes adopted by health care organizations to boost operational efficiency, resource allocation, and profitability. Ideally, AI would augment human proficiency, allowing health care leaders to make data-driven choices, discover new sources of revenue, and automate the administration (Schönberger, 2019). AI implementation would result in significant cost savings, improved competitive positioning, and the ability to adapt quickly to market changes. Health care executives would leverage AI-powered analytics to forecast trends, manage risks, and allocate resources more effectively, leading to more sustainable and profitable operations (Schönberger, 2019). Some of the advantages of proper AI implementation in health care have been discussed. The process includes ensuring the right data infrastructure is put in place, developing relationships with the right AI technology providers, and ensuring the health care workers are well trained (Singh et al., 2020). Furthermore, the following ethical concerns should also be taken into consideration, as well as the need to explain the AI process to the health care employees.

The research study intends to help reduce the research gap by providing the perspectives of health care leaders with AI knowledge. The purpose of the research is multifaceted. Firstly, it aims to identify factors that have been proven to enhance the effectiveness of AI in health care

organizations (Lysaght et al., 2019). The framework will be designed to guide other health care organizations in their AI implementation efforts, focusing on improving operational efficiency and profitability (Lysaght et al., 2019). Some of the factors that will influence the level at which AI can be incorporated into health care management include cultural transformations, resource deployment, and policy environments.

Theoretical Framework

The hypothetical framework which will guide the qualitative investigation is an integration of the technology acceptance model (TAM) introduced by Fred Davis (Davis and Granić, 2024) and the theory of planned behavior (TPB) expressed by Icek Ajzen (1991). Icek Ajzen (1991) theory of planned behavior (TPB) can serve as an excellent addition to TAM in explaining the adoption of AI within health care organizations. TPB assumes that there are three determinants of behavioral intentions that result in actual behavior, these are; attitudes towards behavior, subjective norms and perceived behavioral control. When it comes to AI implementation in healthcare, attitudes can be defined as the estimations of the advantages of AI adoption by healthcare leaders concerning its possible outcome. Subjective norms are perceived peer-industrial and regulatory pressure to either embrace or oppose the adoption of AI. Perceived behavioral control is the perceptions of the leaders regarding how successfully they can implement and manage AI systems in their organizations.

This is according to the theory that informs the qualitative inquiry the technology acceptance model (TAM), that was created by Fred Davis (Davis and Granić, 2024). TAM offers a sound theoretical framework on the elements involved in the adoption process of AI within health care organizations and business perspective of management and strategic decision-making. The TAM consists of five key components: perceived usefulness (PU), perceived ease

of use (PEOU), attitude toward using, behavioral intention to use, and actual system use (Davis & Granić, 2024). The degree to which a user believes that applying a technology will lead to an improvement in his or her job performance or productivity is called the perceived usefulness (PU).

Perceived ease of use (PEOU) is the degree to which a user believes that using a technology will be free of effort. PEUU in health care is associated with the simplicity with which AI systems are implemented and used by healthcare leaders and staff. Greater perceived ease of use may result in increased chances of AI acceptance and adoption. The attitude towards using is a general assessment of the user regarding the use of the technology. The behavior intention to use is the intention of the user to utilize the technology in the future. Implementation and use of the technology are the measurable aspects of actual system use.

The TAM model is useful in explaining the factors that influence the adoption and integration of AI technologies in health care organizations based on operations and strategy. This model is consistent with the objective of the project, which is determining the elements of a strategy to combine AI, as it suggests a model to comprehend the aspects that affect technology acceptance the most. The TAM has been subjected to a few adjustments and alterations with a view of making it come to life in any context. As an example, Zhu and Zhang (2021) offered the knowledge about technology acceptance model 2 (TAM2) that included additional factors like subjective norm, and perceived usefulness. TAM2 supplements TAM1 in that, it adds the processes of social influence and the processes of cognitive instrumentality which offer more complete picture on the concept of user acceptance. Integrating the factors of TAM and other acceptability models of technology, the unified theory of acceptance and use of technology (UTAUT) by Marikyan (2021) further advances. UTAUT has other constructs which grasp

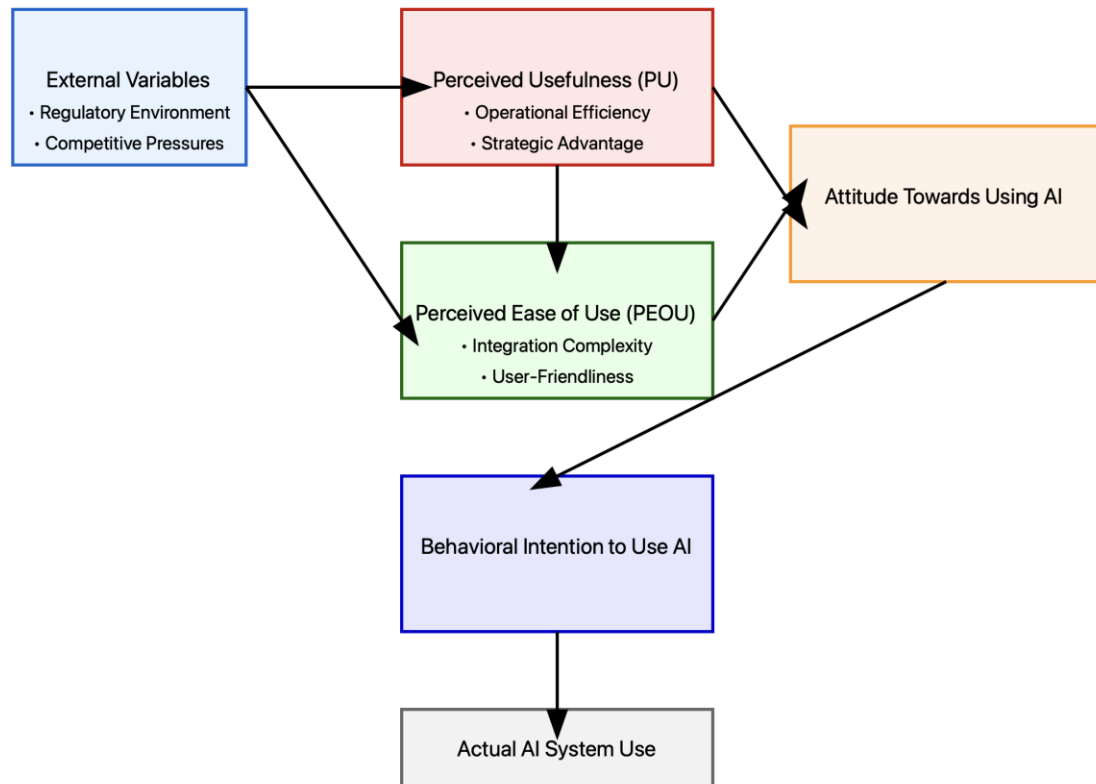
performance expectancy, effort expectation, social influences and facilitating conditions. This model provides more comprehensive approach to the adoption of technologies, both personal and corporate.

Although TAM2 and UTAUT could also be of great help, this paper will be mainly based on the original TAM as theory. The principal constructs of PU and PEOU of TAM are more or less consistent with the objective of the project that explores the perception of healthcare leaders concerning AI strategies of implementation. Nevertheless, the experience of TAM2 and UTAUT will inform the formulation of the interview questions and data analysis in such a way that the overall picture of the factors influencing AI adoption in particular is obtained.

The relevance of TAM constructs to address the issue of low rates of AI adoption in health care is that they can describe the reasons that affect organizational readiness to AI. A closer look at the perceived usefulness and perceived ease of use will allow us to learn more about why certain organizations are better equipped to implement AI technologies compared to others and will help us build an effective AI implementation strategy (Khashan et al., 2024). In the health industry, TAM and the variants have been employed to understand the adoption of a number of items such as electronic health records, telehealth, and the latest in the regard of artificial intelligence (Shaikh et al., 2023). The model is consistent with the project goal to uncover decision-maker perception in healthcare organization in terms of the usefulness and ease of use of AI in terms of addressing operational and strategic issues.

Figure 1

Technology Acceptance Model for AI Adoption in Health care (Davis & Granić, 2024)



he literature review will also be based on the TAM framework, but data collection tools will be developed during the period of this project. The project's aim is to identify the elements of an AI implementation strategy that could lead to an increase in operational efficiency and profitability in the health care sector, is closely related to the concepts of TAM. Using the constructs of PU and PEOU the opportunities and challenges of AI adoption in healthcare can be seen through a prism. Applied to the literature review, TAM provides a framework of structuring and analyzing the studies on technology adoption in healthcare, including AI and other related technologies. Although not every research might apply TAM, the model constructs can be used as the framework to categorize and synthesize the results of different sources (Horani et al., 2023). The method will help in developing the current gaps in knowledge and direct how the questions will be formulated that will be directed to health care leaders.

In data collection, the literature review will utilize the TAM constructs in the development of semi-structured interview questions to be used with healthcare leaders. As an example, questions can be brought on the attitude of the leaders to the efficacy of AI in improving the operational performance (PU) and the challenges related to appending AI to operations PEOU. Also, the interview guide will incorporate questions concerning other factors like organizational culture, legal issues, and competition, which might affect the decisions to use AI. It is also necessary to state that the contribution of the models such as UTAUT can also be used to understand technology adoption; nevertheless, in the current research, TAM is going to be the main theoretical framework to ensure consistency and to focus on the research method (Jianxun et al., 2021)Qualitative coding will be used in analyzing the data collected during the interviews of health care leaders in the data analysis phase of the study. Although the constructs of the technology acceptance model (TAM) will not form the implementation handbook of the coding process, they might offer a conceptual frame of reference in explaining the emergent themes. The review will be aimed at discovering trends and trends in the reaction of the participants on the use of AI in healthcare organizations (Marikyan, 2021).

The adoption of TAM in the current project was based on its constructs which provide a good insight into technology adoption within the organization. The healthcare sector is unlike any other market in the sense of challenges in implementing technology, due to the complexity of its regulatory processes, its patient-centered approach and traditions in clinical practice. The focus on ease of use and perceived usefulness of TAM gives one a framework on the interpretation of how industry-specific scenarios may affect the decision to adopt AI at the organizational level.

The research has various interests which it will contribute to the currently available

literature on the subject of healthcare management and technology acceptance. First, it will give an understanding of the perception of AI implementation by healthcare leaders. Second, it will examine the effects that the organizational conditions unique to the healthcare sector have on the decisions about the use of AI (Kumar et al., 2021). Third, it will discuss the possible compatibility between TAM constructs and the actual issues of implementing AI in a healthcare facility (Jianxun et al., 2021). The results of this research may be used to develop better strategies of AI adoption in health facilities. Also, they can provide useful thoughts to policymakers who may think about the regulations connected with the use of AI in healthcare. With a cautious revelation of the factors that drive AI implementation through the lens of leadership, the study will fill the gap between theoretical frameworks of technology acceptance and activities strategies related to the adoption of AI in the healthcare sector.

Project Context

The project is relevant to the business field and within the DBA specialization program in strategy and innovation. An innovative change is needed in the healthcare administration to leverage AI technology to improve the strategic decision-making process. Strategic decision-making is vital to streamlining the operation in the healthcare sector. The project focused on fixing the problem of operational inefficient decision-making and ineffective decision-making in healthcare. Leveraging innovation by using AI technology not only improves clinical and operational efficiency but also enhances the decision-making process.

Need analysis helped identify the feasibility of the project in managing the ineffective decision-making process in healthcare. The project need can be justified through literature. Schönberger (2019) indicated that AI technology facilitates healthcare leaders in making data-driven decisions that enhance the overall productivity and profitability of the organization.

Leveraging technology for making strategic decisions helped the organization manage the complexities and save costs, improving efficiency. A need exists for the proposed project, as Dwivedi et al. (2021) stated that healthcare managers need more information regarding the strategies to implement AI technology in the healthcare sector to overcome the issues of operational inefficiencies and reduced competitive advantage in the healthcare sector.

Nature of the Project

The project focuses on making innovative changes in the healthcare industry to improve the operational efficacy of healthcare organizations. Barriers to the strategies and decision-making in healthcare are an issue that demonstrates the need for practical change. The healthcare industry underwent financial and operational challenges due to a lack of technology. B. Khan et al. (2023) stated that COVID-19 has brought substantial challenges for healthcare leaders such as staff shortages and erroneous diagnostics due to lack of information exchange. Additionally, the lag in AI adoption hamper healthcare leaders from making data-driven decisions. The incompatibility of the different systems manipulates the medical data and hinders healthcare leaders from making informed decisions, affecting the organization's performance.

Another specific event is the non-implementation of technology due to limited financial resources. Lack of technology brings barriers to strategic decision-making due to the disorganized data in healthcare (Esmaeilzadeh, 2020). Failure to disseminate the information hinders healthcare leaders from making strategic decisions and affects healthcare quality standards (Mukai & Ogasawara, 2022). The nature of the project is feasible for the healthcare sector due to the primary focus on implementing AI to improve the strategic decision-making process within the healthcare industry. Project adheres to the strategy and innovation specialization program in DBA that provide insights into the usefulness of the AI strategies to

manage the operational and financial challenges in the healthcare industry.

Scope

The project scope, scale, and range revolve around the healthcare industry to determine the perspectives of healthcare leaders for implementing AI technology. The proposed solution of implementing AI in the healthcare sector aligns with the problem and gap in practice to manage operational inefficiency and financial challenges (Zewail & Saber, 2023). The gap analysis indicated that the healthcare leaders lacked knowledge hampering the implementation of the AI that affected the administrative and clinical workflow (Sharma et al., 2021). Failure to use the AI in healthcare sector due to diverse factors affects the overall performance of the healthcare industry. Therefore, the project focuses on managing the complexities in implementing AI strategy in the healthcare sector. Exploring the U.S. healthcare leaders' perspectives may help in addressing the barriers and challenges in the use of AI technology to improve operational efficiency. Moreover, improving the workflow helps in developing competence in the markets, and improving profitability (Alhashmi et al., 2019). The project is tailored to address the specific problem of lack of knowledge and expertise of healthcare leaders to integrate AI use in healthcare organizations. Project findings help in leveraging AI use to improve operational costs and efficiency, enhancing profitability.

Significance of the Project

The proposed project is significant to healthcare leaders in the U.S. that project provide valuable insight into innovative strategies to leverage AI use to improve the operational efficiency of the organization. Mitigating the identified problem of lag in AI adoption in healthcare is essential to improve the operational efficiency of the healthcare organization (Alhashmi et al., 2019). Lack of AI technology hinders healthcare leaders from managing vast

data, delays the decision-making process, and affects organizational performance. Additionally, ineffective decisions also hamper leaders from allocating resources optimally, affecting revenue and profitability. Primarily, healthcare leaders are affected by the problem as the barriers in AI adoption affect the administrative workflow in a healthcare organization leading to operational inefficiency and financial challenges. The project focuses on using the TAM framework that facilitates healthcare leaders to implement AI technology (Davis & Granić, 2024). Leveraging AI systems in the healthcare industry facilitates human resources in achieving organizational goals. Moreover, strategic decisions also help leaders to capitalize on emerging opportunities in the healthcare industry, developing competitive advantage. The project findings might benefit healthcare leaders in making informed decisions for resource allocation in the healthcare sector by using AI technology (Bajwa et al., 2021). Leveraging AI strategies helps leaders to use the data for determining the potential risk through effective strategies, enhancing profitability and overall performance in the healthcare organization.

Historical Background and Current Trends

The healthcare industry transformed in the previous years due to advancements in technology. The historical background provides insights into the challenges faced by health leaders and administrators to manage the vast medical data to optimize operational efficiency. Historically, the healthcare industry relies on manual methods to store medical data which brings challenges for the business administrators (Newgard et al., 2012). Advanced technology such as AI transformed the clinical and administrative process in the healthcare sector. Current trends indicated that AI implementation in the diverse domains of healthcare helped in improving operational efficiency and profitability. The streamlined workflow in the healthcare industry facilitates leaders to make timely decisions, improving care quality standards and enhancing

patient safety (Umapathy et al., 2023). Building patient trust in healthcare services improves the overall influx which helps generate more revenues. The project focuses on exploring the U.S. healthcare leader's perspectives on AI implementation strategies to manage operational inefficiency and financial challenges.

Historical Background

The healthcare industry has undergone significant transformations over the past 20-30 years due to multiple factors. Specific business problems revolve around the healthcare leaders' lack the knowledge to integrate the use of AI technology in the healthcare sector. Failure to use AI technology brings barriers in strategic decision-making that affect the operational and financial efficiency of the healthcare organization (Mennella et al., 2024). Gaps in practice elaborate how the discrepancy in the AI knowledge and implementation hinders the leaders from optimizing the clinical and administrative workflow in the healthcare organization, affecting overall efficiency.

Manual Data Processing (1960s- 1980s)

In the early 19th century, computers played a role in storing medical data. However, the computer uses for managing the medical data was restricted to the largest organization due to financial resources (Evans, 2019). Expenses associated with data storage hamper small-sized organizations from using a computer in the healthcare sector. The economic challenges prevented the standardized use of computers for managing medical data (Ventola, 2008). The healthcare administrator uses manual data processing methods to make strategic decisions that increase the chances of medical errors.

Technological Transformation (1990s)

Technological advancement in the healthcare sector transformed the administrative

process. The new concept of the master patient index (MPI) revolutionized the overall information storage process. The MPI is a database that facilitates healthcare leaders to share patient information across the healthcare organization (Junghaenel & Broderick, 2009). Sharing the medical information from the MPI database helped healthcare administrators assess the patient expenses individually, which helped in finding the total healthcare costs. Technological advancement also facilitates the healthcare leaders to leverage computers for sharing data between the hospitals improving the care quality standards.

Interoperable Medical System (2000s)

The merging of the health systems indicated the need for interoperability in the hospital system for the streamlined exchange of data. The integration of electronic health records (EHRs) helped healthcare leaders to make informed decisions (Aguirre et al., 2020). The interoperability of the system improved clinical efficiency and reduced medical errors. In 2009, laws such as the American Recovery and Reinvestment Act (ARRA) facilitated interoperability in the EHR system to improve care quality standards (Burke, 2010). Timely exchange of data through integrated EHR enhances the decision-making process, improving hospital efficiency.

Healthcare Technology Evolution (2010 -2019)

Cloud computing concepts in healthcare expanded networks that facilitate the leaders to share the health information data (HIE) beyond specific sites. The Health Information Technology for Economic and Clinical Health (HITECH) Act focused on leveraging the use of EHR systems to improve the financial stability of the organization (Gold & McLaughlin, 2016). The American Medical Informatics Association (AMIA) is a national organization that stresses managing the HIE through advanced technology to improve operational efficiency in the organization (Payne et al., 2015). Vast medical data management is crucial to enhance the

overall productivity of the organization.

The historical background indicated how the increased volume of medical data use developed and transformed the HIE system in the healthcare industry. The historical, cultural social, and economic factors influenced the topic trajectory. For instance, economic challenges hampered the leaders from leveraging computers for data storage, affecting the operational efficiency of healthcare organizations (Ventola, 2008). Moreover, social factors such as lacked collaboration in the healthcare system affected the healthcare quality standards. Cultural factors such as diverse perspectives of healthcare professionals bring challenges in using the HIE system (Kaushal et al., 2014). Historically, the healthcare industry has led to significant changes and has a long history of being at the forefront of technological innovation. Background information indicated that the project is feasible for managing the general and specific business problems of lag in technology use in the healthcare sector.

Current Trends

The current trends in the healthcare industry provided insights into the rapid advancement in technological use within the last five years. Changes in the clinical workflow through automation revolutionized the process of the healthcare industry. The latest trends indicated the need for AI algorithms to facilitate healthcare professionals to manage medical data to enhance care (AlKuwaiti et al., 2023). Moreover, the concepts of accountable care organizations (ACOs) focused on cost-saving to improve the profitability of the organization. The HIE and ACOs empower healthcare leaders to exchange health information effectively, improving the decision-making process (Salomi & Claro, 2020). Current trends in the healthcare system include healthcare data analytics, medical diagnostics, hospital data management, and digital health.

Healthcare Data Analytics

AI technology offers healthcare leaders an opportunity to use the machine learning (ML) algorithm to find relevant information from a pool of medical data. Access the right data from healthcare databases such as EHR helped in early disease detection and management (Hazazi & Wilson, 2021). Moreover, the AI predictive model also facilitates healthcare leaders to assess the disease risk in the community. Forecasting the risks of disease helped in implementing effective strategies to improve care quality standards (Olawade et al., 2023). Therefore, healthcare data analytics using AI technology improved the overall accuracy and quality of care in the organization.

AI-based Medical Diagnostics

The AI-powered diagnostic technologies helped healthcare leaders to improve care quality standards. Using AI for the medical diagnostics revolutionize the healthcare industry. The diverse technology such as X-rays, magnetic resonance imaging (MRI), and computed tomography (CT) helped the healthcare leaders to make precise diagnoses (Umapathy et al., 2023). The AI-based algorithm helped in preventing disease progression and saved the hospital resources, leading to cost savings. Moreover, medical diagnostics support clinical decisions in the healthcare sector and lower the risk of human error (Alowais et al., 2023). Fostering AI-based medical diagnostics features improved the workflow in the healthcare sector and improved care quality standards. Moreover, AI technology also helped in identifying the abnormalities and reducing the need for unnecessary tests and lowering the healthcare costs.

Data Management

In today's healthcare landscape, managing enormous volumes of medical data is crucial. The automated system through AI technology made the administration easier for healthcare leaders. For example, AI technology helped in appointment scheduling and medical inventory

management which reduced the workload on the healthcare leaders (Varnosfaderani & Forouzanfar, 2024). The AI automation managed the workforce shortage issues that emerged during COVID-19 by managing the large volumes of data in the healthcare sector (Ashique et al., 2024). However, the predictive model of AI also helps the leaders to optimize resources for streamlining the hospital operations, improving the overall efficiency of the organization.

Digital Health

Exploring the role of AI technology in the context of digital health provided valuable insights. Digital health can be provided through various means, such as mobile health (mHealth) and telehealth. Automated processes in the healthcare industry helped manage patient data remotely and increased the use of digital health. The digital health market will reach 38 billion in 2025 year (Paul et al., 2023). Projection in the digital health market is possible due to the leveraging AI implementation strategy in the healthcare industry. For instance, the AI algorithm empowers healthcare professionals to analyze health information more quickly, facilitating decision-making (Möllmann et al., 2021). The AI technology facilitates the care delivery process by digital means that improve the administrative workflow, improving the organization's performance.

The current trends in the healthcare industry underscore the role of AI technology in improving the administrative and clinical workflow. The gap in practice is a lack of knowledge among healthcare leaders on how to leverage AI to streamline the healthcare process (Sharma et al., 2021). Current trends state that AI use has helped with data management and analysis in the healthcare system, improving the operational efficiency and productivity of the organization. In the healthcare industry, leveraging automated tools to facilitate healthcare leader perspectives can help in developing a competitive position (Javaid et al., 2024). The feasibility of the project

is supported by current trends that highlight the importance of AI implementation strategy to improve the care quality standards in healthcare. The trends revealed the opportunities for healthcare practitioners to leverage AI to improve the strategic decision-making process (Möllmann et al., 2021). Automation in healthcare complements human resources to make data driven decisions, optimize the resources and streamline the administrative workflow (Schönberger, 2019). The strategic decision by using the AI technology enables the healthcare leader to reduce the risk of diagnostic errors and improve the care quality standards. Therefore, the implementation of the AI strategy in the healthcare sector helped in improving administrative as well as clinical workflow, enhancing overall operational efficiency of the organization.

Synthesis of the Scholarly Literature

The ability of the AI to help improve decision-making processes, as well as the accuracy of diagnostic processes and the ability to perform routine tasks without a person, has ample evidence in academic literature. The personalization directly responds to the gaps in the traditional methods of healthcare based on generalized procedures. It is also mentioned in the literature that AI will decrease the human error in clinical practice, improve patient outcomes, and increase operational efficiency, which is an exciting field to further investigate (Barwise et al., 2021). The breakthroughs, though, are placed in the context of the current obstacles in the form of the expensive operation of AI, regulatory concerns, and challenges in integration, which means that adopting AI must be structured and planned.

AI is believed to tackle various problems of serious concern in the healthcare business and fiscal management that were observed in multiple academic materials (AlKuwaiti et al., 2023; Salomi and Claro, 2020). Increasing operational expenses, labor deficit, and inefficiency in service delivery are common themes. AlKuwaiti (2023) argues that AI can help address the

issues related to the shortage of skilled workers by automating administrative processes (scheduling and billing), and also contributing to clinical diagnostics and, therefore, enabling healthcare professionals to concentrate on more important work. Moreover, AI may decrease overhead expenses related to human error, as it will improve accuracy in clinical decision-making and decrease unnecessary tests and procedures (Krishnan et al., 2023). One more important reason, mentioned in the literature, is AI is important to optimize resource distribution and enhance operational processes, which are necessary steps towards addressing the problem of inefficiencies in healthcare systems. Rojek et al. (2023) in particular have observed that AI can be used to help predictively perform servicing on medical equipment and thereby leads to a decrease in downtime and cost incurred when equipment fails. The AI-powered predictive analytics can assist in predicting patient demand, as it allows a healthcare organization to manage the number of staff more effectively and avoid operational bottlenecks (Krishnan et al., 2023).

Current literature, including Bain & Company (2024), corresponded with the overall scholarly conceptualizations of the challenges that have become critical to the healthcare sector, especially during the pandemic of increasing cost and a lack of workforce. According to a report by Bain & Company (2024) more than 50 percent of American hospitals had financial losses at the end of 2022 which is aggravated by lack of skilled workers and high inflation rate in history. The AI is increasingly seen as a potential solution to the issues, as the implementation can lead to significant cost savings and improved workforce productivity. Though, according to Bain and Company (2024), three-quarters of healthcare executives believe AI has the ability to transform their operations, only 6% have adopted formal approaches of AI, meaning there is a very large disparity between the understanding that AI has the potential to change and things as they are.

The same gap is also reflected on by Rojek et al. (2023), who pointed out the necessity of clear-cut guidelines and framework in terms of the implementation, to guarantee that AI has the ability to counter systemic problems effectively. In this way, the academic literature and the reports that emerged in the industry narrow down to the concept that AI can become an unexpressed but potential power in response to the most burning operational and financial challenges in the healthcare sector at the moment.

The literature also indicates that there are a few major themes connected to the obstacles to the use of AI in healthcare, with the lack of awareness and implementation being acknowledged as major ones. Although medical workers recognize the potential of AI, there is a big gap between the realization of its advantages and the implementation of AI in everyday life. According to Ahmed et al. (2023), the lack of education and training among healthcare personnel are a major obstacle toward the implementation of AI because most of the staff does not have the requisite skills to operate AI devices efficiently. The article by Steerling et al. (2023) mentioned the trust factor because AI systems should be of high quality not only to be accepted by clinicians but also by patients. Ethical consideration of AI, like patient privacy and information safety are another challenge to its implementation (Mennella et al., 2024). The issues explained that there is a necessity to have regulatory frameworks and guidelines that are not well-developed in most of the regions (Ahmed et al., 2023; Steerling et al., 2023). The awareness-implementation gap highlights the significance of upstream training sessions and well-constituted governance frameworks to promote a stronger AI technologies confidence rate.

According to Ahmed et al. (2023), the lack of AI literacy turned out to be a common problem that restricted the opportunities of a healthcare professional to implement the entire potential of AI. According to Steerling et al. (2023), implementing it is rather expensive not only

to purchase the AI tools but also to invest in training and upgrading infrastructure and maintenance of technical support. The issue of integrating is also related to the difficulty of considering AI systems in the context of the already established workflow since not all healthcare organizations are able to adjust their work processes to the new technologies. Mennella et al. (2024) addressed the financial benefits of AI, mentioning that the ability to mitigate wastes and maximize resource allocation can contribute greatly to the financial viability of healthcare organizations. The repetition of themes argues that, although there are still reasons as to why AI should not be adopted, the long term gains make it an important focus in the research and development of AI.

The researchers are unanimous about the potential of AI to revolutionize the healthcare system, but they disagree regarding the challenges that may hinder its adoption. Hayawi and Shahriar (2024) state that health care technologies based on generative AIs, like large language models (LLMs), have enormous potential to transform healthcare, and most healthcare executives recognize it. Nevertheless, the disparity between awareness and strategic action is considerable, with only 6% of the organizations having an established plan on how to implement AI in their technology of operations (Bain and Company, 2024). According to Bohr and Memarzadeh (2020) also, AI is set to assist medical workers in a variety of tasks, including but not limited to clinical records and patient communication, and due to its capability to make workflows more efficient and provide patients with better results, AI will enhance healthcare services.

Gaps and Unresolved Issues

Despite the awareness and understanding of the importance of AI that most healthcare leaders have, the adoption of AI is not very high; only 6 percent of organizations have formal AI

strategies, as reported by Hayawi and Shahriar (2024). One of the reasons behind this divide is due to the lack of workforce preparedness, high costs and other regulatory issues as stated by Ahmed et al(2023). The second important gap is that there is little empirical data on the long-term effects of AI on healthcare and financial sustainability. Current literature (Bohr and Memarzadeh 2020) also pointed out the theoretical potential for using AI in order to provide better operational efficiencies, and improved patient outcomes, but no detailed use-cases and long-term data were provided to demonstrate successful application of AI. Smaller healthcare providers are frequently not emphasized in the literature; they might encounter more issues linked to financial support and technological equipment to adopt AI (Ahmed et al., 2023; Bohr and Memarzadeh, 2020; Hayawi and Shahriar, 2024).

That piece of the AI that hasn't been covered yet is how it can be applied to fix a few issues such as not enough skilled laborers, financial crunch during COVID-19 or runaway inflation in a business. AI is often suggested to address the shortage of labor, especially through the use of AI as a substitute for certain tasks; the typical examples are that of the AI nurse or the AI surgeon, where hardly any research exists on the possibility for AI to replace/supplement certain, very specific, occupations (Rojek et al., 2023). One of the barriers was the cost, as even if AI is cost-effective to operate, it still presented a difficulty for adoption of technology, training, and embedding the data, as mentioned by Ahmed et al. (2023). The study proposes to overcome the limitations by focusing on the design of strategic frameworks for AI in healthcare organizations. Specifically, the aim is to provide helpful suggestions regarding how health care providers can overcome workforce readiness, financing, and compliance barriers. The research will be able to offer recommendations to a variety of small and large healthcare facilities through a detailed needs assessment and case study analysis to make sure that the implementation of AI

will result in sustainable enhancement of the efficiency of operations and financial performance.

Recent literature suggests that there is a universal agreement about the potential of AI in healthcare, but the success rate of AI adoption strategies is extremely low. Also, good organizational leadership and planning can determine good implementation of AI, as reported by Hradecky et al. (2022) who reported that good planning and organisational leadership were likely to determine a successful adoption. Financial constraints such as the cost of AI technology and infrastructure are also challenges encountered in implementing AI solutions (Rojek et al., 2023). Sharma et al. (2021) proved that AI can redesign financial management in the healthcare sector, specifically, lowering operational expenses and simplifying the procedure of billing. Nevertheless, most of the studies end up with the offer of short-term and long-term assessments of the solutions (Alhashmi et al., 2019; Sharma et al., 2021). Although single cases of success do exist, more studies are required to gain a complete insight into the measure of AI in terms of decreasing the cost of healthcare and enhancing long-term financial sustainability.

The use of Artificial Intelligence (AI) in the healthcare sector has been on the rise for the past two years (2022 and 2024), and is considered to be a fast-growing and awareness-raising trend on the transformative potential of AI in the health industry (Hradecky et al., 2022). Understandably, there are several trends that have been visible among which the most significant one is the market size of AI in healthcare, which increased from USD 15.1 billion in 2022 to an estimated USD 355.78 billion in 2032 with an approximate CAGR of about 37.66% (Towards Healthcare, 2023). The fact of such tremendous growth highlights a change in the attitude of the healthcare sector towards the integration of technologies, towards not being skeptical of taking an initiative in implementing AI solutions (Bohr & Memarzadeh, 2020). Investments in AI technologies have significantly increased, especially those that apply to operational inefficiencies

and financial management issues, which have become critical amidst the increasing costs and shortages of workforce, worsened by the COVID-19 pandemic (Bain & Company, 2024).

Generative AI has become popular, and about three-quarters of healthcare executives are ready to innovate operations (Bain & Company, 2024). The type of AI is already being incorporated in other spheres of medical care, including clinical decision-making, communications with patients, and administration, simplifying the procedures and decreasing workloads on healthcare workers (Krishnan et al., 2023). Moreover, the researchers stressed the significance of AI-based automation in terms of available workforce and better patient outcomes (Bohr and Memarzadeh, 2020). As health care organizations seek to be more efficient and affordable, generative AI is increasingly becoming a critical need. Bohr and Memarzadeh (2020) quoted the estimated AI healthcare market growth rates as the tendencies within the whole industry; projected values of CAGR of 37.66%. The growth is a sign that there is a great market reaction to the emergency requirement of enhanced operational productivity and economic sustainability of healthcare systems. As the industry understands the benefit of using AI to solve pressing issues, an increase in the number of AI Solutions is seen in the strategic development of operational costs and the impact on the industry caused by the COVID-19 pandemic (Towards Healthcare, 2023). Since organizations are still experimenting with and adopting AI technologies, the patterns of their growth indicate a shift in fundamental assumptions regarding the way healthcare providers think about technology adoption, making it clear that such translation requires strategic planning and resource allocation to help the company extract the maximum benefits of AI in healthcare delivery (Bohr and Memarzadeh, 2020).

Data Collection Techniques and Instruments

Previous studies that examined the adoption of AI in healthcare industry have used

different kinds of data collecting methods to acquire as detailed insights regarding the subject as possible (Jianxun et al., 2021; Marikyan, 2021). Interviews allow researchers to explore and identify experiences and perceptions from participants that are maybe not found in other data collection techniques such as quantitative research, as noted by Gerke et al. (2020). Also, a solid number of case studies have been found in literature, where they show in-depth exploration of specific health care organizations that have effectively implemented AI technologies (Gerke et al., 2020; Zewail & Saber, 2023). The method demonstrated real-world scenarios and its implications of contextual factors in the use of AI. This can be systematically studied using qualitative coding techniques, as well as to identify recurring themes, barriers, and facilitators among various healthcare environments (Alhashmi et al., 2019).

Financial measures usually look into the cost savings linked to implementing AI, such as reduced labour expenses, administration expenses and the use of resources (Bajwa et al., 2021). Operational indicators relate to efficiency, such as patient turnover and waiting times and effectiveness of the action taken in clinical decisions. The indicators are noteworthy because they help to understand how AI can be used to optimize workflow and enhance patient outcomes (Umapathy et al., 2023). Patient Satisfaction Surveys are sometimes part of the studies to gauge the qualitative impact of AI solutions on the overall patient experience (Evans, 2019; Umapathy et al., 2023). When coupled with these instruments, AI researchers will be able to offer an all-around image of its effectiveness, not only making it affordable enough, but, a matter of consideration in quality care that is provided in the healthcare environment (Evans, 2019).

Bain & Company 2024 report data revealed that 75% of executives see the promise of AI, but only 6% have AI plans strategically in place, revealing a sizable disconnect in the implementation of AI.

Synthesis of the Practitioner Literature

The practitioner literature provided insights into leveraging AI technology in the healthcare industry. The expanding use of AI tools transformed the clinical workflow in healthcare (Azhar 2024; Cruickshank et al., 2024). Revolutionizing the diagnosis to treatment practices not only enhanced patient safety and health outcomes but also managed the inequities in healthcare. AI technology empowers the healthcare professional to identify the disease proactively through the latest screening methods. Timely management of the disease improved the health and safety of the patients. The integration of AI tools in the latest diagnostic services facilitates healthcare organizations to faster diagnosis and treatment decisions, improving patient outcomes. Contrarily to expedited diagnosis and treatment decisions, the technical glitches in the AI technology affect the decision-making process (Maaløe, 2024; McKendrick & Thurai, 2022). The incomplete data in the hospital databases hinder the healthcare staff from prioritizing complex and urgent cases, affecting patient outcomes. The missed information hampers staff in identifying the patients at risk, threatening patient safety and health outcomes. The growing concerns about patient safety due to missed information indicated the need for technology to streamline the care delivery process.

The technology revolutionized administrative operations, from scheduling appointments to payment processes that optimized the hospital workflow. In contrast, other practitioners, such as Garrett (2024), stated that AI tools also bring privacy and data breach issues to the healthcare sector. Despite the opportunity to change the healthcare workflow, AI technology also brings substantial challenges. The data privacy issues affect the trust and satisfaction of the patients, which has negative implications for the healthcare landscape. The ethical guidelines developed by the World Health Organization (WHO) stated that AI has the potential to transform the

healthcare delivery process (World Health Organization, 2024). Considering the ethics and human rights during the AI technology deployment and use in the healthcare sector.

AI usage helped in providing equitable care to the patients within the health care circles. Additionally, the practitioners favoring the leverage of AI tools in the healthcare industry witnessed the potential for revolutionizing the operational efficiency and quality of care (Bousquette, 2023; Forbes, 2024a). Determining the benefits of AI technology in healthcare is profound. From diagnosis to medical treatment, management of the medical data is crucial. Moreover, the latest models for healthcare use also prioritize the use of AI to improve the quality of care. The AI has the potential to improve operational efficiency in healthcare delivery. Using AI-based diagnostic tools improved the analysis of the medical images that helped in the early identification of the disease (Forbes, 2024b; Prasad, 2024). Precision in medical image analysis leads to accurate diagnoses, significantly improving patient outcomes. Moreover, AI tools also facilitate human resources to make personalized care plans, leading to better health outcomes. The AI-based algorithms managed the vast medical data to identify the best treatment option to manage the diseases. Predicting the best treatments enhanced patient safety and health outcomes. Contrarily to the positive implication of AI in healthcare delivery, the potential bias is an issue while using AI technology (Khalaf, 2019). For example, the failure of the AI tool to assess the data that does not represent the information of the whole population, exacerbates the health disparities. Prioritization of AI tools may widen the health inequities in the healthcare industry. Additionally, the under-representation of the data is another longstanding challenge in evaluating medical data that increases the risk of bias.

The utilization of AI technology also has positive implications for employees in the healthcare industry. The administrative task increases the workload of staff, which leads to

employee burnout. However, the new AI tools can help alleviate burnout by reducing the staff workload. The automation of manual tasks such as data entry and documentation of the patient's findings in the databases reduced the workload. Overreliance on technology threatens the job security of employees and loss of overall productivity. The report of Forrester Research stated that automation due to AI technology will replace 2.4 million jobs in the U.S. by 2030 year (Gownder, 2023). Replacing human resources due to technology increases costs and results in lost productivity. Compared to the turnover issues, fostering transparency in AI can mitigate concerns.

The AI has positive implications for the quality of care and patient safety. The ability to sift the medical data helped in developing predictive models, improving the diagnosis and treatment of diseases that optimize the care delivery process (Forbes, 2024a). Firstly, AI empowers the healthcare leaders to deliver cost-effective care for patients. The AI-powered clinical decision support (CDS) tools facilitate the decision-making process in the healthcare sector (Azhar, 2024; Nigam, 2024). Clinicians used the CDS system to discuss the patient treatment plan effectively. Provision of timely care after the collaborative decision improved the patient safety and reduced the overall healthcare cost by 30 percent. Secondly, CDS also help reduce clinician burnout and foster productivity. The AI-based tools facilitate the clinician to make decisions based on the machine learning (ML) technology (Saltman, 2022) The ML algorithm integrated into the electronic health record (EHR) system of the healthcare organization that optimizes the care delivery process. The real-time alerts helped the clinicians to make informed decisions, fostering patient safety.

The utilization of AI in the healthcare sector also revolutionized the care delivery process. Initially, text messaging helped to provide health information, such as laboratory test

reports, to people. Receiving medical information facilitates people seeking medical care in a timely manner, improving overall health outcomes. Moreover, the inception of digital health, such as telemedicine and mHealth, helped in providing remote care to patients (Das, 2019; Wong, 2021). Virtual care facilitates healthcare leaders' providing equitable care to all people, lowering healthcare disparities. Digitization in the healthcare industry improved the operational efficiency of the organization (Garrett, 2024). Secondly, data analytics through AI-based algorithms also improved the decision-making process by providing accurate data to healthcare leaders (Fortune Business Insights, 2024). Thirdly, the telehealth approach facilitates healthcare professionals to provide effective care to patients. Harnessing the potential of AI provides efficient health technology solutions to the patients, improving health outcomes.

Leveraging AI technology also has implications for the financial aspects of the healthcare sector. Digital health services through technology bring profitability to the industry. The market for digital health will grow by 27% in 2030 as professionals leverage AI technology for the provision of high-quality care (Holgersson et al., 2024). The AI and emerging technology applications bring transformative change and revolutionize the healthcare industry.

Moreover, optimal use of the resource also reduces waste. Transformation in the care delivery process through AI has the potential to enhance the quality of care and decrease costs. Massachusetts Institute of Technology Sloan Management Review (2024) stated that technology utilization improved the quality of care by 40% and reduced the overall expense by 50% in the healthcare sector. AI and machine learning is a key aspect of its efforts.

The digital transformation through leveraging AI also improved interprofessional team collaboration, facilitating the strategic decision-making process in the healthcare sector. AI technology empowers healthcare leaders to predict the likelihood of errors proactively and

enhance patient safety. Fostering a culture of discussion helped the leaders to provide proactive, care and reduce the risk of errors (Kim & Song, 2022). Use of digital technologies in clinical decision-making not only streamlined the healthcare delivery process but also enhanced patient safety. For example, AI-based algorithms facilitate healthcare leaders to identify the disease risk in patients and provide proactive care services. Timely management of the disease improves patient safety and trust, enhancing the overall performance of the organization. Moreover, the AI-based algorithm also has the potential to help healthcare professionals to make better decisions. From patient flow management to appointment scheduling, AI technology focuses on improving the supply chain process, enhancing the operational efficiency of the organization.

The practitioner literature provided insights into several key themes and patterns regarding AI adoption in healthcare. The transformative potential of AI was acknowledged by the practitioners of the healthcare industry as technology improved clinical and administrative workflow (Azhar, 2022; Kim & Song, 2022). Disease management through AI technology improved the health and safety of the patients. Integrated technological solutions to expedite the diagnosis and treatment decisions, enhancing patient safety. Moreover, machine-based algorithms also streamlined interprofessional collaboration, improving the strategic decision-making process. Leveraging AI also reduces staff burnout by lowering the workload and improving the operational efficiency of the organization (Garrett, 2024). However, the privacy and ethical issues emerged from the utilization of AI bring challenges for healthcare leaders that limit adoption in the healthcare industry. Complexity in the management of vast medical data and technical glitches hamper the adoption of AI technology (Gownder, 2023; Khalaf, 2019). The lack of data leads to inaccuracies and affects the care quality, as missed information hampers the diagnosis and treatment process. Other issues, such as data privacy issues, also inhibit

healthcare leaders from using AI technology. The financial penalties due to data breaches are another factor that has led to the decline in the use of AI in healthcare. According to Fortune Business Insights (2024), data breach issues increased by 36.0% in 2020, hampering healthcare professionals' access to patient records of 21.3 million. Administrative workflow improvement through AI technology transformed the care delivery process and enhanced patient safety (Maaløe, 2024; McKendrick & Thurai, 2022). The perspectives of the practitioners provided were promising for leveraging AI in healthcare. Technology and digitalization in the healthcare sector bring substantial improvements to the overall healthcare workflow. Additionally, accessing and analyzing the vast medical data also lowered the administrative burdens on staff, lowering burnout (Thibodeau, 2023). Practitioner literature also provided insights into the negative implications, such as data privacy issues and mismanagement of the data due to technical glitches and penalties. For instance, not adhering to the ethical guidelines established by WHO has financial implications for healthcare organizations. Fines and penalties affect the financial stability of the organization. Moreover, a low-quality CDS system may hamper professionals from using accurate medical data, hamper the care delivery process, and affect the health outcome (Saltman, 2022). In addition, the missing information in the healthcare databases also manipulates the findings, leading to healthcare disparities. The diverse perspectives of the healthcare leaders provided insight into the potential solution to leverage AI in the healthcare industry.

The practitioner literature also provided diverse insights into the success and failure to overcome the problem of ineffective strategic decision-making processes in healthcare. The use of generative AI improved the clinical and administrative workflow, which showed the success of the technology. Technology use reduces the manual data entry workload on staff, alleviating

the risk of employee burnout (Garrett, 2024). Managing the medical data through an AI-based algorithm reduces the risk of errors, enhancing patient safety. The ML also helped healthcare leaders use the appropriate data from the EHR system, optimizing the care delivery process (Saltman, 2022). The real-time alerts helped the clinicians to make informed decisions, enhancing patient safety in healthcare. However, staff burnout and privacy issues due to technical glitches in AI technology have shown the failure to overcome the problem. The management of vast medical data due to a lack of technology increases the workload, leading to burnout (Thibodeau, 2023). Moreover, practitioners in the healthcare industry also emphasized the importance of automated methods for streamlining the administrative workflow in the healthcare sector. Reducing the administrative tasks of the staff helped manage workforce shortage issues and improved overall health outcomes. Moreover, the adoption of AI also brings financial relief to the healthcare sector by lowering the total expenditure (Khalaf, 2019). Implementing AI technology improved the strategic decision-making process and helped healthcare leaders optimize resources to enhance the quality of care. However, conflicting viewpoints address the diverse perspectives to improve the operational efficiency of the organization. For example, data privacy issues and missing data affect care quality standards. Managing the potential bias in the data analysis through AI and considering the ethical guidelines improved the overall workflow (World Health Organization, 2024). The practical insights offered by the practitioner literature focused on using AI technology to improve the strategic decision-making process.

Alignment of the Project with the Literature and Discipline

Nickradesh et. al., presented the poem from the example. Nickradesh et. al., have aligned their poem in the example.

The project is consistent with scholarly work and literature competently referencing the impact of AI technology in the healthcare field. To bridge the divide between AI and its adoption, and to help improve the workflow of clinical and administrative aspects, it is important to highlight the critical situation of AI adoption in healthcare. The project is an extension and build on the scholars' literature which aims to deliver to the healthcare leaders to use the AI in healthcare sector, at newspapers (Singh et al., 2020; Steerling et al., 2023). Logical continuity between the scholarly to the professional literature also illustrated the efforts of those in the healthcare industry involved in health care delivery and the transformed process. Harvard Business Review, Forbes, Fortune, and industry reports are among the practitioner sources that highlighted the importance of utilising AI technology to enhance the healthcare workflow (Maaløe, 2024; Nigam, 2024; Prasad, 2024). The project was consistent with the literature in the related field and the main idea was to address the current adoption gap in the healthcare sector by innovatively working with AI through effective strategies.

SECTION 2. PROCESS

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SECTION 3. FINDINGS AND APPLICATION

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Recommendations for Policy

Recommendations for Practice

Recommendations for Future Work

Conclusion

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