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# ALIGNING ARTIFICIAL INTELLIGENCE AND PROJECT MANAGEMENT: A TOOL FOR OPTIMIZED OUTCOMES?

Business Management Master's thesis

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# DECLARAÇÃO DE HONRA

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## ABSTRACT

This dissertation investigates the integration of Artificial Intelligence (AI) into Project Management (PM) to enhance overall project outcomes. By reviewing current literature on AI technologies and traditional as well as agile project management practices, the study explores how tools such as machine learning, predictive analytics, and automation can improve decision-making, resource allocation, and risk management. Employing a qualitative research design, data was gathered through semi-structured interviews with project managers in the IT and business development sectors. The analysis highlights that AI can streamline routine tasks, improve communication flows, and facilitate more proactive risk assessment, thus allowing managers to concentrate on strategic decision-making. Despite these benefits, challenges such as resistance to change, ethical concerns regarding bias and accountability, and the critical need for ongoing human oversight remain significant. The findings underscore the necessity for organizations to adopt tailored strategies when integrating AI into their project management practices, ensuring that technological advancements complement rather than replace human judgment. Ultimately, this research offers actionable recommendations for leveraging AI to achieve more efficient and adaptive project execution, contributing to the broader discourse on digital transformation in project management.

Key words: Artificial Intelligence, Natural Language Processing, Project Management

## RESUMO

Esta dissertação investiga a integração da Inteligência Artificial (IA) na Gestão de Projetos (GP), para otimizar os resultados gerais de projetos. Ao analisar a literatura atual sobre tecnologias de IA e práticas tradicionais e Agile de gestão de projetos, o estudo explora como ferramentas tal como "machine learning", análise preditiva e automação podem melhorar a tomada de decisões, a distribuição de recursos e a gestão de riscos. Recorrendo a uma metodologia de pesquisa qualitativa, os dados foram recolhidos por meio de entrevistas semiestruturadas com gestores de projetos nos setores de TI e desenvolvimento de negócios. A análise destaca que a IA pode agilizar tarefas repetitivas, melhorar os fluxos de comunicação e facilitar uma avaliação de risco mais proativa, permitindo que os gestores se concentrem na tomada de decisões estratégicas. Apesar destes benefícios, desafios como a resistência à mudança, as preocupações éticas relativas ao preconceito e à responsabilização, e a necessidade crítica de supervisão humana contínua continuam a ser significativos. Os resultados ressaltam a necessidade de as organizações adotarem estratégias personalizadas ao integrar a IA nas atividades de gestão de projetos, garantindo que os avanços tecnológicos complementam, em vez de substituírem, a análise e decisão humana. Em conclusão, esta pesquisa oferece recomendações para alavancar a IA de forma a alcançar uma execução de projetos mais eficiente e adaptativa, contribuindo ainda para a discussão sobre transformação digital em gestão de projetos.

Palavras-chave: Inteligência Artificial, Processamento de Linguagem Natural, Gestão de Projetos

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## List of Abbreviations and Acronyms

AI – Artificial Intelligence

PM – Project Management

LLM – Large Language Model

ML – Machine Learning

NLP – Natural Language Processing

NN – Neural Networks

XAI – Explainable AI

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# 1. INTRODUCTION AND DEFINITIONS OF THE RESEARCH PROBLEM

## 1.1. Theme and Goals

The inspiration for this dissertation stems from a personal fascination with the transformative potential of technology in solving real-world problems. As someone with a keen interest and background in technology, I have observed the emergence of Artificial Intelligence (AI) as a tool for driving efficiency and precision. Also having a background in event management, and being so similar in the process of Project Management (PM), sparked my curiosity about its tangible impact on this industry. This curiosity, coupled with a desire to explore innovative solutions for modern business challenges, served as the driving force behind choosing this topic. I aim to contribute to the growing body of knowledge about AI's practical applications and its potential to revolutionize traditional PM practices.

The primary goal of this dissertation is to ascertain whether AI integration improves project outcomes in terms of efficiency, resource management, and decision-making. Specifically, this research will examine how AI tools and technologies assist project managers in overcoming typical hurdles such as delays, resource misallocation, and communication inefficiencies. By systematically analyzing the effectiveness of AI in PM contexts, this dissertation seeks to uncover whether AI serves as a transformative force or merely a supplementary tool in modern project workflows. Furthermore, it aims to provide actionable insights into best practices for incorporating AI to maximize its potential benefits while minimizing challenges.

## 1.2. Artificial Intelligence and Project Management

### 1.2.1. The Role of AI in Enhancing Project Management Efficiency

PM has experienced a significant transformation over the last few decades, driven by rapid digitalization and the rise of new technologies. According to Elia et al. (2020), there has also been an enhancement of the PM system from paper artistry that was associated with traditional management styles to more complex policy styles supported by computers. Every project is affected by digitalization, which includes planning, scheduling, resources, team members, communication, and risks. This change has

enabled PM and implementation efficiency as it also provides real-time working and actuarial data, which is critical in today's business world.

One of the reasons for such drastic changes is the popularity of software tools to support PM. Such tools facilitate effective planning and tracking of projects and management, as well as tools for analysis of the projects. Tools like Microsoft Project, Trello, or Asana have relatively better features, such as a real-time visibility map, which help them achieve common goals or meet deadlines correctly (Sunny et al., 2024). Furthermore, those based in clouds have enabled remote working, resulting in PM across regions. This factor is quite common in the present-day world economy due to globalization. These tools have minimized human interface errors and allowed multiple project tracking and monitoring.

Adopting AI in PM significantly advances how projects are handled where digital technologies dominate. AI has brought new decision-making capabilities, risk assessment, and future projections. AI can refer to patterns that indicate possible risks or slow down the progress of a project so a manager can adapt the schedule in advance. These are important because this predictive ability minimizes delays and optimally assigns resources, increasing the project's success rate (Taboada et al., 2023). In addition, it assists in the technological management of tasks that may require much input. It iterates the process of entering data and reporting the progress made and such activities that may otherwise prevent the project manager from performing other essential tasks on the project.

Besides, AI supports effective communication by providing intelligent algorithms designed to monitor responsibilities, rebuff tasks, and remind members of many collaborations (Bento et al., 2022). Some algorithms within the Natural Language Processing (NLP) class can dissect communicational activities and decide the specific segments in which extra attention seems necessary or if the members require more definition of teamwork. These help the project managers have practical, cohesively social, and productive teams, mainly when remotely based. Through intelligent communication tasks, the team members are informed of their tasks without much involvement of human beings.

AI integration plays a unique role in scheduling the timetable for particular projects and allocating resources. AI can also use past information to determine the best patterns of

assigning resources to specific tasks in a schedule that will be more efficient (Korke et al., 2023). This data-driven method reduces wastage on projects and ensures the project is finished within the set time and cost. Also, it can analyze the amount of work assigned to members of a particular team and their capabilities; hence, it can allocate work more efficiently to avoid overworking members and optimize productivity.

### 1.2.2. The Potential of AI to Transform Project Management

Integrating Artificial Intelligence in PM transforms the landscape of how projects are planned, executed, and monitored. With the help of modern technologies, AI systems can analyze large amounts of data related to the project and highlight such phenomena, risks, or trends that might be undetectable when looking at the project through the lens of traditional PM approaches (Dwivedi et al., 2021). This capability improves decision-making possibilities by offering specific information that can be used to inform project strategies and resources. Hence, by avoiding the duplication process of accumulating large data sets and reporting, the role of AI is to help project managers attempt more complex value propositions and leadership, thereby enhancing the projects.

Among all the benefits of applying AI in PM, it is important to note the improvement of abilities for prediction. AI-assisted analysis of past project data allows for predicting future problems and their risks to turn them into significant issues with which project managers can work. This predictive capability is imperative for controlling the schedules and costs of projects as it will enable the teams to deploy harm reduction strategies before the execution phase (Hair & Sarstedt, 2021). For instance, it can be used in conditions like the performance of teams working on a project and the availability of resources, hence helping in the prediction of difficulties and thus enabling one to be better placed when it comes to handling complex projects.

Apart from predictive analysis, AI enhances resource management. In resource management, AI algorithms can enable the identification of correlating team member skills to particular tasks that need to be accomplished, leading to efficient placement of the most suited human resource to particular jobs (Vrontis et al., 2022). This optimization adds to efficiency and similarly has a positive effect on team morale because burnout due to over-working exhausted resources is curbed. Moreover, AI tools can enhance data analytics, and IoT tools help define the critical metrics of projects to monitor their progress in real-time and adjust the project in case needed.

Automation is critical to any AI-based PM. Some conventional tasks that take much time for project managers are well managed by automation. For example, AI can create reports and a dashboard that simultaneously show timely project progress – saving managers much time and enabling them to focus on such activities as planning and communication with stakeholders (Sarker, 2022). When attempting to analyze reoccurring data and repetitive reporting, automation helps prevent errors that the human mind may sometimes make.

Further, AI improves inter-employee communication by using NLP and Large Language Model (LLM) tools to communicate among different teams. Such tools increase efficiency when communicating and relating with other AI systems by increasing the efficiency of NLP. Therefore, those communication barriers are reduced to enhance the transparent reporting of issues and interaction among the team members (Olan et al., 2022). When communication is enhanced, the working environment cannot be described as unfavorable, and, most importantly, it brings all the stakeholders in the project on the same page regarding goals and accomplishments.

Lastly, integrating AI in PM offers organizations an excellent opportunity to reduce expenditure by getting better efficiency and risk regulation returns. By improving resource management and decision-making, companies can minimize avoidable costs resulting from poor PM (Niederman, 2021). While implementing these technologies, some amounts of money are to be invested. However, in the end, it enables organizations to work more effectively and achieve more accurate project results. With the advancement of AI technology, AI may encompass various substantial improvements in PM practices and open new opportunities for advancement in the future.

### 1.2.3. Integration of AI with Human Skills

Integrating AI into PM has ushered in a transformative era where the balance between AI capabilities and essential human skills is crucial for success. For these and many more reasons, AI, as much as it offers different advantages like the ability to manage routine work on its own and good analytical skills, cannot replace certain personal traits of human project managers. Computers can never replace these factors and are relevant when managing projects and relative risks. Thus, there must be a complete synchronization between applying these tools with the help of artificial intelligence and applying human factors in this regard.

AI also excels in conditions that involve routine work because it frees project managers of routine work, which is at the same time more time-consuming, creative, and demanding of higher-order thinking. For instance, AI assists with scheduling, budgeting, and resource allocation, freeing project managers to focus on key decision-making and relationship management (Some, 2023). It also improves the working efficiency and does not burden members with paperwork, which was one of the biggest tasks they took up. However, for the same reason, while there will be a marked rise in bureaucracy and other organizational efficiency factors, it cannot offer the emotional intelligence that is so important in leadership. However, there has continued to be a human project manager function in terms of motivation and procurement of talent, communication and change, and all the other social realities that affect projects.

AI-powered data analysis played a significant role in enhancing PM decision-making capability. Historical data allows one to highlight trends that help to apply AI to something previously pointing to hazards that the project managers should avoid (Dwivedi et al., 2021). The mentioned predictive capacity helps the managers plan for the whereabouts of resources for the activities to counteract time disruptions or financial limitations. Unfortunately, project managers must make proper decisions independently when it comes to seeking and implementing innovations. This means that they should assume responsibility in consideration of factors in their environment as well as that of the stakeholder to identify congruence with the given project's general objectives. Furthermore, it was pointed out that communication is one of the top tenets of PM throughout this text. The promised advantages of artificial intelligence are that it increases one's capability to acquire information using virtual assistants and chatbots.

In addition, the AI applied to the PM framework does have its weaknesses. It can be looked at from the perspective of the teams likely to be apprehensive of the processes resulting from the automation. This fear may hinder the openness of organizations to use AI tools and create distrust within the work teams (Senarath, 2024). To overcome this resistance, organizations should pay much attention to change management, which should consist of the following measures: courses used to enhance employee knowledge concerning the usage of AI tools. However, it must be insisted that the company culture of learning and change be developed because, in that way, the teams will desire to accept AI as an easy tool and, more importantly, a helpful assistant.

### 1.2.4. Ethical Consideration in the Use of AI in Project Management

Integrating AI in PM presents significant ethical considerations that organizations must address to ensure responsible use. Some of the issue areas are bias, responsibility, and operational visibility. All these factors are vital in AI technology integration, and individual factors can significantly affect decision-making, stakeholders' trust, and the project result.

Prejudice in the AI environment can be studied as the main factor that results in unfair decision-making (Varona & Suárez, 2022). AI algorithms use historical data as a basis, and since the data set may contain prejudices in the same way, prejudices exist in society. For example, an AI system integrated with data collected from previous projects showing a preference for specific demographics will subconsciously replicate these preferences in future projects or team selections. This could lead to discrimination that is prejudicial to anti-discrimination regulations and compromise the organization's reputation. To reduce bias, it is recommended that organizations pay equal attention to the collection of appropriately diverse data, the use of bias identification tools, and the ongoing, active evaluation for unintended outcomes. By engaging inclusive data practices involving diverse personnel in AI production, organizations must strive to produce equitable forms of AI.

Another important ethical issue that has to do with the use of AI in PM is accountability. To avoid obfuscating accountability for the decisions that AI systems make and influence overall project success, clear accountability must be defined. This includes forming internal accountability structures like AI ethics boards and formulating positions or roles for parties involved in the development and implementation of AI solutions (Miller, 2021). One limitation of AI decision-making is that organizations must be ready to handle the negative after-effects of the decisions made. Hence, there should be prepared response measures in case mistakes or injustices may be discovered after adopting the systems. This aspect denies stakeholders the accountability of AI-based choices to specific individuals; instead, they become a collective responsibility that promotes blame-gaming.

According to Miller (2021), it is evident that transparency fosters confidence between one organization or company and the public. However, suppose the stakeholders know how the AI systems arrive at given decisions, what data they feed on, or how the

algorithms work. In that case, they are more likely to embrace the technologies. Transparency also leads to an early detection of the biases inherent in artificial intelligence systems because the processes by which these technologies make decisions can be more closely examined. Explainable AI (XAI) techniques aim to raise the interpretability levels and make the reason for the results given out by the AI systems easily understandable. Nevertheless, gaining transparency is relatively tricky because most AI models are complex, and people cannot easily comprehend their functioning due to their so-called "black box" nature.

In AI technologies, organizations must promote activities that enhance fairness, accountability, and transparency. This encompasses checking on the AI systems frequently for biases, which may violate the set conduct code of ethics. Moreover, there should be an emphasis on providing training courses and materials about ethical considerations for organizations and people working on AI-related projects. Therefore, organizations must encourage ethical considerations besides negotiating technological solutions and logical decisions due to possible risks posed by AI.

## 1.3. Methodology

The methodology of this study is designed to explore the intersection of AI and PM through a qualitative research approach. Given AI's evolving role in project workflows, decision-making, and team collaboration, understanding its integration requires more than numerical data - it necessitates an exploration of the lived experiences and perceptions of project managers.

A descriptive qualitative design has been chosen as it allows for an in-depth investigation of AI adoption within PM, considering factors such as implementation strategies, organizational readiness, resistance to change, and ethical considerations (Siedlecki, 2020; Yin, 2016).

This study employs semi-structured interviews with project managers to collect primary data, complemented by document analysis to validate findings. Data will be analyzed using thematic analysis (Braun & Clarke, 2006), ensuring that emerging patterns and insights align with existing literature. The software NVivo will be used to facilitate the coding of responses and organizations of data. Ethical considerations, including confidentiality and informed consent, are central to the research design.

By utilizing a qualitative paradigm, this study aims to contribute practical insights and theoretical understanding to guide organizations in effectively aligning AI technologies with PM practices.

## 1.4. Structure

This dissertation is structured to comprehensively explore the intersection of AI and PM. It is divided into the following key chapters: Introduction and Presentation of the Theme, Literature Review, Methodology, Research Questions, Data Analysis, Conclusion, Future Recommendations.

Literature Review: This chapter provides an extensive analysis of existing research of AI, PM, and on the role of AI in PM. It examines trends, gaps, and advancements in AI technologies and their implications for project workflows.

Methodology: The methodology chapter outlines the research design, including the approaches used to collect and analyze data. Quantitative methods ensure a balanced evaluation of AI's impact through personal experiences.

Data Analysis: This chapter presents the findings of the study, with a detailed discussion of patterns, correlations, and insights derived from the data. It aims to establish a clear link between AI integration and project outcomes.

Conclusion and Recommendations: The final chapters synthesize the findings, and offers practical recommendations for leveraging AI in PM. They also highlight limitations and propose areas for future research.

# 2. LITERATURE REVIEW

## 2.1. Theoretical Framework

### 2.1.1. AI Theories and Concepts

AI is a multidisciplinary field that encompasses various theories and concepts, prominently including Machine Learning (ML), Neural Networks (NN), and NLP. These components collectively ensemble an experience of the front-line act for optimizing AI systems, mainly in exploring Human Language. Most specializations in NLP have incorporated Artificial Intelligence, especially ML—the functionality of systems 'understanding' and enhancing from data—into procedures. Nagarhalli et al. (2021) note that conversational understanding in NLP advanced after incorporating ML to analyze the voice or text of the user to determine his/her intention and return an appropriate response. This is a great leap, especially in conversations where NLP remains incredibly influential in chats and virtual support agents.

Deep learning is fundamental in enhancing the performance of NLP. These networks imitate the brain neurons and can process the data through a multilevel format. Building on the work of Lauriola et al. (2022), deep learning techniques have improved the effectiveness of NLP applications. That can be based on complex structures and include features like recurrent NN or transformers, allowing solving various tasks such as sentiment analysis, machine translations, text summaries, etc. This transition from shallow to deep learning techniques is considered a significant advancement. It enables NLP systems to train and adapt because of the large number of samples that can train them, and it has never been done before.

The history of NLP has evolved from the rule-based system belonging to the heuristic linguistic system to the intelligent deep learning system, which can only learn many data sets. As stated by Johri et al. (2021) the growth of NLP can be demonstrated in different fields linked with voice recognition and translation that define new interactions between people and technology. It covers computational linguistics and AI and concerns the principal achievements of deep learning to extend the NLP at the present stage. This evolution indicates how ML techniques are gradually applied to improve human input using computers to achieve the desired natural interfaces.

In addition, the adoption of NLP in such sectors as healthcare has received a boost since it utilizes unstructured information and arranges it into structured data with usage information. According to Klontzas et al. (2023) NLP is an intersection between computer science and computational linguistics that allows text and speech that individuals produce to be transformed into data that qualitatively can be searched for meaning. Indeed, in the healthcare industry, where thousands of reports are written daily, NLP can help in the clinical decision process and form evidence-based practice. The authors also pointed out that the radiology section is one of the specializations that may greatly benefit from NLP solutions, as much of the information exchange in this field is provided in the written format, that is, in reports. This capability shows how NLP can bend data into significant results for increasing patient well-being and organizational effectiveness in healthcare settings.

Specifically, based on the theoretical perspectives provided by the existing AI paradigm, mainly the ML approach, NN, and NLP, AI is in a state of continuous change. The advances in engineering deep learning capabilities help NLP platforms extend their functions and show the possibility of improving multiple applications in numerous fields. In these areas, research keeps on unfolding and increasingly presents deep and meaningful consequences on AI technologies, particularly in handling and utilizing human language.

### 2.1.2. Project Management Theories and Methodologies

PM is an essential discipline that governs how projects are initiated, planned, executed, and completed. Over the years, different methodologies have been developed, and two of the most widely used methodologies are the traditional and agile ones. Waterfall PM, which might be best described as sequential or stage-based, differs significantly from agile frameworks' flexible, collaborative, and cyclic nature.

**Traditional Project Management**

Traditional PM, often exemplified by the Waterfall model, follows a linear sequence of phases: initiation, planning, execution, monitoring, and closure. All must be accomplished linearly, giving a framework and an element of control (Gaborov et al., 2021). This approach is ideal for projects with limited modifications, such as construction or manufacturing. However, it sometimes has limitations in addressing characteristics of many contemporary projects, especially in the IT industry, which is known to be very

flexible. Referring to Gaborov et al. (2021), the following challenges may arise from traditional approaches: low visibility, no stakeholder collaboration, or difficulty defining user needs. Such limitations lead to project failures; hence, organizations look for a dynamic framework.

### Agile Project Management

Agile PM emerged as a response to the limitations of traditional approaches, especially in software development. Popular frameworks like Scrum and Kanban emphasize iterative processes, promoting flexibility and continuous client involvement (Some, 2023). In comparison, agile frameworks consider work to be done in multidisciplinary teams so that people can solve problems faster and adjust to the requirements and feedback. It also makes the approach suitable for the IT industry, where client demands, and other market forces change frequently. Sithambaram et al. (2021) have noted that with agile PM, organizations can address these changes and improve stakeholders' satisfaction and involvement in each project, improving the project's success. In addition, that is why agile methods have had a culture of enhancement; they introduce schedules that reflect the teams' processes and outcomes.

### Hybrid Project Management

Recognizing that neither traditional nor agile methodologies fully meet the demands of all projects, many organizations are now adopting hybrid PM approaches. A blended approach incorporates aspects of both systems from the structural and incremental frameworks while avoiding the weaknesses inherent in the exclusively chosen model (Gemino et al., 2021). This brings the flexibility required when working with project managers with an opportunity to apply structured planning and an agile strategy if they deem the project requires it. According to Diem (2021), Critical success factors (CSFs) that impact the efficiency of hybrid PM include the level of stakeholder involvement, the project scope and type, and the organizational culture of the involved entities. Depending on the nature and size of the projects, the adaptive strategy is sound, especially in situations where certainty and costs cannot be fully guaranteed.

### Essential Project Management Principles and Practices

The core principles of traditional PM include comprehensive planning, clear documentation, and defined roles and responsibilities. This logical approach makes it easier to allocate resources and manage projects because it helps capture the working

dynamics of teams and makes it easy to track and monitor whether the teams are sticking to the time and financial plans (Gaborov et al., 2021). Agility, on the other hand, cuts across the values that focus on the people rather than tools, wrenching maximum utilization of the team as a collective unit (Behrens et al., 2021). Daily inspections like scrums, sprints, and use/user feedback allow the team to correct itself without further inputs from the inspector. On the same note, this implies that human resources will be more directed to the project as well as to the team assigned to the project. The transition from so well-described procedures to less concrete activities enhance managing ambiguous and volatile contexts that are even more relevant in the contemporary business environment (Sithambaram et al., 2021).

Overall, the company gains advantages and losses for every development framework in the long run by following both traditions and the agile approach. The former keeps the hierarchy and planning over the work constant, while the latter introduces change and variability to the project. The blended model can, therefore, be said to mirror the contemporary appreciation of the fact that improving upon project activities must factor in the need for conventional and agile modes of working. That is why it is crucial to synthesize these two styles of working as the project environments change and more projects are delivered to ensure that all organizational and individual obligations to the relevant stakeholders are met.

## 2.2. Integration of AI in Project Management

### 2.2.1. Current Trends in AI and Project Management

AI integration into PM has been gaining momentum in recent years, driven by rapid technological advancements and evolving industry demands. Shang et al. (2023) assert that the advent of Industry 4.0 and the challenges posed by the COVID-19 pandemic necessitate that PM professionals adopt AI tools. Companies are slowly trying to find ways to incorporate more AI into their projects to improve schedules, timing, tracking, and managing risks in the various phases of a project. Particularly, patterns, ML tools, and other artificial intelligence technologies enhance how project managers use data to make valuable decisions. Regarding this, AI implementation characteristics imply that organizations want to stay relevant to their clients. The immense eagerness of organizations to embrace and deploy AI solutions is well in agreement with the global

trend that has seen the industry practicing PM adopt innovative technologies, which help in the intelligent accomplishment of projects.

Nevertheless, several demerits are arising from the application of AI in PM. In their reflections, Shang et al. (2023) point out several concerns: First, the cost is relatively high when adopting those technologies; Second, the appropriate talent is scarce in different organizations. However, it is still worrisome that inadequate handling of these issues is still vital to many organizations, or take-up of the best and most readily available tools leveraging AI is suboptimal. Furthermore, Stanciu et al. (2020) also assume that organizational culture resistance remains crucial to AI rollout since leadership support is critical. This is why organizations should develop the right culture to foster innovation and better performance. In addition, McGrath and Kostalova, (2020) believe that agents of PM need to be transformed to fit an AI-incorporated environment. Having concluded that applying AI solutions has become novel in managing ambitious issues in project teams, project managers should likewise have technical skills and managerial competencies to direct project teams effectively.

The current state of AI integration into PM involves the shift towards using a blended framework, incorporating traditional PM practices, agile methodologies, and integration of artificial intelligence. As organizations gain more understanding of how the business environment can be flexible, they have begun to create business management solutions for PM suited to their business (McGrath & Kostalova, 2020). This trend is in line with the conclusions arrived at by Shang et al. (2023), according to which top-down support and organizational readiness are the key factors related to the effective implementation of AI into PM. It is only important that organizations take advantage of the opportunity that AI technologies present to create a relevant environment where the technology can be tested for values such as improved decision-making and augmenting the value of an AI project. AI's usage in PM shows great opportunity and threat, which should be controlled well to grasp the maximum opportunity that AI has in PM.

### 2.2.2. AI Applications in Project Management

**Risk assessment and management**

AI profoundly transforms PM, particularly in risk assessment and management. The use of various AI technologies, including predictive analytics, raises the ability of project managers to identify risk and manage risks rather than just using conventional

approaches. Karamthulla et al. (2024) posit that AI has the potential to enhance the efficiency of operations in projects and strengthen decision-making activities. It can identify potential threats by utilizing information from previous comparable projects and applying ML to evaluate the overall influence of these threats on time and cost frames. For instance, with the help of AI, it is possible to estimate the likelihood of a delay due to some events and introduce necessary actions. Not only does this proactive approach to managing risks assist in avoiding concerns of getting further out of hand, but it also results in better general project performances—thus proving the applicability of AI in disassembling conventional PM methodologies.

AI applications in the construction sector are on a groundbreaking level regarding project delays and improving risk assessment techniques. Yaseen et al. (2020) proposed an RF-GA hybrid AI model to estimate delay issues in construction projects. This model uses a systematic approach to categorize delay causes and assess the effects and levels of delay by analyzing data. The RF-GA (Random Forest classifier with Genetic Algorithm optimization) model had a high accuracy of 91.67%, which indicates that the proposed model is beneficial in forecasting project delays. Such high precision allows the project manager to rank risks better and allocate resources, thus making construction projects sustainable and prosperous. The strong potentials of AI-based approaches demonstrate how advanced data-driven techniques replace traditional risk management solutions and prove the efficacious applications of AI systems to strengthen further PM frameworks.

Furthermore, the use of AI in predicting change management on the risks within information system projects similarly applies to the impact of AI on risk management. Taking it further, in support of the studies provided by Peddisetty and Reddy (2024), applying AI technologies in the workplace offers project managers a powerful tool to collect timely information regarding the possible risks that may come in a project environment while helping the project managers come up with specific change management plans better suited to their working styles. Where AI is applied, organizations can predict resistance to change and plan the transformations, thus considerably decreasing the risks of project failure. The combination of approaches applied in their work strengthens the impact of adopting AI solutions within change management, which in turn shows that AI is beneficial in terms of risk analysis and increasing general project robustness. While organizations are looking forward to implementing AI technologies for their processes, the aspects of data quality and ethical

approaches of AI are considered crucial to achieving the best outcomes from the application of AI for quantifying the risks and managing them into projects based on PM frameworks.

**Resource Allocation and Optimization**

Integrating AI into PM has led to significant transformations in traditional practices, particularly in enhancing agility, optimizing resource allocation, and improving risk assessment and management. Karim Zadeh et al. (2024) discussed that project managers employ AI technologies such as predictive analytics, ML, and automation tools for analyzing real-time information. They stress that most deep learning models can determine project duration, and the resources required for project completion with little wastage. They also facilitate pattern and anomaly detection in project data through risk management, which tends to scale the overall probability of project success. Guo and Zhang (2022) have pointed out that this capability is valuable for current complex and uncertain PM environments and decision-making.

In addition, costs are one of the most sensitive areas that demonstrate how AI enhances PM solutions. As mentioned in the previous section, adopting new algorithms and deep learning models enables the specific control of the distribution of resources about different project phases to achieve the maximum frequency that can be solved efficiently, according to Kristian et al. (2024). They point out that there is interest in multi-objective optimization (MOO) techniques, a term dictated by the fact that these enable managers to opt for or against factors explaining the performance of their projects about all aspects that influence this performance. With the help of AI, organizations can gain valuable knowledge to set effective resource management for the project, which will make the project sustainable. This is something that can be said based on conclusions present in the recently conducted studies, where it was pointed out that applications of AI help improve the levels of effectiveness, as well as support the sustainability of the goal and objectives of the management of resources in organizations (Kristian et al., 2024).

However, certain challenges may arise when integrating AI into PM, leading to specific complications. Guo and Zhang (2022) argue that there are critical challenges that project managers must meet to pursue the overall benefits of AI, including data privacy concerns, the need for project managers' new skills, and dependence on technology. Considering the factors that affect the transition to AI in PM, Karim Zadeh et al. (2024)

propose a series of steps toward a strategic approach to AI implementation. This approach helps to guarantee technological advancement, supports organizational objectives, and cultivates a culture of innovation. Project Managers must commit more resources to training initiatives, develop effective management of the proliferating data assets, and achieve the right proportion of automation and human control. If these challenges are effectively prevented in advance, businesses will lead more agile processes, thus shortening the time of project implementation and increasing the satisfaction of shareholders.

**Predictive analytics for project success**

Integrating AI into PM has emerged as a transformative force with substantial implications for enhancing efficiency, decision-making, and risk management. In their work, Bharati and Sandbrink (2024) argue that with Smart City planning, AI is indispensable in PM today. They observe that though PM's use can be traced back to 1987, the increasing use of intelligent technologies such as ML and data analytics has brought new vigor to this field. They argue that using AI in PM can transform critical PM activities such as planning and scheduling into successful risk management. The authors have also reviewed relevant literature combined with the formulation of questionnaires, which include semi-structured interviews with project managers in Europe and India to put forward the idea that AI has a more significant impact on job productivity and less burden on workloads. However, the discussion also highlights the need to take ethical issues connected with AI, including the problem of algorithmic bias and data privacy, and explain an AI's decision. The study presents a balanced view of the issue by using this discussion to examine the possible advantages and drawbacks of AI applications to PM.

In addition to the global trends examined by Bharati and Sandbrink (2024), Mishra et al. (2022) delves into the specifics of artificial intelligence utilization in Integrated Technology Project Management (ITPM). According to market data from Statistica (2024), the global market for AI software is expected to total $243 billion by 2025. According to the authors, continuing PM practices are tightly intertwined with human input, failing to utilize project managers' intuition and creativity fully. AI and ML can shift tasks that typically require human-like thinking to be managed by individuals, while AI and ML handle many repetitive or prediction-based activities. The paper thus notes specific ITPM tasks and processes that AI and ML could ultimately supplement to improve a project's workflow.

Specifically, reviewing the civil engineering domain, Hasan and Raza (2024) discuss how AI influences PM through predictive analytics and automation solutions. Their research points out the potential of using artificial intelligence to increase efficiency, cut costs, and manage risks in civil engineering. Using a literature review approach coupled with case studies and questionnaires to professionals in the field, the authors provide a clear understanding of the role of AI in PM. They argue that AI instruments enhance the possibility of managing risks better and completing projects more effectively, as well as some issues connected with implementation costs and technological disadvantages. Based on the results, AI has tremendous potential to change civil engineering PM with a focus on process and results improvements. Generally, this research re-emphasizes the crucial ways in which the elements of AI, when well-embedded into PM schemes, can yield optimistic returns on efficiency and cost-savings, both considered paramount in determining the course of this industry.

**Automation of Routine Tasks**

The integration of AI in PM is rapidly transforming the field, as highlighted in the research conducted by Ghimire and Sagri (2024). This study focuses on the role of AI in minimizing the time taken and automating several management activities within the different PM knowledge areas. The authors conducted a literature search to evaluate the role of AI in supporting decision-making, scope definition, and resource management. They claim that, on the one hand, AI is capable of automating much of the work, but on the other hand, it should support the work of human project managers. This synergy makes it possible for project managers to attend to noble strategic tasks in PM since the standard and repetitive qualitative tasks are assigned to a software system. In addition, the study suggests more empirical work to enhance the knowledge of AI's PM implications altruistically, establishing ethical propriety and AI architectural forms and structures for project integration (Ghimire & Sagri, 2024).

In another integrated review, Hasan and Raza (2024) analyze how civil engineering PM tasks can be automated using AI applications while enhancing the performance of the projects. They find that technology partners inform them that AI is substantially valuable in increasing efficiency and reducing expenditures and that predictive analytics are critical to managing operational risks. This is especially so because one of the primary benefits of AI is reducing the amount of time project managers spend on repetitive tasks. It also notes that the integration problems include expensive implementation and

technical issues, which should be solved to gain more advantages from AI applications. They mentioned that suitable AI applications during project handling minimize the risk factors, enhance the project's efficiency and cost reduction, and help improve the project delivery in the civil engineering sector (Hasan & Raza, 2024).

Finally, Korke et al. (2023) point out that AI has been significantly integrated into construction PM, the sector being one of the biggest contributors to the economy. Their research explores how AI supports the management of earlier mundane tasks and how effectively information is shared across those involved. They also state that its potential to accelerate and facilitate information flow while performing routine activities could triple the speed of construction industry growth, with the potential to double GDP rates, by 2035. The authors stress that as AI technology advances, its application in the construction PM domain needs to be periodically evaluated to meet the advancing needs of the construction industry. The authors consider that integrating AI in construction contributes to improving the sector's performance and ensures better development in the future; thus, focusing on technological changes in PM is crucial (Korke et al., 2023).

## 2.3. Benefits of Aligning AI and PM

### 2.3.1. Improved Decision-Making

Incorporating stakeholder perspectives into decision-making processes is critical for achieving fairness and transparency, a principle emphasized by Zhang et al. (2023). Their research proposes a participatory AI instrument to facilitate the assessment of decision-making activities and enhance performance by stakeholders. Through implementing the ML models by decision-makers and those affected, the tool promotes deliberation of past decisions and discussion of strategies for future decision-making. For example, when admitting students into graduate school, the tool creates opportunities for dialogues between faculties and students, which leads to fairness in decision-making. Such an approach augments the quality of project decisions. It increases stakeholders' trust and involvement while showcasing how AI can link operational technology and human operations in PM.

AI is also involved in simulation, which helps organizations mimic the dexterity of many complexities in decision-making processes. The paper by Gil et al. (2021) presents a low-complexity approach to modeling that connects various types of data and expert

models. This work aims to highlight the problems arising from semantic, spatiotemporal, and execution differences. Further, it works to ease the modeling methods to offer practical solutions in a shorter period. One of the best examples of this approach is the MINT (Model INTegration) framework because it guides the identification and analysis of intertwinements of environmental aspects and human activities like agricultural and water use systems. It advances the possibility for decision-makers to reflect on the implications of different settings of planned events, thus facilitating the creation of more effective and sustainable business plans. The work describes how PM can benefit from AI applications by providing improved ways of dealing with the strategic complexity of project systems.

### 2.3.2. Enhanced Efficiency, Productivity, and Increased Customer Satisfaction

Artificial intelligence (AI) is increasingly recognized for its transformative potential in enhancing firm performance through various strategic applications. As noted by Wamba-Taguimdje et al. (2020), artificial intelligence is a broad concept that includes ML, chatbots, or self-learning algorithms that improve organizational orientation in its environment and operating conditions. The authors again recall that adopting AI capabilities can enhance firms' operational and strategic performance at the financial, marketing, and administration levels. The study aims to understand the business impact of AI-based process transformation initiatives. It shows that organizations can improve their process performance significantly by repositioning these transformations to fit their business models based on AI technologies. Such focus implicitly improves efficiency while nurturing competitive capabilities amid increasingly dynamic business environments.

An analysis of the literature reveals the following as constituencies adequately described by AI integration both internally and in customer relations: Pantano and Serravalle (2022) show that expectations concerning using applications like Siri and Alexa directly impact users' satisfaction. In their research about the sentiment analysis for consumer interaction, the authors discover that customer expectations are more rewarding when they engage the digital assistant through AI-interactions. This study underlines the importance of efficient regulation of customer expectations concerning the virtues of AI applications in organizations. With more and more traders adopting artificial intelligence

technologies to execute services, customer expectations management is crucial to satisfaction and loyalty degrees.

For the public sector, adopting AI services in delivery is critical in increasing citizens' satisfaction and creating public utility. Chatterjee et al. (2022) consider AI services utilization by the Indian government and how efficient adoption and deployment of AI services is pivotal to building trust among the citizens. Their work also found out that the scope and depth of the integration of AI play a critical role in the amount of public value that can be generated from these services, illustrated by the fact that a direct understanding of the capabilities of AI indeed plays a crucial role in the practical implementation of these technologies. The ideas in this paper should help governments as they strive to steer through the challenges and uncertainty surrounding the use of AI, influence how citizens interact with different self-service technologies, and thus improve the satisfaction level of citizens with government services. These accumulated cases demonstrate how AI transforms organizational performance and customer experience and highlight the critical importance of adopting a coherent AI strategy across industries.

### 2.3.3. Continuous Improvement and Feedback Loops

Integrating Artificial Intelligence (AI) into business operations has emerged as a transformative force, particularly in manufacturing firms seeking to innovate their business models and enhance value delivery. Sjödin et al. (2021) highlight the challenges manufacturers face in assimilating AI capabilities at scale, emphasizing the importance of three critical capabilities: Data as a Pipeline, Algorithms, and the Democratization of AI. To extend these capabilities, the firms must develop innovative business models through customer co-creation, data-driven delivery management, and scalable ecosystem orchestration. The authors provide a co-evolutionary model that shows how advanced AI tends to transform and be transformed by business model change. This framework highlights the notion that AI's scale is more than just a technological solution but indicates that a systemic approach needs to be taken to rewrite the manufacturing sector's economic model (Sjödin et al., 2021).

Moreover, using feedback loops is very important to enhance the achievement of organizational goals and objectives since it facilitates continuous monitoring and evaluation of the impact of AI on project implementation. Gupta et al. (2020) provide what can be gained from data analytics to introduce dynamic decision support systems within

Adaptive Case Management (ACM) frameworks to improve user satisfaction. By applying big data, organizations can move away from relying on implicit productivity knowledge and instead follow logical operational data and techniques to produce positive results consistently. The constant supervision of the applications makes it possible for organizations to acquire helpful information, which leads to alternation of organizational strategies and stagers. This is mainly due to the specific characteristics of Agile methodologies, in which feedback loops enable a more continuous and dynamic approach that fits the evolving user needs and market environment (Gupta et al., 2022). Therefore, the organizations implementing the feedback process as a constant enhancement are more prepared to enhance the benefits of implementing AI for sustainable, profitable growth and a competitive edge.

## 2.4. Challenges and Barriers to Integration of AI.

### 2.4.1. Technical Challenges

The study by Sharma et al. (2022) investigates the numerous challenges faced by organizations in the public manufacturing sector (PMS) of emerging economies when implementing AI. Sjödin et al. (2021) highlight the challenges manufacturers face in assimilating AI capabilities at scale, emphasizing the importance of three critical capabilities: The three major trends include data pipeline, algorithm development, and AI democratization. To extend these capabilities, the firms must develop innovative business models through customer co-creation, data-driven delivery management, and scalable ecosystem orchestration. The authors provide a co-evolutionary model that shows how advanced AI tends to transform and be transformed by business model change. This framework highlights the notion that AI's scale is more than just a technological solution but indicates that a systemic approach needs to be taken to rewrite the manufacturing sector's economic model (Sjödin et al., 2021).

### 2.4.2. Ethical and Legal Considerations

Cubric (2020) focuses on the drivers, barriers, and ethical considerations for AI adoption in business and management. This paper synthesizes 30 systematic literature reviews across several sectors of operation, such as healthcare, agriculture, energy, and IT. The author outlines the issues, such as data quality and AI integration, while also considering social issues, such as job loss concerns, security concerns, and trust between human

and AI systems. As the research states, in most fields, including but not limited to healthcare, there is little focus on the societal impact of AI integration. According to the author, there is a human, organizational, and societal perspective of these problems; a human, organizational, and societal solution to these issues could improve AI and its successful applicability in business and management.

A world of advanced automation facilitated through artificial intelligence has brought positive changes in almost all fields apart from severe ethical dilemmas. As listed by Z. Li, (2024), several critical ethical questions must be answered regarding artificial intelligence: 1) bias, 2) privacy, 3) transparency, and 4) accountability. One of the most discussed threats is the problem of algorithmic bias, primarily in AI used in facial recognition technology. They can also reinforce prejudice and strengthen such steroid types of relations in society that contribute to discriminating against people. According to Li, these are problems that must be overcome through strict ethical solutions that would ensure that AI systems respect moral and personal human rights. Respecting interdisciplinary, Li suggests combining theory with practice, whereby theoretical concepts are illustrated with examples from actual practice to create AI systems that will effectively improve society's welfare while preserving its ethical values.

In their analysis of the ethical challenges in AI, Akinrinola et al. (2024) propose measures to enhance oversight, transparency, and accountability (OTS) in AI. The authors argue that as AI continues to grow rapidly, there is a pressing need to establish clear accountability frameworks, particularly in addressing issues related to inequality and the lack of transparency in AI systems. The paper discusses XAI, a building block that contributes positively to the interpretability of AI. The authors highlight the need for bias-based fairness by acknowledging different training and measuring it with different fairness metrics. Thus, it was discovered that it is essential to constantly monitor and share AI algorithms and update them occasionally to avoid biases being reinforced. Additionally, the paper describes methods of human oversight where human decisions are involved in the loop with the AI systems. Thus, the strategies proposed by Akinrinola et al. (2024) are oriented toward managing diverse ethical issues connected with AI development and encouraging reasonable practices in further AI advancement.

Rodrigues (2020) concentrates on AI's legal and human rights concerns and the problems in frameworks. The first one is the algorithmic “Black Box” since its application in AI is ineligible and represents a grave threat to human rights where such a system

cannot be contested. Other paramount concerns include privacy and data protection, which are the most significant AI applications and processes. Both necessitate the accumulation of data along with all the inherent risks of misuse or breaches. According to Rodrigues (2020), AI systems require legal personhood architectures concerning the liability questions that might accompany AI decisions. This article also presents the negative impact of artificial intelligence on workers and other vulnerable persons in society, hence the importance of continually reviewing the legal regimes governing artificial intelligence to ensure that human rights are afforded sufficient protection. In the book, Rodrigues employs vulnerability to manage AI's dangers and guarantee that AI systems conform to human rights.

Based on such aspects, one of the key concerns in defining the ethical approach for AI applications is to include human-centric approaches that address the issue of human rights and the common good. Future AI systems should be designed to account for human dignity, meaning that AI system's decision-making processes should respect general human rights and freedoms. They recommend the active utilization of a set of recommendations for AI systems that will maintain privacy provisions, channels of accountability, and diverse points of view input in writing the system. In addition, the authors emphasize the need to bring academia, industry, and governments together to create proper AI governance worldwide. This kind of partnership is crucial when developing AI frameworks to be more than just breakthrough means in the IT industry while remaining ethical and socially responsible. Concerning these principles, AI can thus be optimally implemented into business and management whereby the former is a guiding principle of applying AI while the latter is a system of values, the realization of which empowers the prosperity of the individual and society.

# 3. METHODOLOGY

## 3.1. Research Methodology

This chapter details the qualitative methodology employed to investigate the integration of AI in PM. By focusing on descriptive research within a qualitative paradigm, this study captures the subjective experiences and perspectives of project managers regarding AI's role in enhancing project workflows and outcomes. Given the rapid advancements in AI technologies and their growing influence on PM, qualitative inquiry allows for an in-depth exploration of individual and organizational experiences, offering a nuanced understanding beyond mere statistical representation (Creswell & Poth, 2018).

A qualitative approach is particularly appropriate due to the nascent stage of AI adoption in PM, where existing frameworks and best practices remain largely undefined (Swift, 2022). Through this methodological lens, this study aims to explore themes such as managerial perceptions, challenges, and ethical considerations related to AI adoption. The study also seeks to understand how project managers navigate the complexities of AI integration, including adapting to new tools, overcoming resistance, and addressing ethical dilemmas in project execution.

By emphasizing subjective experiences, this research highlights the intricate interplay between technology and human decision-making, which cannot be adequately captured through quantitative methods alone (Yin, 2016). AI's influence on project success, stakeholder interactions, and decision-making frameworks are best understood through qualitative narratives that reveal patterns, challenges, and opportunities that may inform future AI implementation strategies.

## 3.2. Research Design

The research employs a descriptive qualitative design, allowing an in-depth exploration of how AI influences PM practices. Descriptive research on the use of AI in PM recognizes different dimensions of AI tools, types of applications, locations, implementation approaches, and perceptions of the project managers and other stakeholders. It is particularly beneficial in such a novel field as AI in PM because there is hardly any recognizable set of protocols and standards to follow. Siedlecki (2020) defines descriptive research as accumulated data that states the trends, issues, and

good practices in more depth, giving a better vision of how artificial intelligence could tip the balance regarding project results.

Descriptive qualitative research is particularly suited to this study because it bridges the gaps in understanding by detailing experiences and organizational practices under real-world conditions while allowing for rich accounts of individual experiences with AI integration (Doyle et al., 2020). Unlike quantitative research, which seeks to establish causal relationships through numerical data, qualitative research captures the lived experiences of project managers, offering insights that may inform best practices and policy decisions (Yin, 2016). By focusing on the interplay between human decision-making and AI-driven processes, this research aims to illuminate:

- Success stories and challenges in AI adoption.
- Managerial perceptions of AI's capabilities and limitations.
- Practical insights into AI integration for risk management, collaboration, and process optimization.
- The evolving role of AI in redefining PM methodologies.

Ethical dilemmas and regulatory considerations associated with AI in PM.

## 3.3. Interview Questions

In line with the literature, 5 themes were identified to better understand the current status of AI in PM: General Understanding of AI, AI in Decision Making, Resistance to Change, Ethical Concerns, and Future of AI in Project Management. The following questions were selected:

**Table 1**

*Interview Questions*

| Theme | Interview Question | Justification |
|---|---|---|
| **General Understanding of AI** | 1. Can you describe your understanding of artificial intelligence and its various applications within project management contexts? | Understanding the breadth of AI applications in project management is crucial as it sets the foundation for exploring its |

| | | |
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| | | impacts (Guo & Zhang, 2022; Korke et al., 2023) |
| | 2. What specific AI technologies or tools have you encountered in your professional experience, and how have they impacted your work? | This question aims to gather insights into practical applications of AI technologies, which are critical for enhancing project outcomes (Hasan & Raza, 2024; Yaseen et al., 2020) |
| | 3. Could you share some personal experiences or anecdotes regarding using AI tools in managing projects? What was the outcome? | Personal experiences can illustrate the real-world effectiveness of AI in project management, providing anecdotal evidence of its benefits and challenges (Kristian et al., 2024; Wamba-Taguimdje et al., 2020) |
| **AI in Decision Making** | 4. In what ways do you believe artificial intelligence can enhance decision-making processes within project management? Can you provide specific examples? | This question addresses the potential of AI to improve decision-making, supported by research highlighting the advantages of predictive analytics (Kaggwa et al., 2024; Mishra et al., 2022) |
| | 5. Have you personally experienced any improvements in project efficiency or effectiveness due to integrating AI technologies? If so, could you elaborate on those experiences? | Collecting personal insights on efficiency improvements helps gauge the real impact of AI technologies on project management (J. Li et al., 2023; Sjödin et al., 2021) |

| | | |
|---|---|---|
| | 6. Can you share examples where AI has positively influenced project outcomes? What metrics or indicators did you use to measure this impact? | Understanding metrics used to measure AI's impact allows for a more quantifiable assessment of its effectiveness in project management (Gupta et al., 2022; Sodhi et al., 2022) |
| | 7. Do you believe that AI technologies can fully replace human decision-making in project management? Why or why not? Can you provide reasoning for your stance? | This question explores the limitations of AI in decision-making, highlighting the importance of human intuition and judgment (Z. Li, 2024; Okolo, 2020) |
| **Resistance to Change** | 8. What challenges or obstacles have you encountered when implementing AI technologies in your projects? How did you address these challenges? | Identifying specific challenges can inform strategies to overcome resistance and enhance AI adoption in organizations (Neumann et al., 2024; Sithambaram et al., 2021) |
| | 9. How would you describe your team's attitude and openness towards adopting AI tools and technologies? What factors contribute to this attitude? | Understanding team dynamics and attitudes towards AI can provide insight into organizational culture and the likelihood of successful implementation (McGrath & Kostalova, 2020; Sharma et al., 2022) |
| | 10. Can you identify any organizational cultural barriers that have hindered the successful adoption of AI in your experience? What steps | Identifying cultural barriers can lead to targeted interventions that facilitate smoother AI integration (Karamthulla et al., 2024; Sjödin et al., 2021) |

| | | |
|---|---|---|
| | could be taken to address these barriers? | |
| | 11. What strategies or initiatives could effectively help overcome resistance to change regarding AI integration within your organization? | This question seeks practical solutions for promoting AI adoption in organizations, grounded in theoretical and practical insights (McGregor, 2021; Peres et al., 2020) |
| **Ethical Concerns** | 12. What ethical considerations or concerns do you have regarding using AI technologies in project management practices? Can you share specific examples? | Exploring ethical concerns is essential to understanding the broader implications of AI deployment in project management (Z. Li, 2024; Rodrigues, 2020) |
| | 13. How do you think issues of accountability and liability should be managed when utilizing AI tools in project-related decision-making? | Accountability in AI usage is crucial for mitigating risks and ensuring ethical practices in project management (Miller, 2021; Sharma et al., 2022) |
| | 14. In your experience, how does the lack of human intuition and emotional intelligence in AI systems affect project outcomes? Could you provide examples? | Understanding the limitations of AI in replicating human emotional intelligence can inform decision-making processes (Nagarhalli et al., 2021; Okolo, 2020) |
| | 15. What guidelines or best practices should organizations establish to ensure the ethical use of AI technologies in their projects? | Best practices can guide organizations in implementing ethical standards and mitigate risks associated with AI deployment (Kaggwa et al., 2024; McGregor, 2021) |

| | | |
|---|---|---|
| **Future of AI in Project Management** | 16. Looking ahead, what do you envision as the evolving role of AI in project management over the next few years? | This question seeks to gather insights on the future trajectory of AI's role in project management based on emerging trends (Hasan & Raza, 2024; Zhang et al., 2023) |
| | 17. How do you foresee the integration of AI changing the roles and responsibilities of project managers in the future? | Understanding future role changes can inform training and development strategies for project managers as AI becomes more integrated (Wamba-Taguimdje et al., 2020; Zadeh et al., 2024) |
| | 18. Are there any specific applications or emerging trends in AI that you believe will be critical for enhancing project management practices in the future? | Identifying critical trends can help organizations prepare for and leverage upcoming innovations in AI (McGregor, 2021; Mishra et al., 2022) |
| | 19. What concerns or reservations do you have about AI potentially automating key decision-making processes within project management? How might this affect project outcomes? | Understanding concerns about automation can inform strategies to maintain human oversight and decision-making capabilities (Gupta et al., 2022; Rodrigues, 2020) |
| | 20. How do you think organizations can find a balance between leveraging AI technologies and preserving the necessity for human skills, | Balancing AI and human skills is vital for successful project outcomes, ensuring that organizations benefit from technology without sacrificing |

| | | |
|---|---|---|
| | creativity, and interpersonal relations in project management? | essential human elements (McGregor, 2021; Nagarhalli et al., 2021) |

Source: Adapted from the above mentioned authors

### 3.4. Selection Criteria

The study targets project managers within a diversity of experiences, challenges, and successes with AI integration. This includes managers in IT industries, and overall business development, acknowledging the importance of these domains in leveraging AI technologies to optimize workflows, enhance decision-making, and foster innovation.

Rationale for focus on IT and Business Development

1. IT Sector:
    - The IT industry is often at the forefront of adopting advanced technologies like AI to streamline PM processes. AI tools in this sector, such as ML algorithms and predictive analytics, significantly enhance project efficiency, collaboration, and adaptability (Stan et al., 2024).
    - AI-enabled platforms improve real-time data processing and decision-making, especially in agile project environments (Mizambekov, 2024).
2. Business Development:
    - Business development professionals are increasingly integrating AI solutions for strategic planning, resource optimization, and client relationship management. This application underscores AI's potential to transform traditional management practices by automating tasks and predicting market trends (Kaggwa et al., 2024).
    - The role of AI in these areas fosters innovation and positions organizations to respond proactively to market demands (Bhattacharya & Sachdev, 2024).

This narrowed focus ensures that the study captures diverse yet relevant perspectives on how AI is shaping contemporary PM practices within pivotal industries.

## 3.5. Interviewees info

A total of 16 interviews were conducted, both in person and through videocalls, and one via email. 6 from the IT sector, and 10 from Business Development. Respecting the anonymity requested and discussed further in the Ethical Considerations subchapter, all those form IT were identified as Alex, and from Business Development sector as Jordan.

The following is a short bio from each interviewee:

**Table 2**

*Interviewees Info*

| **Interviewees Info** |
|---|
| #1: Alex C., 38. Background in computer science and over a decade in managing teams in software development. |
| #2: Alex M., 40. 5 years experience managing projects in software development and infrastructure upgrades. |
| #3: Alex P., 38. Specialized in Agile and Scrum methodologies, working for 4 years in coordinating cross-functional teams. |
| #4: Alex R., 43. Over a decade of experience in planning, executing and delivering IT projects. |
| #5: Alex J., 40. Extensive experience coordinating teams, managing budgets, and ensuring projects are delivered on time, but relatively new to the world of artificial intelligence. |
| #6: Alex N., 47. Worked extensively with traditional project management tools and techniques, although new to the world of artificial intelligence. |

| |
|---|
| #7: Jordan R., 51. A decade of experience managing partnerships and launching initiatives to deliver real business value. |
| #8: Jordan T., 53. Curious beginner in AI, working in planning, coordinating, and executing projects that drive growth for the companies. |
| #9: Jordan M., 53. Working for over 8 years helping companies grow through well executed projects and strategic partnerships. |
| #10: Jordan J., 37. Expertise in managing teams and delivering projects that drive revenue and innovation. |
| #11: Jordan A., 46. A couple of years working on projects that intersect strategy, technology, and market expansion, and with a growing interest and experience in leveraging AI. |
| #12: Jordan B., 39. A decade of experience delivering value through innovation and adaptability. |
| #13: Jordan C., 48. Specialized in business development, with an approach to balance technology and human insight, ensuring efficiency without losing the personal touch. |
| #14: Jordan T., 48. Experience leading teams, working closely with stakeholders to create structured plans and deliver projects on time and within budget. |
| #15: Jordan D., 52. Expertise in managing projects that drive business growth, with experience in leading cross functional teams. |
| #16: Jordan F, 34. Expertise in AI working for over 6 years in financial investments. |

Source: self elaboration.

## 3.6. Data Collection

The primary data collection method for this study is semi-structured interviews**,** a widely recognized approach in qualitative research for capturing in-depth narratives and contextual details. These were designed to explore these themes, ensuring flexibility while maintaining a structured inquiry (Kvale, 2007). This approach allows respondents to share their experiences in a detailed and reflective manner, contributing to a comprehensive understanding of AI's impact on PM. The open-ended nature of the questions enables the identification of emerging trends, challenges, and strategic adjustments that organizations adopt when integrating AI.

The interviews will be conducted one-on-one, either virtually or in person, following ethical guidelines to ensure participant comfort and flexibility, and data integrity (Gonçalves et al., 2021). This method is ideal for gathering detailed narratives and exploring the unique contexts of AI implementation in different industries.

Using an interview guide, questions will focus on themes identified in the literature, such as efficiency improvements, risk management, and AI's role in collaboration. Interviews provide depth and allow participants to share narratives that highlight the multifaceted impacts of AI adoption (Jain, 2021).

Moreover, the data collected in these interviews will enrich the study with qualitative information regarding the challenges and opportunities related to the application of AI in projects, as seen from the viewpoint of project managers and key decision-makers. These interactions can also present examples and stories of AI's implementations and impacts in different PM scenarios. These are important as they offer real-life cases and a richness of details that may be lost when using percentage, ratio, or rate only.

## 3.7. Data Analysis

The responses were analyzed using thematic analysis, qualitative research method that identifies patterns or themes within the data. As described by Braun and Clarke (2006), the key steps to guide the analysis process include:

1. Familiarization: Immersion in interview transcripts and documents.
2. Initial Coding: Identifying recurring concepts and phrases.

3. Theme Development: Grouping codes into broader themes such as "collaboration enhancement" or "risk mitigation challenges."
4. Refinement: Ensuring themes accurately represent the data.

NVivo software was used to facilitate the coding of responses and organizations of data. Each of the five main themes was further broken down into sub-themes, and a Matrix Coding Query was employed to explore the intersections between themes. The coding process allowed to quantify certain aspects, such as the frequency of mentions for specific sub-theme.

This thematic approach enables a structured yet flexible interpretation of the data, highlighting emerging insights while remaining rooted in participants' narratives (Nowell et al., 2017).

## 3.8. Ethical Considerations

Ethical adherence is paramount in research involving human participants, ensuring their dignity, rights, and well-being are prioritized throughout the study.

Participants will be fully informed about the study's purpose, methods, and objectives (Broesch et al., 2020). All identifiable data will be anonymized to protect participant privacy, with measures such as pseudonyms and encrypted digital storage implemented to prevent unauthorized access (Kisselburgh & Beever, 2022). Furthermore, data will only be accessible to the researcher to uphold confidentiality. The study will follow the principles of beneficence and non-maleficence, aiming to maximize benefits while minimizing any potential risks to participants (Pietilä et al., 2020). By adhering to these guidelines, the research maintains its integrity and ensures respect for all contributors involved.

## 3.9. Methodology Conclusion

This methodology chapter has outlined the research design, selection criteria, data collection methods, and analytical approach employed in this qualitative study. By leveraging semi-structured interviews and thematic analysis, the study seeks to provide an in-depth exploration of AI's integration into PM. The qualitative paradigm ensures that human experiences and organizational dynamics remain central to understanding AI's

evolving role in PM practices, offering meaningful insights that extend beyond traditional data-driven evaluations.

# 4. DATA ANALYSIS AND FINDINGS

## 4.1. Introduction

This report provides an in-depth examination of the insights gathered from extensive qualitative interview data, structured through a robust analytical framework. In semi-structured interviews, the participants narrated their experiences and perceptions of the organization's AI, uncovering interesting data on AI integration's pros and cons. By addressing critical themes such as AI's impact on decision-making, resistance to technological change, ethical challenges, and its potential future in PM, this analysis offers a comprehensive view of AI's evolving role. It emphasizes not only the significant opportunities AI presents but also the associated challenges and complexities inherent in its adoption. This report delves deeper into each theme, integrating broader perspectives and additional participant insights to paint a more detailed picture of AI's transformative potential in PM. In addition to shedding light on the change-making possibilities of AI technologies, this qualitative investigation also reveals the necessity of reintroducing impressive innovations with human know-how and emotions to PM methodologies.

## 4.2. Theme 1: General Understating of AI and Experience

### 4.2.1. Questions Summary

Q1: Can you describe your understanding of artificial intelligence and its various applications within project management contexts?

**Table 3**

*Q1 answers Summary*

| Question 1 Answers Summary by Participant |
|---|
| #1: "[…] a tool that helps take some of the heavy lifting […]. It's like having a super-organized assistant who's always looking out for you" |
| #2: "AI in PM is essentially about leveraging machine learning, automation, and data analytics to make smarter, faster decisions" |

| |
|---|
| #3: “[…] is all about machines learning to perform tasks that usually require human intelligence […]” |
| #4: “AI in project management is like having a super-smart assistant. It takes care of the repetitive, time-consuming stuff […]” |
| #5: “To me, artificial intelligence means using systems or machines that can analyze data, learn patterns, and perform tasks that typically require human intelligence” |
| #6: “To me, artificial intelligence is about machines or systems mimicking human decision-making, learning patterns, and improving processes” |
| #7: “[…] is like having a really smart assistant that can analyze patterns, handle repetitive tasks, and maybe even suggest better ways to do things” |
| #8: “[…] a tool that can analyze lots of data quickly, spot trends, and sometimes even suggest actions” |
| #9: “[…] a really smart assistant that doesn’t sleep. It can […] give recommendations that would take me hours (or even days) to figure out manually” |
| #10: “AI is like the Swiss Army knife of modern tech. […] Its ability to process massive amounts of data and identify patterns makes it invaluable…” |
| #11: “[…] is like having a supercharged assistant” |
| #12: My understanding of AI in project management is that it involves using smart technologies to assist with tasks |
| #13: “I’ve seen how AI can act as a helpful assistant” |
| #14: “[…] a way for computers or systems to assist with tasks by analyzing information and providing useful outputs…” |
| #15: “[…] AI can support tasks like forecasting project risks, optimizing schedules, or even analyzing team productivity” |
| #16: “[…] replication of human cognitive capabilities through systems/algorithms capable of simulating aspects of human intelligence […]” |

Source: self elaboration.

Q2: What specific AI technologies or tools have you encountered in your professional experience, and how have they impacted your work?

**Table 4**

*Q2 answers Summary*

| **Question 2 Answers Summary by Participant** |
|---|
| #1: “I've used tools like Jira's AI-driven risk detection and Microsoft Project's scheduling suggestions. […] These tools save time and often give insights I wouldn’t have thought of on my own” |
| #2: “These tools have streamlined communication and task management within teams” |
| #3: “They’ve made planning and tracking a lot easier by automating repetitive tasks and providing real-time insights into project health” |
| #4: “They’ve streamlined workflows, reduced errors, and helped me focus on strategy instead of micromanagement” |
| #5: “Tools like Trello, or MS Project, which use automation for task assignments and progress tracking…” |
| #6: “[…] automate task scheduling and send reminders for deadlines, which helps streamline workflow” |
| #7: “[…] help forecast project timelines based on past data” |
| #8: “[…] suggest the best times to follow up with leads” |
| #9: “[…] can prioritize tasks based on deadlines and dependencies. […] helped answer repetitive questions about project timelines, which saved me a ton of back-and-forth emails” |
| #10: “These tools make work more efficient and reduce manual labor” |
| #11: “These technologies save time and provide clarity, helping me focus on strategic priorities rather than micromanaging day-to-day operations” |
| #12: “[…] helped me stay organized and track team performance more effectively” |

| |
|---|
| #13: “I’ve come across features like automated task reminders […], as well as basic analytics […] they’ve shown me how small integrations can make everyday tasks more manageable” |
| #14: “These tools have been helpful for organizing tasks and sending reminders automatically” |
| #15: “[…] basic automation features, which may use AI in small ways, like suggesting timelines” |
| #16: “[…] I was able to integrate several AI solutions, such as: Machine Learning and Predictive Analytics […]; Optimization algorithms […]; Large language models […] |

Source: self elaboration.

Q3: Could you share some personal experiences or anecdotes regarding using AI tools in managing projects? What was the outcome?

**Table 5**

*Q3 answers Summary*

| **Question 3 Answers Summary by Participant** |
|---|
| #1: “It felt like the tool was almost thinking ahead for us, and it led to a smoother process overall” |
| #2: “By integrating AI tools for project tracking, the system predicted potential delays in our sprint cycles” |
| #3: “It flagged potential delays based on historical data and helped us redirect resources to critical tasks” |
| #4: “We used an AI tool that flagged interdependencies between modules and suggested an optimized order for deployment. […] it prevented a critical conflict that would have caused a major delay” |
| #5: “[…] using scheduling tools that adjust timelines dynamically when a task is delayed has saved my team from confusion and manual updates” |

| |
|---|
| #6: “[…] using software that automatically adjusts timelines based on task dependencies has saved me time and reduced errors. This experience makes me optimistic about how more advanced AI could further simplify project management.” |
| #7: “They got quicker insights…” |
| #8: “[…] it saved a lot of time on brainstorming” |
| #9: “It flagged a shipping delay as a high-probability risk based on weather forecasts in a key region. We adjusted our timeline and avoided a major bottleneck” |
| #10: “The AI flagged a potential resource bottleneck early on, allowing us to reassign tasks before it became an issue” |
| #11: “The tool suggested reallocating resources […] we saw a 15% boost in campaign ROI” |
| #12: “It helped streamline customer queries, freeing up the team to focus on other priorities” |
| #13: “[…] it significantly reduced the load on our support team, allowing them to focus on complex issues” |
| #14: “[…] scheduling tool once notified me of overlapping deadlines, which helped avoid potential confusion. It was a small thing, but it made a difference in keeping things on track” |
| #15: “[…] an AI-powered email assistant once helped me draft follow-ups faster, saving a lot of time for other tasks” |
| #16: “[…] I implemented a predictive analytics tool that integrated historical data from currency pairs” |

Source: self elaboration.

### 4.2.2. Key Insights

Participants’ understanding of AI varied, but there were clear commonalities in how they perceived its role in PM. Though familiarity with AI varies, some use advanced tools while others rely on basic automation. Common AI-powered tools like Jira, Microsoft Project,

Trello, and Asana help improve efficiency by reducing manual work and offering insights, though some respondents were unsure if they were using true AI or just automation.

Two sub-themes emerged from the responses:

- AI as an Assistant: AI was generally seen as a smart assistant, with some calling it a “supercharged assistant”, that automates tasks, analyzes data, and supports decision-making in project management. It is used for scheduling, risk management, and resource allocation. For example, one participant stated, “AI is a tool that helps take some of the heavy lifting off your plate—whether that’s analyzing data, automating repetitive tasks, or even spotting patterns you might miss” (Participant 1). This perception reflects the utility of AI in reducing administrative burdens.
- Data-Driven Decision Making: Personal experiences with AI highlight its ability to predict delays, optimize workflows, and improve project outcomes.AI was seen as particularly valuable for identifying risks early, optimizing schedules, and reallocating resources more efficiently. One participant noted, “In project management, AI helps by making sense of the chaos—whether it’s streamlining schedules, forecasting risks, or even optimizing team workloads” (Participant 9).

## 4.3. Theme 2: AI in Decision Making

### 4.3.1. Questions Summary

Q4: In what ways do you believe artificial intelligence can enhance decision-making processes within project management? Can you provide specific examples?

**Table 6**

*Q4 answers Summary*

| **Question 4 Answers Summary by Participant** |
|---|
| #1: “AI takes the guesswork out of decision-making. Imagine you’re juggling ten different priorities” |
| #2: “[…] AI tools can analyze past data and recommend adjustments, like shifting resources or revising timelines, to mitigate risks” |

| |
|---|
| #3: “AI helps cut through the noise by analyzing vast amounts of data quickly” |
| #4: “AI enhances decision-making by providing insights rather than just raw data” |
| #5: “[…] analyzes historical project data and flags patterns suggesting potential risks” |
| #6: “[…] analyze historical project data to identify patterns and predict potential risks or delays” |
| #7: “[…] AI could flag tasks that are slipping or predict when a resource bottleneck might happen” |
| #8: “AI could help by flagging risks or opportunities you might not notice” |
| #9: “AI helps you make more informed decisions because it’s better at crunching numbers and spotting patterns than humans” |
| #10: “AI enhances decision-making by offering a data-driven edge, which is vital in project management” |
| #11: “AI enhances decision-making by presenting insights we might otherwise miss” |
| #12: “AI can enhance decision-making by providing data-driven insights” |
| #13: “AI can provide quick insights that help guide decisions, like flagging potential risks or showing patterns in team performance” |
| #14: “[…] an AI tool could point out trends in how teams spend their time or suggest which projects might need more resources” |
| #15: “[…] AI could analyze past project data to highlight common delays or suggest where to allocate resources for the highest impact” |
| #16: “[…] AI can simulate multiple scenarios based on historical data and market variables” |

Source: self elaboration.

Q5: Have you personally experienced any improvements in project efficiency or effectiveness due to integrating AI technologies? If so, could you elaborate on those experiences?

**Table 7**

*Q5 answers Summary*

| Question 5 Answers Summary by Participant |
|---|
| #1: “It’s like having a really smart advisor who can instantly calculate the impact of every change. The efficiency gains aren’t just about time savings […]” |
| #2: “By automating scheduling and tracking tasks, our team spends less time on administrative work” |
| #3: “AI-powered resource optimization tools reduced our project […] It also freed up time for me to focus on strategic planning” |
| #4: “We could focus on solving actual issues instead of getting bogged down in admin work” |
| #5: “Automated resource tracking, task delegation, and risk analysis could significantly improve project efficiency” |
| #6: “[…] AI could automate progress tracking and generate reports, freeing up time for more strategic tasks” |
| #7: “[…] I can imagine how it would. Automating status updates or creating real-time dashboards would save a ton of time” |
| #8: “[…] improve efficiency by freeing up time for more important work, like strategic planning or stakeholder communication” |
| #9: “[…] automatic progress tracking through AI-powered dashboards has saved hours of admin work every week” |
| #10: “[…] saved countless hours that used to go into manual updates. That freed us up to focus on strategic tasks” |
| #11: “AI’s ability to consolidate and process data made the process much more efficient than traditional methods” |
| #12: “[…] automated notifications and reminders in project management tools have helped reduce manual follow-ups” |

| |
|---|
| #13: “[…] it reduced the number of manual follow-ups I had to do, saving time for higher-priority tasks” |
| #14: “[…] automatically update task boards or notify team members when a deadline is approaching help reduce delays and keep everyone aligned” |
| #15: “[…] email platforms that flag important messages or scheduling apps that optimize meeting times” |
| #16: “[…] made it possible to significantly reduce the time dedicated to monitoring and manual analysis” |

Source: self elaboration.

Q6: Can you share examples where AI has positively influenced project outcomes? What metrics or indicators did you use to measure this impact?

**Table 8**

*Q6 answers Summary*

| **Question 6 Answers Summary by Participant** |
|---|
| #1: “It flagged dependencies we hadn’t noticed, which could’ve caused a two-week delay” |
| #2: “The tool helped identify a potential budget overrun before it became an issue” |
| #3: “For instance, after implementing AI in scheduling, we improved on-time delivery by 20%” |
| #4: “In a software deployment, a machine learning tool prioritized risks, cutting delays by close to 20%” |
| #5: “[…] I’d look at tangible metrics like reduced time spent on repetitive tasks, improved on-time delivery rates, and fewer budget overruns” |
| #6: “[…] tracking time saved on routine tasks and team satisfaction with the tools would provide a comprehensive view of its effectiveness” |
| #7: “[…] anything that helps avoid the classic “too much to do, not enough hands” scenario sounds like a win to me” |

| |
|---|
| #8: “[…] ensuring the right people are on the right tasks at the right time” |
| #9: “[…] we used an AI-powered scheduling tool that automatically adjusted timelines when resource availability changed. […] The project was delivered two weeks ahead of schedule, which is rare in my line of work” |
| #10: “In a digital transformation project, AI-driven time tracking helped us stay within 5% of the planned timeline” |
| #11: “[…] personalized client workflows based on their engagement patterns” |
| #12: “[…] it ensured the team’s time was used more effectively, which improved overall morale” |
| #13: “We once used a simple forecasting tool to predict resource needs for a marketing campaign” |
| #14: “[…] analyze past projects and suggest better ways to allocate resources, leading to faster delivery times or staying within budget” |
| #15: “[…] predictive analytics might help flag bottlenecks before they happen” |
| #16: “In projects where predictive analytics is applied, improvements can be evidenced in two ways: via increased revenue or cost reduction” |

Source: self elaboration.

Q7: Do you believe that AI technologies can fully replace human decision-making in project management? Why or why not? Can you provide reasoning for your stance?

**Table 9**

*Q7 answers Summary*

| **Question 7 Answers Summary by Participant** |
|---|
| #1: “AI is great at crunching numbers and spotting patterns, but it doesn’t have the nuance of human intuition” |
| #2: “While AI is great at processing data and suggesting actions, the human element can’t be replicated by AI” |

| |
|---|
| #3: “AI is great for data-driven decisions, but project management requires empathy, negotiation, and nuanced judgment that machines can’t replicate” |
| #4: “AI is fantastic for spotting trends and making recommendations, but it lacks human intuition, creativity, and empathy” |
| #5: “AI can crunch numbers and offer recommendations, but it lacks the ability to understand team dynamics, corporate culture, or the nuances of human emotions” |
| #6: “I don’t believe AI can fully replace human decision-making in project management” |
| #7: “[…] it doesn’t understand context, emotions, or team dynamics” |
| #8: “AI can analyze data and give you options, but it doesn’t understand the full context |
| #9: “AI is great for providing data and suggesting options, but it doesn’t understand the nuances of human relationships or business priorities” |
| #10: “[…] it lacks the context, empathy, and creativity that humans bring to decision-making” |
| #11: “While AI provides valuable insights, it lacks emotional intelligence and context” |
| #12: “Project management often involves understanding people’s emotions and navigating team dynamics—things that AI can’t handle” |
| #13: “AI can provide data and insights, but it can’t fully understand the human side of projects” |
| #14: “There’s a lot about managing a project that requires understanding people, emotions, and the context of decisions” |
| #15: “It lacks the ability to interpret nuances like team dynamics or company culture” |
| #16: […] they cannot completely replace the interpretation of a professional, the product of the experience gained over the years” |

Source: self elaboration.

### 4.3.2. Key Insights

Participants consistently highlighted AI's transformative role in decision-making. By analyzing vast datasets, AI tools offer project managers actionable recommendations that align with strategic objectives. Predictive analytics platforms, dynamic dashboards, and AI-driven resource allocation tools were frequently cited as innovations that enable more informed, timely decisions. As one participant articulated, "AI enhances decision-making by providing insights rather than just raw data. It can model scenarios, recognize patterns, and even highlight team dynamics through sentiment analysis" (Participant 4). Many managers noted how AI's ability to integrate various data sources gives decision-making a level of depth and precision that was previously unattainable.

### 4.3.3. Expanded Examples

- **Risk Mitigation:** AI's ability to flag potential delays by analyzing task interdependencies was emphasized by multiple respondents. One team shared how their AI dashboard identified a conflict in resource allocation two weeks before it would have caused significant delays, allowing them to avert the issue. Another participant reflected, "The AI flagged a potential resource bottleneck early on, allowing us to reassign tasks before it became an issue" (Participant 10). Managers frequently cited similar use cases where AI prevented costly overruns by surfacing risks early.
- **Enhanced Efficiency:** Participants reported substantial efficiency improvements through AI's automation of routine data analyses. Real-time insights enabled teams to pivot quickly in response to emerging challenges. One respondent noted, "AI tools have helped us reduce the time spent on manual updates. [...] That time gets reinvested in strategic tasks" (Participant 9). Such examples highlight the way AI streamlines processes without compromising accuracy.
- **Resource Optimization:** AI's role in resource management was frequently cited, as tools offered recommendations for task reallocation, improving workload balance. A project lead explained, "AI-driven resource optimization, which resulted in better workload balance across the team" (Participant 2). This functionality not only enhanced efficiency but also boosted team morale, as another manager pointed out that "it might show that a team's workload is

affecting morale, giving me the chance to make adjustments before productivity drops" (Participant 4).

#### 4.3.4. Expanded Challenges

While AI's strengths in data processing and predictive analytics are undeniable, participants also highlighted limitations:

- **Emotional Intelligence:** Participants stressed that while AI excels in technical analysis, it lacks the nuance to interpret human emotions or cultural dynamics. "AI can suggest actions based on data, but it might miss out on human elements like intuition, empathy, and understanding the broader context", one manager recounted. "That's where managers come in—to balance efficiency with empathy" (Participant 7), another added.

#### 4.3.5. Recommendations

- Foster collaboration between AI tools and human decision-makers by creating frameworks that balance data-driven insights with intuitive judgment.
- Continuously train project managers to interpret AI outputs critically, ensuring they understand the context behind the data.
- Implement iterative reviews to validate AI recommendations and refine tool functionality.
- Leverage AI's speed while ensuring teams retain the ability to pivot based on interpersonal or contextual factors.

### 4.4. Theme 3: Resistance to Change

#### 4.4.1. Questions Summary

Q8: What challenges or obstacles have you encountered when implementing AI technologies in your projects? How did you address these challenges?

**Table 10**

*Q8 answers Summary*

| **Question 8 Answers Summary by Participant** |
|---|

| |
|---|
| #1: “Getting everyone on board. People often worry AI will replace their jobs, so there’s resistance” |
| #2: “One obstacle was getting the team to trust AI’s recommendations” |
| #3: “One challenge was the steep learning curve for the team” |
| #4: “Integrating AI with legacy systems has been tricky, and some team members worry about job security” |
| #5: “The biggest challenge I’d anticipate is resistance to change. People might be wary of learning new tools or fear job displacement” |
| #6: “Teams might resist change if the tools are too complex or if they fear job displacement |
| #7: “Most AI tools seem complex, and it’s intimidating when you don’t have a tech background” |
| #8: “[…] hey don’t want to learn a tool that feels complicated or unnecessary” |
| #9: “One challenge I’ve run into is accuracy. AI tools are only as good as the data they’re trained on” |
| #10: “Some team members were skeptical, fearing AI would replace jobs” |
| #11: “One challenge was resistance from team members who felt AI tools might micromanage or replace them” |
| #12: “One challenge I’ve faced is the steep learning curve with new tools” |
| #13: “One challenge I’ve seen is skepticism from team members who are unsure if AI is reliable” |
| #14: “[…] I’d probably start small—maybe using one simple feature—and build my confidence from there” |
| #15: “[…] one challenge would be understanding its capabilities and limitations” |
| #16: “[…] measures such as carrying out pilot projects and drafting data validation protocols have been implemented […]” |

Source: self elaboration.

Q9: How would you describe your team's attitude and openness towards adopting AI tools and technologies? What factors contribute to this attitude?

**Table 11**

*Q9 answers Summary*

| **Question 9 Answers Summary by Participant** |
|---|
| #1: “Some are excited because it makes their work easier, while others are skeptical or worried about losing the “human touch”” |
| #2: “The team is generally open to adopting AI, but it depends on how well we integrate it into their workflow” |
| #3: “Most of my team is curious but cautious. Demonstrating quick wins with AI helped them embrace it more enthusiastically” |
| #4: “Some team members are excited by the possibilities, while others worry about being replaced” |
| #5: “If a tool is presented as user-friendly and helps reduce workload, most people are open to it” |
| #6: “If a tool is easy to use and clearly beneficial, most team members are open to it” |
| #7: “People are open to new tools but worry about learning curves or whether AI will take over parts of their jobs” |
| #8: “Some team members are excited about trying new tools, but others are more hesitant” |
| #9: “Some people are excited because they see how AI can make their jobs easier, while others worry about losing control or being replaced” |
| #10: “Some embrace AI for its efficiency, while others resist because it’s unfamiliar” |
| #11: “They appreciate the efficiencies AI brings but remain wary of over-dependence” |
| #12: “They appreciate tools that make their jobs easier but worry about being replaced” |
| #13: “My team is open to AI as long as it’s easy to use and doesn’t disrupt their workflow” |

| |
|---|
| #14: “If there was clear training and a focus on how AI can make things easier without replacing people, they’d probably be more open to it” |
| #15: “My team would probably approach AI tools with curiosity and a bit of skepticism” |
| #16: “[…] the team tends to be cautious and demanding about the robustness and security of new technologies” |

Source: self elaboration.

Q10: Can you identify any organizational cultural barriers that have hindered the successful adoption of AI in your experience? What steps could be taken to address these barriers?

**Table 12**

*Q10 answers Summary*

| **Question 10 Answers Summary by Participant** |
|---|
| #1: “A lot of people in traditional organizations view AI as this black-box tech that’s too complex to trust” |
| #2: “One challenge has been the resistance from upper management, who were initially skeptical about AI tools because of the upfront investment and the perceived risks” |
| #3: “Transparent communication about AI as a support tool rather than a replacement has been key to easing concerns” |
| #4: “The “we’ve always done it this way” mindset can be a big barrier […] Hosting workshops to demonstrate quick wins and tangible benefits helped change their perspective” |
| #5: “If leadership doesn’t advocate for change or teams feel disconnected from the decision to adopt AI, it’s unlikely to succeed” |
| #6: “Cultural resistance and lack of leadership buy-in are significant barriers to AI adoption” |

| |
|---|
| #7: “It’s tough to sell new tools when people are used to doing things a certain way. Showing tangible benefits, like saving time or reducing errors, could help shift attitudes” |
| #8: “[…] there’s a mindset that “we’ve always done it this way,” and AI feels like too big of a leap. Overcoming that means proving the value of AI with small wins” |
| #9: “People are naturally skeptical of tools they don’t fully understand, especially when they’re tied to something as critical as decision-making” |
| #10: “Fear of change and mistrust in automation were major hurdles” |
| #11: “A significant barrier is the "fear of the unknown" that some team members or leaders have regarding AI. This often stems from a lack of understanding about how AI works” |
| #12: “Fear of the unknown and skepticism about AI’s accuracy have been common barriers |
| #13: “There’s often a mindset that AI is too “high-tech” for our organization, especially among more traditional team members” |
| #14: “Fear of change or a lack of time to learn new systems might be barriers” |
| #15: “I think barriers could stem from a lack of understanding or fear of change” |
| #16: “It is common to find greater barriers to change, especially when it comes to technologies that affect sensitive areas […]” |

Source: self elaboration.

Q11: What strategies or initiatives could effectively help overcome resistance to change regarding AI integration within your organization?

**Table 13**

*Q11 answers Summary*

| **Question 11 Answers Summary by Participant** |
|---|
| #1: “You need to start small. Run a pilot project […] frame AI as something that helps people do their jobs better, not something that replaces them” |

| |
|---|
| #2: “To ease the resistance, I would recommend a phased approach, where AI is introduced in non-critical areas first |
| #3: “It’s about showing how AI makes their work easier, not harder” |
| #4: “Starting with low-stakes pilot projects and sharing success stories works wonders” |
| #5: “One effective way to reduce resistance is to involve the team early on. Let them test new tools and provide feedback” |
| #6: “To overcome resistance, I’d focus on education and transparency” |
| #7: “Start with a pilot project to show quick wins. Pick something small but impactful, like automating reminders for deadlines” |
| #8: “I’d say the key is starting small and showing quick results” |
| #9: “I think showing results is key. […] Seeing that real, tangible benefit convinced the team it was worth giving a shot” |
| #10: “Transparency is huge—sharing success stories, offering training, and engaging early adopters as champions go a long way in easing resistance” |
| #11: “Involving teams early in the decision-making process is crucial” |
| #12: “Starting with small, non-critical AI tools and showcasing their benefits has helped reduce resistance” |
| #13: “[…] introducing AI tools for non-critical tasks first, then scaling up once the team sees the benefits” |
| #14: “Demonstrating small wins would be a good approach. […] Offering training sessions or workshops could also reduce fears and make the transition easier” |
| #15: “Starting with pilot projects to showcase quick wins would be a great way to build confidence” |
| #16: “To mitigate resistance, an approach can be adopted that combines: Specialized training, Active involvement, Demonstration of results […]” |

Source: self elaboration.

### 4.4.2. Key Insights

Resistance to AI adoption remains a significant challenge. Concerns about job displacement, lack of familiarity with AI, and cultural skepticism were recurring themes. Overcoming these barriers requires strategic communication, phased rollouts, and inclusive training programs to build trust and competence among teams. Resistance is often fueled by a lack of transparency about AI's capabilities and the perception that it may disrupt existing workflows.

### 4.4.3. Broader Examples

- Cultural Skepticism: In traditional organizations, AI was often viewed as a "black box" technology. Participants described a lack of trust stemming from limited understanding of AI's decision-making processes. "Fear of change and mistrust in automation were major hurdles" (Participant 10), one respondent shared. This sentiment highlights the need for open dialogues about AI implementation.
- Demonstrating Quick Wins: Highlighting tangible successes proved effective in shifting attitudes. One example involved using AI to automate reporting, reducing time spent on repetitive tasks. Another team leveraged AI to optimize task assignments, leading to faster project completion and increased team satisfaction. "Once people see the benefits, they're more likely to get on board" (Participant 7) a manager noted. Building confidence through initial wins can pave the way for larger-scale adoption.
- Gradual Adoption: Participants highlighted the value of starting with pilot projects. "we've implemented workshops and case studies to demonstrate AI's practical benefits and how it complements human roles rather than replacing them" (Participant 11) a project leader explained. This approach minimizes risks and fosters a culture of learning.

### 4.4.4. Recommendations

- Transparent Communication: Clearly explain how AI works and involve teams in its implementation. Leaders should communicate clearly about the role of AI in enhancing – not replacing – human roles. As one respondent put it, "Transparency builds trust."

- Pilot Programs and Training: Start small and scale up as teams become more comfortable, demonstrating how AI tools align with broader team objectives. Ongoing support and training help reduce apprehension and ensure effective use of such tools.

## 4.5. Theme 4: Ethical Considerations

### 4.5.1. Questions Summary

Q12: What ethical considerations or concerns do you have regarding using AI technologies in project management practices? Can you share specific examples?

**Table 14**

*Q12 answers Summary*

| **Question 12 Answers Summary by Participant** |
|---|
| #1: “Bias in AI is a big one. If the AI is trained on biased data, it could reinforce unfair practices” |
| #2: “AI decisions can sometimes seem "too data-driven," which might overlook the human impact of certain choices” |
| #3: “Bias in algorithms is a big one. For example, relying solely on AI for resource allocation might overlook diversity or inclusion factors” |
| #4: “Bias in AI models is a major concern. If a tool is trained on biased data, it can lead to unfair decisions, like favoring certain profiles for tasks” |
| #5: “I worry about data privacy and bias in AI systems” |
| #6: “Ethical concerns include potential biases in AI algorithms and data privacy risks” |
| #7: “One concern is bias—if AI recommends who gets what task, is it fair? Another is transparency—people need to know how the AI is making decisions” |
| #8: “One concern I have is transparency. If an AI tool recommends a decision, I want to know how it got there” |
| #9: “One concern is ensuring fairness. […] Another issue is transparency […]” |

| |
|---|
| #10: “AI raises important ethical concerns, such as biases in its algorithms or potential infringements on data privacy” |
| #11: “One concern I’ve encountered is the potential for AI tools to create unfair performance metrics” |
| #12: “I worry about over-reliance on AI and how it might lead to unfair decisions if the algorithms are biased” |
| #13: “One concern is data privacy” |
| #14: “I’d be concerned about privacy and fairness” |
| #15: “Ethical concerns I’d consider include data privacy and decision-making transparency” |
| #16: “The use of AI poses challenges such as: the need to ensure the transparency of algorithms […]; the protection of confidential customer and project data; the prevention of biases […]” |

Source: self elaboration.

Q13: How do you think issues of accountability and liability should be managed when utilizing AI tools in project-related decision-making?

**Table 15**

*Q13 answers Summary*

| **Question 13 Answers Summary by Participant** |
|---|
| #1: “At the end of the day, it’s always the human who’s accountable” |
| #2: “AI can assist with decision-making, but ultimately, the responsibility lies with the project manager and team” |
| #3: “Responsibility should always rest with humans” |
| #4: “The project manager should always remain accountable” |
| #5: “Accountability should remain with the project manager” |
| #6: “Accountability should remain with the project manager, even when using AI tools” |

| |
|---|
| #7: “At the end of the day, the project manager should be accountable” |
| #8: “Even if AI provides recommendations, the project manager should always own the decision” |
| #9: “At the end of the day, the project manager is still responsible for decisions” |
| #10: “The project manager should remain accountable for decisions, even when aided by AI” |
| #11: “Accountability should remain with the humans overseeing the AI tools” |
| #12: “In my view, humans should remain accountable for decisions, even when using AI” |
| #13: “[…] the project manager should always be accountable for decisions […]” |
| #14: “Humans should remain responsible for decisions, even when using AI tools” |
| #15: “Responsibility should always rest with the human team, even if AI is used to inform decisions” |
| #16: “[…] the ultimate responsibility for decisions lies with (human) managers” |

Source: self elaboration.

Q14: In your experience, how does the lack of human intuition and emotional intelligence in AI systems affect project outcomes? Could you provide examples?

**Table 16**

*Q14 answers Summary*

| **Question 14 Answers Summary by Participant** |
|---|
| #1: “[…] won’t recognize that the team is already burnt out. That’s where human oversight comes in […]” |
| #2: “[…] AI might suggest reallocating resources, but it can’t sense team morale or other subtle dynamics […]” |
| #3: “[…] AI might suggest cutting a “low priority” task, not understanding its value to team morale” |

| |
|---|
| #4: “[…] it might assign tasks purely based on efficiency without considering if someone on the team is close to burnout” |
| #5: “AI doesn’t understand things like team morale or interpersonal conflicts […] it might assign tasks purely based on availability […]” |
| #6: “AI’s inability to understand emotions or team morale is a limitation” |
| #7: “AI might suggest the most efficient way to distribute work, but it won’t consider how someone feels about it” |
| #8: “[…] an AI tool might suggest the most efficient way to structure a project, but it won’t consider team morale […]” |
| #9: “[…] an AI tool might assign tasks purely based on efficiency, but it won’t consider how someone feels about their workload” |
| #10: “AI might not catch subtleties like a stressed team member who’s falling behind” |
| #11: “AI lacks the ability to read between the lines or gauge emotions” |
| #12: “AI can’t understand subtle team dynamics or emotional factors” |
| #13: “AI can’t account for things like team dynamics or individual stress levels” |
| #14: “[…] AI might miss out on understanding how people feel or what motivates them” |
| #15: “[…] reallocating tasks based on data alone might unintentionally frustrate team members […]” |
| #16: “[…] they lack the intuition and emotional intelligence necessary to understand complex contexts, especially in situations of crisis or extreme uncertainty” |

Source: self elaboration.

Q15: What guidelines or best practices should organizations establish to ensure the ethical use of AI technologies in their projects?

**Table 17**

*Q15 answers Summary*

| **Question 15 Answers Summary by Participant** |
|---|
| #1: “Start with transparency—teams need to understand how the AI works and what its limitations are” |
| #2: “[…] establish a clear ethical framework for AI adoption, ensuring transparency in AI decision-making processes” |
| #3: “Transparency in algorithms, accountability measures, and regular audits are essential” |
| #4: “Make sure stakeholders know how AI decisions are made, and establish clear processes for reviewing and adjusting those decisions when needed” |
| #5: “[…] clear rules on how AI is used, including ensuring fairness in decision-making and protecting sensitive data” |
| #6: “[…] clear guidelines for using AI, focusing on transparency, fairness, and data protection” |
| #7: “[…] establish clear policies, like auditing AI tools regularly to ensure they’re fair and transparent” |
| #8: “[…] ensuring AI tools are regularly reviewed for fairness and accuracy” |
| #9: “The best practice is transparency—always make it clear how and why AI tools are being used” |
| #10: “Define clear guidelines for AI use, ensure transparency in algorithms, and establish an escalation process for decisions AI can’t make effectively” |
| #11: “[…] establish policies that emphasize transparency, data privacy, and the ethical use of AI-generated insights” |
| #12: “[…] ensure transparency in how AI tools work and provide guidelines for their use” |

| |
|---|
| #13: “[…] ensure transparency about how AI tools work and involve the team in decisions about their use” |
| #14: “Organizations should be transparent about how AI is used and ensure people know how decisions are made” |
| #15: “[…] prioritize transparency, requiring clear explanations of AI-driven decisions” |
| #16: “[…] it is crucial to establish the following measures: transparency; data protection; periodic audits; human feedback and oversight” |

Source: self elaboration.

### 4.5.2. Key Insights

Ethical concerns were a major theme, with several participants expressing caution about the potential biases in AI algorithms and the need for human oversight in decision-making processes. Other issues such as data privacy, and the need for human oversight were highlighted as critical concerns. Participants underscored the need for transparent, inclusive, and responsible AI practices to address these issues effectively. Ethical lapses can erode trust in AI systems, making governance frameworks essential.

### 4.5.3. Additional Cases

- Algorithmic Bias: Participants showed concern about the risk of AI perpetuating existing biases, particularly when tools are trained on biased or incomplete data. One participant described how they “realized an AI tool was favoring senior team members for certain tasks, which wasn’t fair to junior staff” (Participant 1). This bias was corrected by diversifying the data used to train the algorithm. Addressing these biases ensures equitable distribution of opportunities.
- Accountability: Respondents stressed the importance of human oversight in AI-driven decisions. “Responsibility should always rest with the human team, even if AI is used to inform decisions” (Participant 15). Clear accountability ensures that AI serves as a tool, not a decision-maker.
- Emotional Intelligence and Human Judgement: AI’s inability to understand the emotional and human aspects of project management was another concern. As

a respondent put it, “AI systems stand out for their ability to process quantitative data, but they lack the intuition and emotional intelligence necessary to understand complex contexts, especially in situations of crisis or extreme uncertainty” (Participant 16)

### 4.5.4. Recommendations

Implement Ethical Framework: Organizations should establish ethical guidelines for the development and use of AI tools, including regular audits for bias and fairness.

Human Oversight: Ensure that all AI-driven decisions are reviewed by project managers who can apply their emotional intelligence and contextual knowledge. Educate teams on the ethical implications of AI to promote mindful adoption, as these tools should assist, not replace, human judgement in areas requiring empathy or strategic thinking.

## 4.6. Theme 5: Future of AI in Project Management

### 4.6.1. Questions Summary

Q16: Looking ahead, what do you envision as the evolving role of AI in project management over the next few years?

**Table 18**

*Q16 answers Summary*

| **Question 16 Answers Summary by Participant** |
|---|
| #1: “I think AI will become more integrated into day-to-day tools, helping with real-time insights and decision-making” |
| #2: “[...] deeply integrated into project management tools, focusing more on predictive analytics and enhancing decision-making” |
| #3: “I see AI becoming a co-pilot for project managers, handling data-heavy tasks while we focus on strategic and interpersonal aspects” |
| #4: “AI will take over more administrative and analytical tasks, like scheduling and risk analysis [...]” |
| #5: “[...] AI will play a bigger role in risk management and predictive analytics” |

| |
|---|
| #6: “[...] AI will become a valuable advisor in project management, providing predictive insights and automating repetitive tasks” |
| #7: “I think AI will become a bigger part of project planning [...]” |
| #8: “It’ll act more like a partner, giving managers insights and recommendations while still leaving the big decisions to us” |
| #9: “I think AI will evolve into more of a proactive assistant, not just analyzing data but also making suggestions in real time” |
| #10: “I foresee AI being used for proactive risk mitigation [...] Another exciting development could be digital twins” |
| #11: “I see it helping not just with execution but with strategic planning” |
| #12: “I imagine AI will take on more administrative tasks in the future [...]” |
| #13: “I think AI will become more of a behind-the-scenes helper in project management [...]” |
| #14: “I think AI might take on more of the repetitive and administrative tasks, like tracking progress or sending updates” |
| #15: “AI will likely take on more advanced predictive and analytical roles [...]” |
| #16: “The trend is for AI to become increasingly integrated at all levels […]” |

Source: self elaboration.

Q17: How do you foresee the integration of AI changing the roles and responsibilities of project managers in the future?

**Table 19**

*Q17 answers Summary*

| Question 17 Answers Summary by Participant |
|---|
| #1: “Project managers will need to become tech-savvy—understanding how AI works and how to use it effectively” |
| #2: “[...] project managers will shift towards more strategic roles” |
| #3: “PMs will become more strategic, focusing on leadership, communication, and innovation [...]” |
| #4: “Project managers will become strategists and team enablers [...]” |
| #5: “As AI takes over repetitive tasks, project managers will need to focus more on leadership and strategy” |
| #6: “As AI handles more routine tasks, project managers will need to focus on developing soft skills [...]” |
| #7: “[...] project managers can focus more on strategy, communication, and leadership” |
| #8: “[...] project managers will be able to focus on leadership, stakeholder engagement, and solving complex problems that AI can’t handle” |
| #9: “AI will take over a lot of the repetitive, administrative work, like tracking progress or updating stakeholders” |
| #10: “[...] AI handling the heavy lifting of data crunching and task automation” |
| #11: “Project managers will shift from task oversight to becoming strategic facilitators” |
| #12: “As AI takes over routine tasks, project managers will likely need to focus more on skills like problem-solving” |
| #13: “[...] project managers will need to become more like facilitators and coaches [...]” |
| #14: “AI might make project managers less focused on routine tasks and more focused on big-picture strategy and team management” |

| |
|---|
| #15: “I think project managers will transition from task overseers to strategic leaders” |
| #16: “[…] project and consulting managers will focus on strategic analysis and interpretation of the data generated by AI systems” |

Source: self elaboration.

Q18: Are there any specific applications or emerging trends in AI that you believe will be critical for enhancing project management practices in the future?

**Table 20**

*Q18 answers Summary*

| **Question 18 Answers Summary by Participant** |
|---|
| #1: “I’m excited about AI for predictive analytics and dynamic scheduling” |
| #2: “I think AI tools focused on risk prediction, automated decision-making, and collaboration management will become essential” |
| #3: “Imagine AI tools analyzing meeting transcripts to suggest actionable steps or risks” |
| #4: “Real-time analytics and generative AI for tasks like report writing or brainstorming solutions” |
| #5: “I see AI-driven resource optimization and sentiment analysis tools as emerging trends” |
| #6: “I’m interested in AI-driven tools for resource optimization and risk management” |
| #7: “I’m intrigued by predictive analytics” |
| #8: “[...] AI tools that can analyze meeting notes and emails to identify potential risks or misaligned priorities” |
| #9: “Imagine an AI tool that can pick out the key action items from a meeting and update your project plan automatically” |
| #10: “Natural language processing (NLP) for better team communication and sentiment analysis is exciting” |

| |
|---|
| #11: “[...] generative AI for drafting reports, proposals, or even brainstorming solutions” |
| #12: “[...] AI tools for real-time risk analysis and virtual assistants for managing projects” |
| #13: “[...] simulate project outcomes based on different scenarios” |
| #14: “[...] tools that predict project risks or help with scheduling” |
| #15: “Predictive analytics and AI-driven communication tools are two trends that seem promising” |
| #16: “[…] some areas that are expected to be of particular relevance include: Big Data and machine learning; Large language models (LLMs); Integrated risk management platforms” |

Source: self elaboration.

Q19: What concerns or reservations do you have about AI potentially automating key decision-making processes within project management? How might this affect project outcomes?

**Table 21**

*Q19 answers Summary*

| **Question 19 Answers Summary by Participant** |
|---|
| #1: “There’s a risk of over-relying on AI and losing sight of the human side of projects” |
| #2: “My concern is that over-reliance on AI could lead to a lack of nuanced decision-making” |
| #3: “Ensuring human oversight will be critical to maintaining creativity and context in project decisions” |
| #4: “If we rely too much on AI, we risk missing qualitative factors [...]” |
| #5: “My concern is that over-relying on AI could lead to a loss of critical thinking” |
| #6: “If project managers blindly follow AI recommendations without critical thinking, it could lead to poor outcomes” |

| |
|---|
| #7: “My main worry is losing flexibility” |
| #8: “If we trust it too much, we might overlook important context or miss out on creative solutions” |
| #9: “[...] we risk losing the creativity and flexibility that come with human problem-solving” |
| #10: “The worry isn’t just about potential job losses; it’s also about losing the human touch” |
| #11: “[…] over-reliance on AI, which could lead to decisions that lack context or human judgment” |
| #12: “[…] relying too much on AI might lead to losing the human touch in project management” |
| #13: “My concern is that over-reliance on AI might lead to missing the bigger picture” |
| #14: “My main concern would be losing the human touch” |
| #15: “Automating decisions without human oversight might lead to unforeseen issues, like neglecting team morale” |
| #16: “[…] there is always the concern that over-reliance on automated systems can lead to decisions without proper consideration of intangible factors and the regulatory context” |

Source: self elaboration.

Q20: How do you think organizations can find a balance between leveraging AI technologies and preserving the necessity for human skills, creativity, and interpersonal relations in project management?

**Table 22**

*Q20 answers Summary*

| **Question 20 Answers Summary by Participant** |
|---|
| #1: “Organizations need to treat AI as a partner, not a replacement” |

| |
|---|
| #2: “Organizations should focus on creating a synergy between AI and human abilities” |
| #3: “[…] position AI as an enabler, not a replacement” |
| #4: “[…] focus on training teams in soft skills like communication and problem-solving while using AI to handle the repetitive, data-heavy tasks” |
| #5: “AI should be seen as a tool to enhance human capabilities, not replace them” |
| #6: “[…] ensure that AI complements human skills rather than replaces them” |
| #7: “[…] let AI handle the heavy lifting with data and let people do what they do best […]” |
| #8: “The sweet spot is using AI to handle repetitive, data-heavy tasks while leaving the creative and interpersonal aspects to humans” |
| #9: “By combining the two, we can create better project outcomes without losing the human touch” |
| #10: “[…] AI as an amplifier of human potential” |
| #11: “The key is to view AI as a partner rather than a replacement” |
| #12: “I think it’s important to use AI for what it does best […] while leaving more complex, people-focused decisions to humans” |
| #13: “[…] use AI to handle repetitive or data-driven tasks while leaving creative and interpersonal aspects to humans” |
| #14: “Organizations can balance this by using AI for the tasks it does best […]” |
| #15: “Organizations can use AI to handle repetitive and data-heavy tasks while emphasizing the importance of human judgment and creativity” |
| #16: “The key to success lies in a symbiosis between technology and human cognitive abilities” |

Source: self elaboration.

### 4.6.2. Expanded Insights

Participants envisioned AI becoming an integral part of PM, particularly in predictive analytics, sentiment analysis, and dynamic scheduling. As one respondent noted, “It’ll act more like a partner, giving managers insights and recommendations while still leaving the big decisions to us” (Participant 8). Emerging technologies such as digital twins and generative AI were seen as game-changers, providing new ways to simulate, analyze, and optimize projects.

### 4.6.3. Broader Examples

- Predictive Analytics: AI tools capable of forecasting risks and suggesting mitigations were praised as invaluable. “We used an AI-powered tool to analyze project data and predict possible risks” (Participant 2), one manager remarked. This predictive capacity could significantly reduce delays and improve project outcomes.
- Generative AI: Tools that assist with brainstorming and creative problem-solving were identified as key future trends. The use of Generative AI for tasks such as drafting reports, generating ideas, and even suggesting potential solutions for complex problems was another key area of interest. “[…] the use of generative AI for drafting reports, proposals, or even brainstorming solutions” (Participant 11).
- Over-Reliance: Some respondents expressed caution about becoming overly dependent on AI. As one participant observed, “My main concern is the risk of over-reliance on AI. If project managers blindly follow AI recommendations without critical thinking, it could lead to poor outcomes” (Participant 6). Many emphasized the need for project managers to remain actively engaged and use AI as a complement rather than a replacement for human oversight.

### 4.6.4. Recommendations

- Encourage Human-AI Collaboration: Develop workflows that integrate AI’s analytical strengths with human ingenuity and leadership. Focus on developing AI tools that augment human capabilities. Provide training to ensure project managers can use advanced AI tools effectively while maintaining human-centric leadership.

- AI Design: Regularly evaluate AI's impact on productivity and team dynamics, adjusting as needed. AI tools should be designed with clear guidelines for responsible use, ensuring they enhance rather than diminish the role of project managers in leadership, creativity, and relationship management.

## 4.7. NVivo Word Cloud

**Figure 1**

*Word Cloud*


Source: NVivo software

The NVivo-generated word cloud succinctly highlights key themes from qualitative interviews examining the integration of AI in PM. The visually prominent terms - "decision," "project," "team," "tools," "answer," and "managing" - directly align with the dissertation's central objective of assessing AI's effectiveness in improving project outcomes, specifically regarding decision-making, efficiency, and collaboration.

"Decision" emerges as a dominant term, reflecting participants' consistent emphasis on AI's role in enhancing decision-making capabilities. As analyzed above, interviewees frequently cited AI's ability to analyze vast datasets quickly, identifying patterns and risks that might escape human notice. Thus, the prominence of "decision" underscores the consensus that AI significantly contributes to more informed and timely decisions, directly impacting project success.

Equally central, "tools" underscores the practical use of specific AI technologies in real-world project scenarios. Participants referenced various AI-enabled systems like Jira's

risk detection and Microsoft Project's scheduling tools. Therefore, the frequent mention of "tools" highlights AI's practical implementation as a facilitator of improved efficiency and productivity within project management practices.

The term "answer," beyond its surface indication of interview responses, conveys deeper implications regarding AI's role as a responsive, supportive tool. Participants described AI systems swiftly providing clear answers to routine questions about timelines, resources, or project statuses. This ability to promptly deliver accurate, data-driven information positions AI as an indispensable assistant in project management, enabling managers to make informed decisions without exhaustive manual analysis.

Another prominent term, "managing," emphasizes AI's influence on daily project management activities. AI applications, especially in automation and analytics, have reshaped how projects are managed, making resource allocation and risk assessment more efficient and accurate. The recurrent use of "managing" thus reflects the pivotal role AI plays in refining traditional management practices, boosting operational effectiveness, and positively influencing overall project outcomes.

"Team" notably highlights the human aspect of AI integration. Participants frequently discussed how AI affects team dynamics and organizational culture, emphasizing the necessity of team trust and openness toward technology adoption. Successful AI integration, according to respondents, hinges significantly on clear communication about AI's supportive rather than replacement role. The strong emphasis on "team" indicates the collective view that AI should augment human collaboration rather than replace it.

Similarly, the visibility of "human" in the word cloud further reinforces the critical consensus among interviewees: AI's role remains complementary. Participants explicitly noted that despite AI's advanced analytical capabilities, nuanced human qualities remain uniquely essential. This sentiment aligns directly with the dissertation's findings, advocating for a balanced approach where AI handles data-intensive tasks, while human judgment continues to oversee strategic and relational project aspects.

In conclusion, the NVivo word cloud effectively summarizes and visually validates key insights from the dissertation, particularly highlighting AI's positive impact on decision-making, project efficiency, and team collaboration. It emphasizes AI as a powerful facilitator, automating routine management tasks and enhancing decision quality, while simultaneously reinforcing the indispensable role of human expertise and emotional

intelligence. Furthermore, the cloud reveals subtle yet critical considerations regarding organizational culture, trust, and ethical integration, suggesting fruitful directions for future research, as discussed further on chapter 6. Ultimately, the word cloud underscores the dual narrative central to this research: optimal project management outcomes are achieved not by replacing humans with AI, but by aligning AI's technological strengths with human strategic oversight and interpersonal capabilities.

## 4.8. Analysis Conclusion

The analysis revealed that while the industry increasingly recognizes AI's potential in PM, its adoption still needs to grow. Most respondents agree with the potential of AI to revolutionize the way PM is done in many ways, including increasing efficiency, reducing expendable and repeatable work, and optimizing resource usage. However, not all the interviewed managers have implemented AI into their operations completely.

In addition, the respondents to the study mentioned the many benefits of AI and pointed to the potential of enhancing decisions that affect project outcomes. Huge datasets are another strength of using AI since project managers require real-time analysis and prompt decisions on different aspects of the project (Niederman, 2021). By applying AI, project managers can expect upcoming risks, the timeline of the project more accurately, and resources appropriately. These enhancements mitigate and eliminate human error, increase efficiency, and keep projects on time.

In decision-making, AI was pointed out to have greatly assisted project managers in coming to faster decisions based on real-time data. The use of AI to deliver predictive analysis and suggestions facilitates decision-making. However, the developed work also highlighted that human participation is an essential part of decision-making processes with AI. For that reason, many respondents mentioned the human aspect of PM, such as emotional intelligence, critical thinking, and interpersonal skills (Podgórska & Pichlak, 2019). Such human qualities are especially valued where judiciousness, initiative, or otherwise moral concerns are needed, and, to date, AI cannot approximate these values. Consequently, there is a need to undertake careful monitoring and control of the usage of AI in organizations to ensure that the technology is used to assist human resources in decision-making rather than replacing human beings.

# 5. CONCLUSION

This study has revealed the possibilities of a spectacular future in PM with the help of AI solutions, which would prominently increase the speed of production, minimize the amount of monotonous work, and optimize the decisions made. Intuitively, using AI to scan through vast amounts of data accurately and efficiently presents project managers with more efficient ways of managing resources and an ability to execute projects with enhanced technicalities. The research reveals that AI, internalized if embedded appropriately, offers the potential for enhancement of many of the tasks inherent in PM and their adaptation to new circumstances.

Despite the challenges presented in the previous chapter, the study revealed optimism about AI's future role in PM. Interviewees pointed out that as time passes, AI solutions will improve in aspects like forecasting, risk assessment, and streamlining of various processes. The future looks bright in the application of AI in PM because as these technologies continue to grow, they can undertake more complicated activities that used to be done by analysts (Shang et al., 2023). With the progress in AI development, the project manager will be relieved from several time-consuming activities, which in turn assist them in managing the more complex decision-making activities during PM. However, to achieve this potential, organizations must be willing to make the necessary investments to allow AI to grow, involving investment in infrastructure, personnel, time, and culture change.

The study underscored the growing need to consider ethical issues when using AI technology in PM. Data protection and AI algorithm bias and accountability for decision-making made by Artificial Intelligence were concerns noted by some respondents. With the advancement in the use of AI in PM workflows, organizations must develop and incorporate standards of ethical use. Explaining AI decision-making and having human involvement in this process will be the main steps to trust AI. Businesses that implement ethical factors and guarantee that AI is being used appropriately will be on the right footing to realize the potential of AI while avoiding some of the challenges. AI ethics will, therefore, need to be in place to retain organizational credibility for the implementation of AI and to uphold fundamental community standards when deploying AI technologies (Díaz-Rodríguez et al., 2023).

The study also stresses the question of combining the benefits of using AI with the need for the skills that people are still best at, including emotional and critical thinking and interpersonal communication in PM. Thus, relying on artificial intelligence can be efficient in number processing. However, even in a successful project, most steps are evaluated based on a person's judgment and creative thinking or natural leadership.

Generally, integrating AI in PM is highly beneficial, although it is necessary to consider the technical, cultural, and ethical aspects to achieve a successful implementation. When organizations concentrate on making AI easily accessible, encouraging employees to think creatively, and aligning AI with people's skill sets, it becomes possible to increase the ability of AI to deliver improved project outcomes.

Finally, AI integration into each facet of PM should improve humans' work rather than replace, and complement people's decisions and creativity to improve the primary concerns needed for successfully managing projects with technology.

# 6. RECOMMENDATIONS AND FUTURE RESEARCH

## 6.1. Recommendations

Based on the findings, several recommendations can be made to help project managers and organizations fully embrace and benefit from integrating AI into PM. First, organizations should train and develop their humans into professionals to have adequate knowledge of AI usage in organizations. Rana et al. (2022) reveal that organizations need more skills in applying artificial intelligence technologies in their operations. Through training and encouraging their staff to learn more, such firms can help their workers work hand in hand with AI-based tools, thereby improving organization's functionality. Besides, it is recommended that organizations hire extrinsic AI specialists or cooperate with firms that specialize in developing AI solutions to help navigate the implementation process.

Moreover, organizations should prioritize fostering an adaptive and innovative culture to ensure successful AI integration. There is always resistance to new change, especially when people feel like AI will soon do their jobs, and it becomes very hard to implement (Dwivedi et al., 2021). Organizations have the task of explaining the advantages of AI and easing the fact that AI is meant to augment and not replace human operations. Leadership must establish an innovation culture by pushing AI tools and guiding employees to identify ways to use new tools effectively. Addressing fear of AI in an organization would require achieving see-through regarding how AI will be integrated into the organization. The formulation of this culture of AI can be supported by programs that engage the employees to embrace AI adoption programs.

Lastly, it is essential to consider the importance of having an ethical approach to the use of AI in the management of projects. There is a clear need to set ethical rules to guide the usage of AI in decision-making processes that impact employees and customers since decisions made by AI systems affect people (Rodgers et al., 2023). Policies that will help make the decision-making process more transparent for human analysis should be implemented in organizations to help managers scrutinize the AI systems' actions. However, it is on the same note that companies should make more effort to avoid cases of bias in AI algorithms by properly adapting the data used in training the AI systems. Supervising human participation in AI decision-making will remain critical to keeping faith

in AI and guarantee that AI applications do not contradict essential ethical and organizational norms. Of course, organizations care enough about ethical aspects. In that case, they can lay a good groundwork for adding AI systems, which will improve performance and gain stakeholder confidence.

## 6.2. Limitations

While this research provides valuable insights into the integration of AI within PM, several limitations must be acknowledged to contextualize the findings and to guide future research.

Firstly, the qualitative nature of this study inherently limits the generalization of the results. The research employed semi-structured interviews with 16 project managers from specific sectors (IT and Business Development), which might not comprehensively represent the broader spectrum of industries and organizational contexts. Therefore, the findings, while rich and insightful, are specific to the contexts and experiences of the interviewed participants and may not directly apply to all sectors.

Secondly, the sample size, although appropriate for qualitative research, is relatively small. A larger and more diverse sample could provide broader perspectives and potentially reveal additional themes or concerns related to AI integration in PM that were not depicted in this study.

Additionally, the reliance on participant self-reporting introduces potential biases, such as social desirability bias, where respondents might portray their experiences or opinions in a manner they perceive as favorable or acceptable. Future studies could mitigate this limitation by incorporating observational methods or quantitative measures.

Lastly, ethical concerns and resistance to AI highlighted by participants suggest the necessity for deeper investigation into organizational culture and change management strategies. Although these themes emerged from the interviews, a more detailed exploration of organizational factors influencing AI adoption was beyond this study's scope. Future research might benefit from a more detailed examination of organizational readiness and change management practices that facilitate or hinder successful AI integration.

Acknowledging these limitations is crucial as they provide context for interpreting the results and highlight opportunities for further research to build upon and expand the findings presented.

## 6.3. Areas for Future Research

The integration of AI in public organizations poses distinct challenges and opportunities compared to its use in the private sector. Using the Technology Organization Environment (TOE) framework, Neumann et al. (2024) conducted a comparative, qualitative case study on AI implementation in eight Swiss public organizations. Their study shows that various aspects of technology and organization are more relevant at certain stages of adoption than in others. For instance, whereas in the early hybridization phase, technological enabler infrastructure and staff technical know-how are more relevant, as implementation advances, organizational receptiveness and top management support are paramount. However, factors or pressure from the external environment, including the ever-increasing regulation from the public, seem to have a relatively small impact throughout the four stages. By doing so, this work provides evidence against the view positing that public sector organizations are principally motivated by external pressures and raises a note that internal organizational readiness is the most significant factor towards effective AI adoption in public sector institutions (Neumann et al., 2024).

In the context of industrial AI, the challenges arising from adoption are the same. In the Systematic Review by Peres et al. (2020) of AI industrial applications in Industry 4.0, the authors explain that it is within this environment that business entities are using artificial intelligence technologies to improve manufacturing situations. However, they argued that adopting AI solutions in the real world still needs to go beyond the pilot level. This difference mainly arose from the fact that AI applications in cyber-physical systems, unlike autonomous systems, may not be linear due to the vast volumes of data they handle and the interconnectivity between different stages. Thus, using the data from the study, the following conceptual model aligning research with industry and promoting the concept of digital and data-oriented cultural change is provided to help drive AI industrialization. In addition, Peres et al. (2020) argue that more studies need to be conducted to determine how AI developments lead to workforce change, organizational culture change, and productivity change.

In the future, there is still a strong need to do comparative studies across various industries to assess the full impact of AI. Although public organizations focus on internal aspects such as organizational readiness, in industries like manufacturing, there are technical issues like data management and decision-making issues (Neumann et al., 2024; Peres et al., 2020). This type of study might reveal that sectors face similar issues, or they might find that different sectors require different approaches, which would help address the AI implementation problem more adequately. Future studies will be beneficial in highlighting how AI's application impacts sustainable efficacy within different industries and how those changes occurred regarding roles and cultures (Peres et al., 2020). It would be beneficial for public and private organizations to understand such effects and be ready for a shift of culture and operations due to the application of AI.

There is also a need for more research on the role of AI and its ethics concerning sectors and disciplines, in other words, sectoral research. Most existing works established AI implementation's technical, organizational, and cultural implications. However, analysis has yet to be made about the differences in ethical issues across the sectors in areas like privacy, bias, accountability, and the issue of transparency. For example, in the healthcare context, there is a decency issue at stake because patient data is often involved, and there could also be fairness issues because algorithms may end up recommending one treatment plan for one part of the population and a different one for another. As for the problem of using AI in decision-making, the question of fairness arises, especially when the algorithm decides on credit or insurance. More qualitative future studies should examine these ethical considerations and understand how different industries manage the fine line between functioning productivity with AI-driven systems and the inclination toward ethical accountability. As with many emerging technologies, concerns instilled recently include increasing safety and security while decreasing risks partly to build more trust between society and AI systems of public and private organizations, which collective efforts will address holistically for higher consciousness and endeavors for AI sustainability.

## BIBLIOGRAPHY

Akinrinola, O., Okoye, C. C., Ofodile, O. C., & Ugochukwu, C. E. (2024). Navigating and reviewing ethical dilemmas in AI development: Strategies for transparency, fairness, and accountability. *GSC Advanced Research and Reviews*, *18*(3), 050–058. https://doi.org/10.30574/gscarr.2024.18.3.0088

Behrens, A., Ofori, M., Noteboom, C., & Bishop, D. (2021). A Systematic Literature Review: How Agile is Agile Project Management? *Issues In Information Systems*, *22*(3), 278–295. https://doi.org/10.48009/3_iis_2021_298-316

Bento, S., Pereira, L., Gonçalves, R., Dias, Á. (2022). Artificial intelligence in project management: systematic literature review. *International Journal of Technology Intelligence and Planning*, *13*(2), 143. https://doi.org/10.1504/IJTIP.2022.126841

Bharati, A., & Sandbrink, C. (2024). The Implementation of Artificial Intelligence in Project Management. In M. Schrenk, T. Popovich, P. Zeile, P. Elisei, C. Beyer, J. Ryer, & H. R. Kaufmann (Eds.), *Keep on Planning for the Real World: Climate Change calls for Nature-based Solutions and Smart Technologies*. REAL CORP 2024. https://doi.org/10.48494/REALCORP2024.0078

Bhattacharya, S., & Sachdev, B. K. (2024). Regulatory Challenges and Opportunities for Future Fintech and Green Finance. In *Information Systems Engineering and Management* (7), 103–122. https://doi.org/10.1007/978-3-031-70219-8_7

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101. https://doi.org/10.1191/1478088706qp063oa

Broesch, T., Crittenden, A. N., Beheim, B. A., Blackwell, A. D., Bunce, J. A., Colleran, H., Hagel, K., Kline, M., McElreath, R., Nelson, R. G., Pisor, A. C., Prall, S., Pretelli, I., Purzycki, B., Quinn, E. A., Ross, C., Scelza, B., Starkweather, K., Stieglitz, J., & Mulder, M. B. (2020). Navigating cross-cultural research: methodological and ethical considerations. In S. Barrett (Ed.), *Proceedings of the Royal Society B: Biological Sciences* (Vol. 287, Issue 1935, p. 20201245). Royal Society Publishing. https://doi.org/10.1098/rspb.2020.1245

Chatterjee, S., Khorana, S., & Kizgin, H. (2022). Harnessing the Potential of Artificial Intelligence to Foster Citizens' Satisfaction: An empirical study on India.

*Government Information Quarterly*, *39*(4), 101621. https://doi.org/10.1016/J.GIQ.2021.101621

Creswell, J., & Poth, C. (2018). *Qualitative Inquiry & Research Design* (4th ed.), SAGE.

Cubric, M. (2020). Drivers, barriers and social considerations for AI adoption in business and management: A tertiary study. *Technology in Society*, *62*, 101257. https://doi.org/10.1016/J.TECHSOC.2020.101257

Díaz-Rodríguez, N., Del Ser, J., Coeckelbergh, M., López de Prado, M., Herrera-Viedma, E., & Herrera, F. (2023). Connecting the dots in trustworthy Artificial Intelligence: From AI principles, ethics, and key requirements to responsible AI systems and regulation. *Information Fusion*, *99*, 101896. https://doi.org/10.1016/j.inffus.2023.101896

Diem, G. (2021). *Agile and traditional project management : comparing agile, traditional and hybrid project management practices* [unpublished PhD dissertation] [Edinburgh Business School]. https://www.ros.hw.ac.uk/handle/10399/4425

Doyle, L., McCabe, C., Keogh, B., Brady, A., & McCann, M. (2020). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, *25*(5), 443–455. https://doi.org/10.1177/1744987119880234

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *57*, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Findler, F., & Martinuzzi, A. (2024). Managing projects for sustainable innovation. In *Research Handbook on Sustainable Project Management* (*14*)4, 48–67. https://doi.org/10.4337/9781800885455.00013

Gaborov, M., Karuović, D., Kavalic, M., Radosav, D., Milosavljev, D., Stanisaljev, S., & Bushati, J. (2021). Comparative analysis of agile and traditional methodologies in IT project management. *Journal of Applied Technical and Educational Sciences*, *11*(4), 1–24. https://doi.org/https://doi.org/10.24368/jates.v11i4.279

Gemino, A., Horner Reich, B., & Serrador, P. M. (2021). Agile, Traditional, and Hybrid Approaches to Project Success: Is Hybrid a Poor Second Choice? *Project Management Journal*, *52*(2), 161–175. https://doi.org/10.1177/8756972820973082

Ghimire, S., & Sagri, G. S. (2024). The Role of AI in Project Management [Vaasan Ammattikorkeakoulu University of Applies Sciences]. In Vaasan Ammattikorkeakoulu University of Applies Sciences. http://www.theseus.fi/handle/10024/865881

Gil, Y., Garijo, D., Khider, D., Knoblock, C. A., Ratnakar, V., Osorio, M., Vargas, H., Pham, M., Pujara, J., Shbita, B., Vu, B., Chiang, Y.-Y., Feldman, D., Lin, Y., Song, H., Kumar, V., Khandelwal, A., Steinbach, M., Tayal, K., … Shu, L. (2021). Artificial Intelligence for Modeling Complex Systems: Taming the Complexity of Expert Models to Improve Decision Making. *ACM Transactions on Interactive Intelligent Systems*, *11*(2), 1–49. https://doi.org/10.1145/3453172

Gonçalves, S., Gonçalves, J., & Marques, C. (2021). *Manual de Investigação Qualitativa* (1ª Ed). PACTOR.

Guo, K., & Zhang, L. (2022). Multi-objective optimization for improved project management: Current status and future directions. *Automation in Construction*, *139*, 104256. https://doi.org/10.1016/j.autcon.2022.104256

Gupta, R. K., Shukla, S., Rajan, A. T., & Aravind, S. (2022). Leveraging Data Analytics to Improve User Satisfaction for Key Personas: The Impact of Feedback Loops. *International Journal for Research Publication and Seminar*, *11*(4), 242–252. https://doi.org/10.36676/jrps.v11.i4.1489

Hair, J. F., & Sarstedt, M. (2021). Explanation Plus Prediction—The Logical Focus of Project Management Research. *Project Management Journal*, *52*(4), 319–322. https://doi.org/10.1177/8756972821999945

Hasan, M. A., & Raza, M. T. (2024). The Impact of Artificial Intelligence on Civil Engineering Project Management. *International Journal of Novel Research in Engineering and Science*, *11*(1), 87–99. https://doi.org/https://doi.org/10.5281/zenodo.13220223

Jain, N. (2021). Survey Versus Interviews: Comparing Data Collection Tools for Exploratory Research. *The Qualitative Report*, *26*(2), 541–554. https://doi.org/10.46743/2160-3715/2021.4492

Johri, P., Khatri, S. K., Al-Taani, A. T., Sabharwal, M., Suvanov, S., & Kumar, A. (2021). Natural Language Processing: History, Evolution, Application, and Future Work. In A. Abraham, O. Castillo, & D. Virmani (Eds.), *Proceedings of 3rd International Conference on Computing Informatics and Networks* (Vol. 167, pp. 365–375). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/978-981-15-9712-1_31

Kaggwa, S., Eleogu, T. F., Okonkwo, F., Farayola, O. A., Uwaoma, P. U., & Akinoso, A. (2024). AI in Decision Making: Transforming Business Strategies. *International Journal of Research and Scientific Innovation*, *X*(XII), 423–444. https://doi.org/10.51244/IJRSI.2023.1012032

Karamthulla, M. J., Malaiyappan, J. N. A., Muthusubramanian, M., Ranjan, R., & Tillu, R. (2024). From Theory to Practice: Implementing AI Technologies in Project Management. *International Journal for Multidisciplinary Research*, *6*(2), 1–11. https://doi.org/10.17613/vm9fw-yvq59

Kisselburgh, L., & Beever, J. (2022). The Ethics of Privacy in Research and Design: Principles, Practices, and Potential. In B. P. Knijnenburg, X. Page, P. Wisniewski, H. R. Lipford, N. Proferes, & J. Romano (Eds.), *Modern Socio-Technical Perspectives on Privacy* (pp. 395–426). Springer International Publishing. https://doi.org/10.1007/978-3-030-82786-1_17

Klontzas, M. E., Fanni, S. C., & Neri, E. (2023). Imaging Informatics for Healthcare Professionals. In P. van Ooijen, E. R. Ranschaert, A. Trianni, & M. E. Klontzas (Eds.), *Introduction to Artificial Intelligence* (pp. 69–85). Springer.

Korke, P., Gobinath, R., Shewale, M., & Khartode, B. (2023). Role of Artificial Intelligence in Construction Project Management. *E3S Web of Conferences*, *405*, 04012. https://doi.org/10.1051/e3sconf/202340504012

Kristian, A., Goh, T., Ramadan, A., Erica, A., & Sihotang, S. (2024). Application of AI in Optimizing Energy and Resource Management: Effectiveness of Deep Learning Models. *International Transactions on Artificial Intelligence 2*(2), 99–105. https://doi.org/10.33050/italic.v2i2.530

Kvale, S. (2007). *Doing Interviews*. SAGE Publications, Ltd. https://doi.org/10.4135/9781849208963

Lauriola, I., Lavelli, A., & Aiolli, F. (2022). An introduction to Deep Learning in Natural Language Processing: Models, techniques, and tools. *Neurocomputing*, *470*, 443–456. https://doi.org/10.1016/j.neucom.2021.05.103

Li, J., Herdem, M. S., Nathwani, J., & Wen, J. Z. (2023). Methods and applications for Artificial Intelligence, Big Data, Internet of Things, and Blockchain in smart energy management. *Energy and AI*, *11*, 100208. https://doi.org/10.1016/j.egyai.2022.100208

Li, Z. (2024). Ethical Frontiers in Artificial Intelligence: Navigating the Complexities of Bias, Privacy, and Accountability. *International Journal of Engineering and Management Research*, *14*(3). https://doi.org/10.5281/ZENODO.12792741

McGrath, J., & Kostalova, J. (2020). Project Management Trends and New Challenges 2020+. In P. Maresova, P. Jedlicka, K. Firlej, & I. Soukal (Eds.), *Proceedings of the international scientific conference Hradec Economic Days 2020* (Vol. 10, pp. 534–542). University of Hradec Kralove. https://doi.org/10.36689/uhk/hed/2020-01-061

McGregor, S. (2021). Preventing Repeated Real World AI Failures by Cataloging Incidents: The AI Incident Database. In Q. Yang (Ed.), *Proceedings of the AAAI Conference on Artificial Intelligence* (Vol. 35, Issue 17, pp. 15458–15463). Association for the Advancement of Artificial Intelligence. https://doi.org/10.1609/aaai.v35i17.17817

Miller, G. (2021). Artificial Intelligence Project Success Factors: Moral Decision-Making with Algorithms. In M. Ganzha, L. Maciaszek, & M. Paprzycki (Eds.), *Proceedings of the 16th Conference on Computer Science and Intelligence Systems, FedCSIS 2021* (pp. 379–390). Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.15439/2021F26

Mishra, A., Tripathi, A., & Khazanchi, D. (2022). A Proposal for Research on the Application of AI/ML in ITPM. *International Journal of Information Technology Project Management*, *14*(1), 1–9. https://doi.org/10.4018/IJITPM.315290

Mizambekov, C. (2024). Strategies for Reducing Costs in Custom Software Development: Leveraging Modern Technologies for Competitive Advantage.

*Journal of Current Science and Research Review*, *2*(3), 99–112. https://jcsrr.org/index.php/jcsrr

Nagarhalli, T. P., Vaze, V., & Rana, N. K. (2021). Impact of Machine Learning in Natural Language Processing: A Review. In T. Kurzweg (Ed.), *2021 Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV)* (pp. 1529–1534). IEEE. https://doi.org/10.1109/ICICV50876.2021.9388380

Neumann, O., Guirguis, K., & Steiner, R. (2024). Exploring artificial intelligence adoption in public organizations: a comparative case study. *Public Management Review*, *26*(1), 114–141. https://doi.org/10.1080/14719037.2022.2048685

Niederman, F. (2021). Project management: openings for disruption from AI and advanced analytics. *Information Technology & People*, *34*(6), 1570–1599. https://doi.org/10.1108/ITP-09-2020-0639

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *16*(1), 1–13. https://doi.org/10.1177/1609406917733847

Okolo, C. T. (2020). AI in the “Real World”: Examining the Impact of AI Deployment in Low-Resource Contexts. In C. Ashurst, R. Campbell, D. Raji, S. Barocas, & S. Russell (Eds.), *Navigating the Broader Impacts of AI Research*. NeurIPS. https://doi.org/https://doi.org/10.48550/arXiv.2012.01165

Olan, F., Ogiemwonyi Arakpogun, E., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, *145*, 605–615. https://doi.org/10.1016/j.jbusres.2022.03.008

Pantano, E. (2019). The role of smart technologies in decision making: developing, supporting and training smart consumers. *Journal of Marketing Management*, *35*(15–16), 1367–1369. https://doi.org/10.1080/0267257X.2019.1688927

Peddisetty, N., & Reddy, A. K. (2024). Leveraging Artificial Intelligence for Predictive Change Management in Information Systems Projects. *Distributed Learning and Broad Applications in Scientific Research*, *10*, 88–94. https://dlabi.org/index.php/journal/article/view/56

Peres, R. S., Jia, X., Lee, J., Sun, K., Colombo, A. W., & Barata, J. (2020). Industrial Artificial Intelligence in Industry 4.0 -Systematic Review, Challenges and Outlook. *IEEE Access*, *8*, 220121–220139. https://doi.org/10.1109/ACCESS.2020.3042874

Pietilä, A.-M., Nurmi, S.-M., Halkoaho, A., & Kyngäs, H. (2020). Qualitative Research: Ethical Considerations. In H. Kyngäs, K. Mikkonen, & M. Kääriäinen (Eds.), *The Application of Content Analysis in Nursing Science Research* (pp. 49–69). Springer International Publishing. https://doi.org/10.1007/978-3-030-30199-6_6

Podgórska, M., & Pichlak, M. (2019). Analysis of project managers' leadership competencies. *International Journal of Managing Projects in Business*, *12*(4), 869–887. https://doi.org/10.1108/IJMPB-08-2018-0149

Rana, N. P., Chatterjee, S., Dwivedi, Y. K., Akter, S., Mikalef, P., Popovic, A., Lundström, J. E., & Conboy, K. (2022). Understanding dark side of artificial intelligence (AI) integrated business analytics: assessing firm's operational inefficiency and competitiveness. *European Journal of Information Systems*, *31*(3), 364–387. https://doi.org/10.1080/0960085X.2021.1955628

Rodgers, W., Murray, J. M., Stefanidis, A., Degbey, W. Y., & Tarba, S. Y. (2023). An artificial intelligence algorithmic approach to ethical decision-making in human resource management processes. *Human Resource Management Review*, *33*(1), 100925. https://doi.org/10.1016/J.HRMR.2022.100925

Rodrigues, R. (2020). Legal and human rights issues of AI: Gaps, challenges and vulnerabilities. *Journal of Responsible Technology*, *4*, 100005. https://doi.org/10.1016/J.JRT.2020.100005

Sarker, I. H. (2022). AI-Based Modeling: Techniques, Applications and Research Issues Towards Automation, Intelligent and Smart Systems. *SN Computer Science*, *3*(2), 1–20. https://doi.org/10.1007/s42979-022-01043-x

Senarath, S. M. D. V. T. (2024). *Examine the Potential of Artificial Intelligence in Enhancing Project Management Agility: Concerning Norwegian Companies* [University of South-Eastern Norway]. https://openarchive.usn.no/usn-xmlui/handle/11250/3154975

Shang, G., Low, S. P., & Lim, X. Y. V. (2023). Prospects, drivers of and barriers to artificial intelligence adoption in project management. *Built Environment Project and Asset Management*, *13*(5), 629–645. https://doi.org/10.1108/BEPAM-12-2022-0195

Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2022). Implementing challenges of artificial intelligence: Evidence from public manufacturing sector of an emerging economy. *Government Information Quarterly*, *39*(4), 101624. https://doi.org/10.1016/J.GIQ.2021.101624

Siedlecki, S. (2020). Understanding Descriptive Research Designs and Methods. *Clinical Nurse Specialist CNS*, *34*, 8–12. https://doi.org/10.1097/NUR.0000000000000493

Sithambaram, J., Nasir, M. H. N. B. M., & Ahmad, R. (2021). Issues and challenges impacting the successful management of agile-hybrid projects: A grounded theory approach. *International Journal of Project Management*, *39*(5), 474–495. https://doi.org/10.1016/J.IJPROMAN.2021.03.002

Sjödin, D., Parida, V., Palmié, M., & Wincent, J. (2021). How AI capabilities enable business model innovation: Scaling AI through co-evolutionary processes and feedback loops. *Journal of Business Research*, *134*, 574–587. https://doi.org/10.1016/J.JBUSRES.2021.05.009

Sodhi, M. M. S., Seyedghorban, Z., Tahernejad, H., & Samson, D. (2022). Why emerging supply chain technologies initially disappoint: Blockchain, IoT, and AI. *Production and Operations Management*, *31*(6), 2517–2537. https://doi.org/10.1111/POMS.13694/ASSET/IMAGES/LARGE/10.1111_POMS.13694-FIG2.JPEG

Some, L. (2023). *Automated decision-making in project management*. Stockholm University.

Stan, N.-M., Predescu, A. B., & Titu, A. M. (2024). Market Trends in 2024 in the IT Project Management Industry. *Journal of Research and Innovation for Sustainable Society*, *6*(2), 26–33. https://doi.org/10.33727/JRISS.2024.2.3:26-33

Stanciu, O., Bodea, C.-N., & Mitea, C. (2020). Artificial Intelligence Adoption in Project Management: Main Drivers, Barriers and Estimated Impact. In A. M. Dima (Ed.),

*Proceedings of the International Conference on Economics and Social Sciences* (pp. 758–767). Sciendo. https://doi.org/10.2478/9788395815072-075

Statistica. (2024). *Artificial Intelligence - Global | Statista Market Forecast*. Statistica Market Insights. https://www.statista.com/outlook/tmo/artificial-intelligence/worldwide

Sunny, M., Sakil, M., Nahian, A., & Atayeva, J. (2024). *Project Management and Visualization Techniques A Details Study*. *13*(5), 28–44. https://www.irjes.com/Papers/vol13-issue5/13052844.pdf

Swift, A. (2022). Being Creative with Resources in Qualitative Research. In *The SAGE Handbook of Qualitative Research Design* (pp. 290–306). SAGE Publications Ltd. https://doi.org/10.4135/9781529770278.n19

Taboada, I., Daneshpajouh, A., Toledo, N., & de Vass, T. (2023). Artificial Intelligence Enabled Project Management: A Systematic Literature Review. *Applied Sciences*, *13*(8), 5014. https://doi.org/10.3390/app13085014

Varona, D., & Suárez, J. L. (2022). Discrimination, Bias, Fairness, and Trustworthy AI. *Applied Sciences*, *12*(12), 5826. https://doi.org/10.3390/app12125826

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, *33*(6), 1237–1266. https://doi.org/10.1080/09585192.2020.1871398

Wamba-Taguimdje, S.-L., Fosso Wamba, S., Kala Kamdjoug, J. R., & Tchatchouang Wanko, C. E. (2020). Influence of artificial intelligence (AI) on firm performance: the business value of AI-based transformation projects. *Business Process Management Journal*, *26*(7), 1893–1924. https://doi.org/10.1108/BPMJ-10-2019-0411

Yaseen, Z. M., Ali, Z. H., Salih, S. Q., & Al-Ansari, N. (2020). Prediction of Risk Delay in Construction Projects Using a Hybrid Artificial Intelligence Model. *Sustainability*, *12*(4), 1514. https://doi.org/10.3390/su12041514

Yin, R. (2016). Qualitative Research from Start to Finish. In *Family and Consumer Sciences Research Journal* (2nd ed., Vol. 44, Issue 3). The Guilford Press.

Zadeh, E., Khoulenjani, A., & Safaei, M. (2024). Integrating AI for Agile Project Management: Innovations, Challenges, and Benefits. *International Journal of Industrial Engineering and Construction Management*, *13*(5), 28–44. https://www.researchgate.net/publication/382241441_Integrating_AI_for_Agile_Project_Management_Innovations_Challenges_and_Benefits

Zhang, A., Walker, O., Nguyen, K., Dai, J., Chen, A., & Lee, M. K. (2023). Deliberating with AI: Improving Decision-Making for the Future through Participatory AI Design and Stakeholder Deliberation. In J. Nichols (Ed.), *Proceedings of the ACM on Human-Computer Interaction* (Vol. 7, Issue CSCW1, pp. 1–32). ACMPUB27New York, NY, USA. https://doi.org/10.1145/3579601

## APPENDICES

Interview Answers

#1

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| Alex C., 38. IT Business.<br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room and before lunch time. | |
| #1 | AI is basically a tool that helps take some of the heavy lifting off your plate—whether that's analyzing data, automating repetitive tasks, or even spotting patterns you might miss. For project management, this means smarter scheduling, better resource allocation, and having a "second brain" to flag risks. It's like having a super-organized assistant who's always looking out for you. |
| #2 | I've used tools like Jira's AI-driven risk detection and Microsoft Project's scheduling suggestions. ChatGPT has been surprisingly useful for brainstorming ideas or drafting communications. These tools save time and often give insights I wouldn't have thought of on my own. |
| #3 | Oh, absolutely! One time, during a cloud migration project, I used an AI-powered scheduling tool that analyzed team availability across time zones. It suggested shuffling tasks around, and that saved us from overloading one group while another had downtime. It felt like the tool was almost thinking ahead for us, and it led to a smoother process overall. We delivered on time, and the client was thrilled. |
| #4 | AI takes the guesswork out of decision-making. Imagine you're juggling ten different priorities. Instead of flipping a coin or relying purely on gut instinct, AI can look at past data, analyze risks, and recommend the best course of action. For example, an AI tool flagged a resource bottleneck in a project plan I was reviewing, so I could adjust staffing before it became a crisis. |

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| #5 | Absolutely! A tool we used once analyzed team capacity and suggested reallocations that saved weeks on a timeline. It's like having a really smart advisor who can instantly calculate the impact of every change. The efficiency gains aren't just about time savings, though—they also reduce stress for everyone involved. |
| #6 | On one project, we used an AI tool to predict risks in a complex supply chain integration. It flagged dependencies we hadn't noticed, which could've caused a two-week delay. Because we caught it early, we adjusted the schedule, and the project stayed on track. We measured success by hitting milestones on time and within budget. |
| #7 | No way. AI is great at crunching numbers and spotting patterns, but it doesn't have the nuance of human intuition. For example, AI might suggest pushing deadlines to maximize output, but it won't understand that the team's morale is already low. Humans bring empathy and creativity to the table, which AI just can't replicate. |
| #8 | Biggest challenge? Getting everyone on board. People often worry AI will replace their jobs, so there's resistance. Another issue is data quality—if your input data that isn't good, the AI's output will be garbage. To tackle this, I focused on training sessions to show the team how AI helps them and made sure we cleaned up our data before implementing anything. |
| #9 | It's a mixed bag. Some are excited because it makes their work easier, while others are skeptical or worried about losing the "human touch". What helps is showing them quick wins, like how an AI tool can save hours on tedious tasks. That usually gets people to warm up to it. |
| #10 | Definitely. A lot of people in traditional organizations view AI as this black-box tech that's too complex to trust. The key to breaking that barrier is transparency—explaining how the AI works and showing real examples of its benefits. |
| #11 | You need to start small. Run a pilot project to show how AI can solve a specific problem, then share those results widely. Also, frame AI as something that helps |

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| | people do their jobs better, not something that replaces them. Involve teams in the implementation process so they feel like they're part of the change. |
| #12 | Bias in AI is a big one. If the AI is trained on biased data, it could reinforce unfair practices. For example, in one project, we realized an AI tool was favoring senior team members for certain tasks, which wasn't fair to junior staff. We worked with the vendor to tweak the algorithm to balance workload distribution. |
| #13 | At the end of the day, it's always the human who's accountable. AI might provide recommendations, but someone has to sign off on them. It's important to have clear governance in place to make sure there's a human review process. |
| #14 | AI lacks emotional intelligence. For instance, it might suggest squeezing in more tasks to hit a deadline but won't recognize that the team is already burnt out. That's where human oversight comes in—we can balance efficiency with empathy. |
| #15 | Start with transparency—teams need to understand how the AI works and what its limitations are. Regularly audit AI tools to ensure they're fair and unbiased. And always involve diverse perspectives when designing or implementing AI systems. |
| #16 | I think AI will become more integrated into day-to-day tools, helping with real-time insights and decision-making. It'll take over routine tasks, giving project managers more time to focus on strategy and leadership. Imagine AI dashboards that not only track progress but also suggest how to fix delays as they happen. |
| #17 | Project managers will need to become tech-savvy—understanding how AI works and how to use it effectively. Instead of focusing on task management, we'll spend more time guiding teams, resolving conflicts, and making judgment calls on AI-driven insights. |
| #18 | I'm excited about AI for predictive analytics and dynamic scheduling. AI-driven chatbots are also getting better—they'll likely handle routine stakeholder updates |

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| | soon. Another big trend is using AI to analyze team sentiment through email and chat tools to detect potential issues early. |
| #19 | There's a risk of over-relying on AI and losing sight of the human side of projects. For example, AI might optimize for speed, but at what cost to team morale or creativity? Balance is key—AI can assist, but humans need to stay in charge. |
| #20 | Organizations need to treat AI as a partner, not a replacement. Use it for the heavy data lifting and repetitive tasks, but keep humans at the center for creativity, relationship-building, and big-picture thinking. Training teams to use AI effectively while emphasizing their unique strengths is the sweet spot. |

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| Alex M., 40. IT Business<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview by the end of a work day. | |
| #1 | AI in project management is essentially about leveraging machine learning, automation, and data analytics to make smarter, faster decisions. It can be applied to tasks like resource allocation, risk assessment, timeline forecasting, and even automating routine tasks like reporting. AI's power lies in its ability to process massive amounts of data and identify patterns that might not be obvious to the human eye. |
| #2 | I've worked with tools like Trello integrated with AI-based plugins for task prioritization and Jira, where AI features help in issue tracking and prediction of delivery dates. These tools have streamlined communication and task management within teams. The biggest impact I've seen is the reduction in manual work, leaving me and my team to focus more on creative problem-solving. |
| #3 | There was this one project where we were developing a mobile app for a client. By integrating AI tools for project tracking, the system predicted potential delays in our sprint cycles. Based on these predictions, we were able to reallocate resources ahead of time, which ultimately kept us on schedule. The project was completed within budget, and we even exceeded some of the client's expectations. |
| #4 | AI can massively improve decision-making by providing data-backed insights. For example, if a project is facing delays, AI tools can analyze past data and recommend adjustments, like shifting resources or revising timelines, to mitigate risks. In one project, AI identified that our team was underestimating the time required for quality assurance, which helped us adjust timelines before they became critical. |
| #5 | Yes, I've definitely seen improvements in project efficiency. By automating scheduling and tracking tasks, our team spends less time on administrative work. |

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| | One project, for instance, used AI-driven resource optimization, which resulted in better workload balance across the team, leading to quicker turnaround times and improved delivery quality. |
| #6 | In a recent project, we used an AI-powered tool to analyze project data and predict possible risks. The tool helped identify a potential budget overrun before it became an issue. This led us to revisit vendor contracts and negotiate better terms. We measured this impact through budget adherence, team satisfaction, and client feedback—ultimately, the project was delivered under budget and on time. |
| #7 | I don't think AI can fully replace human decision-making in project management. While AI is great at processing data and suggesting actions, the human element—especially in areas like team dynamics, client relations, and creativity—can't be replicated by AI. A good project manager still needs to make judgment calls based on intuition, experience, and emotional intelligence. |
| #8 | One obstacle was getting the team to trust AI's recommendations. We had to take time to show them the AI tools in action, especially with forecasting and resource allocation. Once they saw how much more accurate the AI was compared to traditional methods, they warmed up to it. It's all about building that trust in technology. |
| #9 | The team is generally open to adopting AI, but it depends on how well we integrate it into their workflow. For example, when AI tools helped reduce mundane tasks like reporting, they were on board quickly. The key factors here are transparency and ensuring the tools genuinely improve their day-to-day work. |
| #10 | One challenge has been the resistance from upper management, who were initially skeptical about AI tools because of the upfront investment and the perceived risks. To overcome this, we demonstrated small wins—like AI-enhanced project timelines—before scaling up. Providing evidence of tangible results helped shift their perspective. |

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| #11 | To ease the resistance, I would recommend a phased approach, where AI is introduced in non-critical areas first. Training and continuous support are crucial. Showing the team that AI is a tool to assist, not replace, their skills also helps. |
| #12 | AI decisions can sometimes seem "too data-driven," which might overlook the human impact of certain choices. For instance, an AI tool could recommend cutting corners in quality to save time, but that could affect the user experience. Ensuring that AI tools align with company ethics and human-centric decision-making is vital. |
| #13 | AI can assist with decision-making, but ultimately, the responsibility lies with the project manager and team. We can't let AI take the blame if things go wrong. The key is to use AI as an advisor, not a decision-maker, and ensure there's a clear framework for human oversight. |
| #14 | AI doesn't have the emotional intelligence or intuition that humans do. For example, AI might suggest reallocating resources, but it can't sense team morale or other subtle dynamics that might make the change impractical. While AI helps streamline processes, I still rely on my instincts to gauge team energy and interpersonal factors. |
| #15 | Organizations should establish a clear ethical framework for AI adoption, ensuring transparency in AI decision-making processes. It's also important to regularly audit AI tools to ensure they align with ethical standards, and have contingency plans in place if the AI starts making decisions that deviate from company values. |
| #16 | Over the next few years, I see AI being deeply integrated into project management tools, focusing more on predictive analytics and enhancing decision-making. AI will become a more proactive part of project planning, helping to identify risks and opportunities before they happen. |
| #17 | As AI takes over more of the data analysis and routine tasks, project managers will shift towards more strategic roles. We'll be focusing more on creativity, team development, and client relationships, leaving the data-heavy tasks to AI. |

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| #18 | I think AI tools focused on risk prediction, automated decision-making, and collaboration management will become essential. AI-powered virtual assistants that help manage schedules, track progress, and even analyze team performance will play a significant role. |
| #19 | My concern is that over-reliance on AI could lead to a lack of nuanced decision-making. AI can suggest actions based on data, but it might miss out on human elements like intuition, empathy, and understanding the broader context. This could lead to decisions that aren't in the best interest of the project or team. |
| #20 | Organizations should focus on creating a synergy between AI and human abilities. AI can handle repetitive tasks and data analysis, while project managers can focus on creativity, leadership, and interpersonal skills. Training teams to work alongside AI will ensure both the tech and human skills are leveraged effectively. |

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| Alex P., 38. IT Business<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview early in the morning of a weekend. | |
| #1 | AI, to me, is all about machines learning to perform tasks that usually require human intelligence, like analyzing data, recognizing patterns, or making predictions. In project management, it's being used for automating tasks, predicting project risks, allocating resources, and even forecasting project timelines. |
| #2 | I've worked with tools like Microsoft Project with AI integrations, and chatbots for team queries. They've made planning and tracking a lot easier by automating repetitive tasks and providing real-time insights into project health. |
| #3 | I remember using an AI-driven risk management tool during a software implementation project. It flagged potential delays based on historical data and helped us redirect resources to critical tasks. The project finished on time, and the tool's predictions were eerily accurate. |
| #4 | AI helps cut through the noise by analyzing vast amounts of data quickly. For example, AI-based sentiment analysis tools can gauge team morale from chat logs, enabling proactive measures to address any dips in engagement. |
| #5 | Absolutely! AI-powered resource optimization tools reduced our project costs by 15% on one assignment by matching skills to tasks more effectively. It also freed up time for me to focus on strategic planning. |
| #6 | Success metrics often include project completion rates, budget adherence, and team productivity. For instance, after implementing AI in scheduling, we improved on-time delivery by 20%. |
| #7 | Not fully. AI is great for data-driven decisions, but project management requires empathy, negotiation, and nuanced judgment that machines can't replicate. |

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| #8 | One challenge was the steep learning curve for the team. To address it, we organized hands-on workshops to ensure everyone felt confident using the tools. |
| #9 | Most of my team is curious but cautious. Demonstrating quick wins with AI—like faster report generation—helped them embrace it more enthusiastically. |
| #10 | Resistance often comes from fear of job displacement. Transparent communication about AI as a support tool rather than a replacement has been key to easing concerns. |
| #11 | Showcasing success stories, involving the team in tool selection, and providing training can help overcome resistance. It's about showing how AI makes their work easier, not harder. |
| #12 | Bias in algorithms is a big one. For example, relying solely on AI for resource allocation might overlook diversity or inclusion factors. Human oversight is crucial here. |
| #13 | Responsibility should always rest with humans. We can treat AI as an advisor but ensure decision-makers validate and own the final calls. |
| #14 | This can lead to rigid solutions. For instance, AI might suggest cutting a "low-priority" task, not understanding its value to team morale. Balancing tech with human judgment is critical. |
| #15 | Transparency in algorithms, accountability measures, and regular audits are essential. Also, ethical considerations should be part of the tool selection criteria. |
| #16 | I see AI becoming a co-pilot for project managers, handling data-heavy tasks while we focus on strategic and interpersonal aspects. Think of it as a digital assistant. |
| #17 | PMs will become more strategic, focusing on leadership, communication, and innovation while AI takes care of the nitty-gritty details. |

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| #18 | Predictive analytics and natural language processing are exciting. Imagine AI tools analyzing meeting transcripts to suggest actionable steps or risks. |
| #19 | Over-reliance on AI could lead to cookie-cutter decisions. Ensuring human oversight will be critical to maintaining creativity and context in project decisions. |
| #20 | Organizations need to position AI as an enabler, not a replacement. Training in soft skills and fostering collaboration will ensure that technology complements, rather than competes with, human expertise. |

#4

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| Alex R., 43. IT Business<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview by the end of a workday. | |
| #1 | AI in project management is like having a super-smart assistant. It takes care of the repetitive, time-consuming stuff—like data analysis, risk prediction, and task automation—so you can focus on the bigger picture. It's incredibly versatile, helping with realistic timeline planning, budget tracking, and even understanding team morale through sentiment analysis. It doesn't replace people; it just enhances what we can do. |
| #2 | I've worked with tools like Jira's AI-powered plugins, and predictive analytics platforms. They've streamlined workflows, reduced errors, and helped me focus on strategy instead of micromanagement. For example, I've used AI-powered tools to assess system dependencies during migrations, saving us from potential downtime and chaos. |
| #3 | Sure! One time, we were managing a large e-commerce platform upgrade, and there was so much going on that keeping track of dependencies was a nightmare. We used an AI tool that flagged interdependencies between modules and suggested an optimized order for deployment. At first, we were skeptical, but we followed its recommendations, and it prevented a critical conflict that would have caused a major delay. Another instance was during a project review. An AI-driven sentiment analysis tool highlighted areas of dissatisfaction within the team that we hadn't picked up on in meetings. This insight allowed us to address concerns proactively, improving morale and productivity. Both outcomes reinforced the value AI brings to project management. |
| #4 | AI enhances decision-making by providing insights rather than just raw data. It can model scenarios, recognize patterns, and even highlight team dynamics through |

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| | sentiment analysis. For instance, it might show that a team's workload is affecting morale, giving me the chance to make adjustments before productivity drops. |
| #5 | Absolutely. Automating status reports with a bot saved my team hours each week. We could focus on solving actual issues instead of getting bogged down in admin work. In one project, AI optimization of resource allocation led to a 20% increase in overall project efficiency. |
| #6 | In a software deployment, a machine learning tool prioritized risks, cutting delays by close to 20%. We measured success through adherence to timelines, budget variance, and stakeholder satisfaction, all of which improved significantly. |
| #7 | No way. AI is fantastic for spotting trends and making recommendations, but it lacks human intuition, creativity, and empathy. It might flag a resource issue, but it won't know that someone on the team is already stretched thin emotionally. That's why humans will always have the final say. |
| #8 | Integrating AI with legacy systems has been tricky, and some team members worry about job security. We tackled this by starting small with pilot projects and offering plenty of training. Once people saw the benefits, their resistance softened. |
| #9 | It's been a mix. Some team members are excited by the possibilities, while others worry about being replaced. Transparent communication and involving them in the selection and implementation process have been key to building trust. |
| #10 | The "we've always done it this way" mindset can be a big barrier. In one organization, leaders were hesitant about AI-driven risk management. Hosting workshops to demonstrate quick wins and tangible benefits helped change their perspective. |
| #11 | Starting with low-stakes pilot projects and sharing success stories works wonders. Educating teams on how AI supports rather than replaces their work is another effective strategy. Involving everyone in the process builds buy-in. |

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| #12 | Bias in AI models is a major concern. If a tool is trained on biased data, it can lead to unfair decisions, like favoring certain profiles for tasks. To prevent this, I always advocate for diverse datasets and regular audits of AI recommendations. |
| #13 | The project manager should always remain accountable. AI can suggest actions, but it's up to humans to ensure those actions align with the project's goals and values. Clear guidelines on decision ownership are essential. |
| #14 | AI doesn't understand emotions or context. For example, it might assign tasks purely based on efficiency without considering if someone on the team is close to burnout. This is why human oversight is so important to balance AI-driven decisions. |
| #15 | Organizations need to focus on transparency, bias mitigation, and regular audits. Make sure stakeholders know how AI decisions are made, and establish clear processes for reviewing and adjusting those decisions when needed. |
| #16 | AI will take over more administrative and analytical tasks, like scheduling and risk analysis, allowing project managers to focus on leadership and strategy. It'll be more like a co-pilot than just a tool. |
| #17 | Project managers will become strategists and team enablers, relying on AI for insights while focusing on big-picture goals, stakeholder relationships, and team morale. The role will shift from micromanaging to leading with vision. |
| #18 | Digital twins are exciting—they let you simulate a project before it starts. Real-time analytics and generative AI for tasks like report writing or brainstorming solutions are also trends I think will be game-changers. |
| #19 | Over-automation worries me. If we rely too much on AI, we risk missing qualitative factors like team morale or client relationships. A balanced approach, where humans provide the context and intuition, is essential. |

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| #20 | Organizations need to focus on training teams in soft skills like communication and problem-solving while using AI to handle the repetitive, data-heavy tasks. This way, AI and humans can complement each other perfectly. |

#5

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| Alex J., 40. IT Business<br><br>Interview conducted via Zoom, as per the subject's request. In their workplace, during a lunch break. | |
| #1 | To me, artificial intelligence means using systems or machines that can analyze data, learn patterns, and perform tasks that typically require human intelligence. In project management, I see its potential in automating repetitive processes, predicting risks, and even improving decision-making by offering data-driven insights. While I haven't had hands-on experience with sophisticated AI tools, I recognize that it could help managers focus more on strategic planning and less on mundane tasks. |
| #2 | My exposure to AI is more indirect. Tools like Trello, or MS Project, which use automation for task assignments and progress tracking, are as close as I've gotten. They're not fully AI-driven, but they showcase the power of smart systems to improve workflow. For example, these tools suggest task prioritizations based on deadlines, which simplifies planning. |
| #3 | I haven't directly worked with AI-specific tools in projects yet, but I've benefited from basic automation. For example, using scheduling tools that adjust timelines dynamically when a task is delayed has saved my team from confusion and manual updates. While these tools aren't deeply "intelligent," they hint at how smarter systems could transform project management. |
| #4 | I think AI could be a game-changer for decision-making. Imagine a tool that analyzes historical project data and flags patterns suggesting potential risks. For instance, if a project is tracking behind schedule, an AI tool could suggest resource reallocation or highlight dependencies causing delays. This kind of predictive insight could help managers stay ahead of problems rather than reacting to them. |
| #5 | Although I've yet to integrate AI into my workflows, I see its potential. Automated resource tracking, task delegation, and risk analysis could significantly improve project efficiency. For example, if a tool could alert me to overburdened team members and suggest adjustments, it would save time and prevent burnout. |
| #6 | If I were to measure the impact of AI, I'd look at tangible metrics like reduced time spent on repetitive tasks, improved on-time delivery rates, and fewer budget |

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| | overruns. I'd also consider team satisfaction—if AI makes their work easier, that's a big win. |
| #7 | I don't think AI will ever fully replace human decision-making, especially in project management. AI can crunch numbers and offer recommendations, but it lacks the ability to understand team dynamics, corporate culture, or the nuances of human emotions. For example, AI might suggest assigning more tasks to a technically available team member, but only a human manager would know if that person is already feeling overwhelmed. |
| #8 | The biggest challenge I'd anticipate is resistance to change. People might be wary of learning new tools or fear job displacement. There's also the issue of trust—would the team rely on AI recommendations, or would they double-check everything manually? To address this, I'd focus on education, emphasizing how AI can complement their work rather than replace it. |
| #9 | From what I've seen, attitudes toward AI depend on how it's introduced. If a tool is presented as user-friendly and helps reduce workload, most people are open to it. However, if it seems complicated or threatens their role, there's bound to be resistance. A gradual rollout with training and feedback loops can help build trust. |
| #10 | Cultural resistance can be a major hurdle. If leadership doesn't advocate for change or teams feel disconnected from the decision to adopt AI, it's unlikely to succeed. Building a culture of continuous learning and showing quick wins with AI could help break these barriers. |
| #11 | One effective way to reduce resistance is to involve the team early on. Let them test new tools and provide feedback. Also, sharing success stories—whether from within the organization or external examples—can help show the benefits of AI. |
| #12 | I worry about data privacy and bias in AI systems. For instance, if an AI tool prioritizes resources based on flawed data, it could perpetuate inequalities or unfairly allocate tasks. Ensuring transparency and regular audits would help mitigate these risks. |
| #13 | Accountability should remain with the project manager. AI can assist, but final decisions must rest with humans. For example, if an AI tool incorrectly predicts a delay and resources are reallocated unnecessarily, the PM should review and validate such changes before implementing them. |

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| #14 | AI doesn't understand things like team morale or interpersonal conflicts. For example, it might assign tasks purely based on availability without considering that one team member is facing personal challenges. These gaps highlight the need for human oversight in AI-driven processes. |
| #15 | Organizations should establish clear rules on how AI is used, including ensuring fairness in decision-making and protecting sensitive data. Regular training and transparency about how AI systems work can also build trust among team members. |
| #16 | Looking ahead, I believe AI will play a bigger role in risk management and predictive analytics. It might even become a "virtual assistant" for PMs, handling routine tasks and surfacing insights that managers can act on. |
| #17 | As AI takes over repetitive tasks, project managers will need to focus more on leadership and strategy. Emotional intelligence, creativity, and stakeholder management will become even more critical skills. |
| #18 | I see AI-driven resource optimization and sentiment analysis tools as emerging trends. For example, AI might analyze team feedback to identify morale issues before they escalate, which would be invaluable for proactive management. |
| #19 | My concern is that over-relying on AI could lead to a loss of critical thinking. If project managers blindly follow AI recommendations without questioning them, it could result in poor outcomes. Striking a balance between automation and human judgment is key. |
| #20 | AI should be seen as a tool to enhance human capabilities, not replace them. For example, while AI can help plan resources, it's the project manager who ensures the plan aligns with broader goals and team dynamics. Organizations should foster a culture where both AI and human contributions are valued equally. |

#6

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| Alex N., 47. IT Business<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room, after lunch on a weekend. | |
| #1 | To me, artificial intelligence is about machines or systems mimicking human decision-making, learning patterns, and improving processes. In project management, I see its potential in areas like automating routine tasks, analyzing data trends, and providing predictive insights to assist with planning and risk management. My understanding is still developing, but I recognize that AI can add value to a project manager's toolkit. |
| #2 | My experience with AI tools is limited. I've worked with project management software like Microsoft Project and Jira, which incorporate basic automation features. For example, these tools automate task scheduling and send reminders for deadlines, which helps streamline workflow. However, I wouldn't classify them as true AI systems—they're more about automation than intelligence. |
| #3 | I haven't directly used AI-specific tools in my projects. However, I've benefited from automation in scheduling and reporting. For instance, using software that automatically adjusts timelines based on task dependencies has saved me time and reduced errors. This experience makes me optimistic about how more advanced AI could further simplify project management. |
| #4 | AI has the potential to make decision-making more data-driven and precise. For example, it could analyze historical project data to identify patterns and predict potential risks or delays. This kind of insight would allow me to make proactive decisions, such as reallocating resources to avoid bottlenecks or adjusting timelines before issues arise. |
| #5 | While I haven't integrated AI into my projects, I believe it could significantly enhance efficiency. For instance, AI could automate progress tracking and generate reports, freeing up time for more strategic tasks. This would allow project managers to focus on leadership and stakeholder engagement rather than administrative work. |
| #6 | If I were to evaluate the impact of AI, I'd focus on metrics like task completion rates, resource utilization, and on-time delivery. Additionally, tracking time saved on routine |

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| | tasks and team satisfaction with the tools would provide a comprehensive view of its effectiveness. |
| #7 | I don't believe AI can fully replace human decision-making in project management. While AI can analyze data and suggest actions, it doesn't account for human factors like team dynamics or organizational culture. For instance, an AI might recommend a technically optimal solution that isn't feasible due to interpersonal or political considerations. Human oversight is essential to balance technical insights with real-world complexities. |
| #8 | One challenge I foresee is the learning curve associated with adopting new AI tools. Teams might resist change if the tools are too complex or if they fear job displacement. To address this, it's important to provide proper training and demonstrate how AI can make their work easier rather than replace them. |
| #9 | From my experience, team attitudes vary based on familiarity with technology. If a tool is easy to use and clearly beneficial, most team members are open to it. However, if it's perceived as unnecessary or difficult, resistance can grow. A well-structured rollout and involving the team in tool selection can help foster a positive attitude. |
| #10 | Cultural resistance and lack of leadership buy-in are significant barriers to AI adoption. For example, if decision-makers don't prioritize AI initiatives, teams are unlikely to embrace them. Demonstrating quick wins through pilot projects can help build confidence and support. |
| #11 | To overcome resistance, I'd focus on education and transparency. Offering training sessions, sharing success stories, and involving the team in implementation decisions are effective ways to build trust and acceptance. |
| #12 | Ethical concerns include potential biases in AI algorithms and data privacy risks. For example, if an AI tool recommends task assignments based on flawed data, it could inadvertently favor some team members over others. Ensuring fairness, transparency, and regular audits of AI systems would be critical. |
| #13 | Accountability should remain with the project manager, even when using AI tools. AI should act as an advisor, not a decision-maker. For instance, if an AI tool suggests a resource reallocation, the project manager must review and validate the recommendation before acting on it. |

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| #14 | AI's inability to understand emotions or team morale is a limitation. For example, it might assign tasks to a team member who appears available but is already overwhelmed due to personal challenges. This highlights the need for human judgment in AI-driven processes. |
| #15 | Organizations should establish clear guidelines for using AI, focusing on transparency, fairness, and data protection. Regular training and open discussions about AI's role in project management can help address concerns and build trust. |
| #16 | In the future, I believe AI will become a valuable advisor in project management, providing predictive insights and automating repetitive tasks. This would allow project managers to focus more on strategy and leadership. |
| #17 | As AI handles more routine tasks, project managers will need to focus on developing soft skills like communication, emotional intelligence, and strategic thinking. These skills will remain critical for managing teams and navigating complex projects. |
| #18 | I'm interested in AI-driven tools for resource optimization and risk management. For example, tools that use predictive analytics to forecast delays or cost overruns could be game-changers for project planning. |
| #19 | My main concern is the risk of over-reliance on AI. If project managers blindly follow AI recommendations without critical thinking, it could lead to poor outcomes. Striking a balance between automation and human oversight is essential. |
| #20 | Organizations need to ensure that AI complements human skills rather than replaces them. For example, while AI can analyze data and provide insights, human creativity and interpersonal skills are irreplaceable in project management. Encouraging collaboration between AI and human teams will help strike the right balance. |

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| Jordan R., 51. Business Development<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room, after lunch. | |
| #1 | AI, to me, is like having a really smart assistant that can analyze patterns, handle repetitive tasks, and maybe even suggest better ways to do things. In project management, I imagine it being useful for tracking progress, predicting risks, or helping prioritize tasks when everything feels like it's on fire. |
| #2 | I haven't worked with anything I'd call full-blown AI yet. Most of the tools I've used, like Trello and Microsoft Teams, have automation features, but they're pretty basic. I've seen some demos of AI tools, though, like platforms that help forecast project timelines based on past data. It's exciting but not something I've had hands-on experience with—yet. |
| #3 | I don't have any direct AI stories from my own projects, but I did work with a sales team that used AI to analyze customer data. They got quicker insights, and it made me wonder if we could use something similar in project management—for example, to track team productivity or flag risks early. |
| #4 | AI could be great for identifying patterns or blind spots. Let's say you're juggling multiple deadlines—AI could flag tasks that are slipping or predict when a resource bottleneck might happen. It's like having an extra pair of eyes on everything while you focus on the bigger picture. |
| #5 | Not personally, but I can imagine how it would. Automating status updates or creating real-time dashboards would save a ton of time. Instead of spending hours gathering data, you could jump straight into solving problems. |
| #6 | I've heard of companies using AI to streamline resource planning, cutting down costs and reducing over-allocation. I'd love to try something like that in my projects—anything that helps avoid the classic "too much to do, not enough hands" scenario sounds like a win to me. |

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| #7 | No way! AI can provide great suggestions, but it doesn't understand context, emotions, or team dynamics. Decisions like how to motivate a team or handle a tough stakeholder need a human touch. AI's a tool, not a replacement. |
| #8 | Honestly, just figuring out where to start feels like a challenge. Most AI tools seem complex, and it's intimidating when you don't have a tech background. I think starting small, with something simple like automated reporting, would help. |
| #9 | There's curiosity but also a bit of hesitation. People are open to new tools but worry about learning curves or whether AI will take over parts of their jobs. It's on me to show them how it could actually make their work easier. |
| #10 | Sometimes, there's a mindset of "if it's not broken, don't fix it." It's tough to sell new tools when people are used to doing things a certain way. Showing tangible benefits, like saving time or reducing errors, could help shift attitudes. |
| #11 | Start with a pilot project to show quick wins. Pick something small but impactful, like automating reminders for deadlines. Once people see the benefits, they're more likely to get on board. |
| #12 | One concern is bias—if AI recommends who gets what task, is it fair? Another is transparency—people need to know how the AI is making decisions. Being open and clear about these things is important. |
| #13 | At the end of the day, the project manager should be accountable. Even if AI helps with decision-making, it's our job to review its suggestions and ensure they make sense. |
| #14 | Definitely. AI might suggest the most efficient way to distribute work, but it won't consider how someone feels about it. That's where managers come in—to balance efficiency with empathy. |
| #15 | Organizations should establish clear policies, like auditing AI tools regularly to ensure they're fair and transparent. Everyone on the team should understand how the tool works and what its limitations are. |
| #16 | I think AI will become a bigger part of project planning—helping predict risks, allocating resources, and maybe even suggesting the best way to structure a project. It'll be a great assistant but still needs human oversight. |

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| #17 | AI will take over repetitive tasks like tracking budgets or updating schedules. That means project managers can focus more on strategy, communication, and leadership—things AI can't do. |
| #18 | I'm intrigued by predictive analytics. Imagine a tool that tells you a task is 80% likely to run late unless you act now. It feels like having a crystal ball for your project! |
| #19 | My main worry is losing flexibility. Projects often need quick pivots, and AI might struggle to adapt to situations outside its programmed scope. It's great for guidance but shouldn't drive the whole process. |
| #20 | The key is teamwork—let AI handle the heavy lifting with data and let people do what they do best: think creatively, build relationships, and make judgment calls. It's about complementing each other's strengths. |

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| Jordan T., 53. Business Development<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview by the end of a work day. | |
| #1 | To me, AI is like a tool that can analyze lots of data quickly, spot trends, and sometimes even suggest actions. In project management, I see it as a way to help with things like planning more efficiently, predicting potential risks, or even tracking progress without the manual effort. |
| #2 | I've mostly used tools like HubSpot and Zoho, which have some AI features for sales and marketing. For example, they suggest the best times to follow up with leads. I haven't used those capabilities specifically for managing projects yet, but I can see how similar tools could help organize tasks or set priorities. |
| #3 | There was one time when a colleague used an AI-driven tool to generate content for a marketing campaign. It wasn't directly tied to project management, but it saved a lot of time on brainstorming. It got me thinking—if AI can speed up content creation, maybe it could also help with things like drafting project charters or reports. |
| #4 | AI could help by flagging risks or opportunities you might not notice. For example, if a task has been delayed in three similar projects before, AI could alert you to plan extra time for it in your current project. It's like having a data-driven gut instinct. |
| #5 | Not directly, but I've heard of teams using AI to automate routine tasks like sending reminders for deadlines. That would definitely improve efficiency by freeing up time for more important work, like strategic planning or stakeholder communication. |
| #6 | I haven't personally experienced this yet, but I've read case studies where companies used AI for resource management, like ensuring the right people are on the right tasks at the right time. It seems like a great way to reduce overwork and improve overall team performance. |
| #7 | I don't think so. AI can analyze data and give you options, but it doesn't understand the full context. For example, it might suggest cutting a task to save time, but it won't know if that task is critical to keeping a client happy. Humans will always need to make the final call. |

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| #8 | A big challenge for me is just figuring out what's worth investing in. There are so many tools out there, and it's hard to know which ones are actually useful versus just "nice to have." Also, getting buy-in from the team can be tough—they don't want to learn a tool that feels complicated or unnecessary. |
| #9 | Some team members are excited about trying new tools, but others are more hesitant. I think there's a bit of fear that AI might make their roles less important. My job is to show them that AI isn't replacing them—it's here to help. |
| #10 | Definitely. In some organizations, there's a mindset that "we've always done it this way," and AI feels like too big of a leap. Overcoming that means proving the value of AI with small wins—like automating a tedious task and showing how much time it saves. |
| #11 | I'd say the key is starting small and showing quick results. For example, if you introduce a tool that automatically generates project status updates, people will see the immediate benefit. It's also important to get input from the team early so they feel involved in the process. |
| #12 | One concern I have is transparency. If an AI tool recommends a decision, I want to know how it got there. For example, if it's assigning tasks to team members, I'd need to make sure it's not basing those decisions on flawed or biased data. |
| #13 | Even if AI provides recommendations, the project manager should always own the decision. AI is a tool, not a scapegoat. If something goes wrong, it's still our responsibility to understand why and address it. |
| #14 | It can. For example, an AI tool might suggest the most efficient way to structure a project, but it won't consider team morale or how people feel about the workload. That's why project managers need to balance AI's recommendations with empathy and communication. |
| #15 | Organizations should set clear guidelines, like ensuring AI tools are regularly reviewed for fairness and accuracy. Teams also need training to understand how AI works so they can trust and use it effectively. |

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| #16 | I think AI will become a standard feature in most project management tools, helping with everything from scheduling to risk management. It'll act more like a partner, giving managers insights and recommendations while still leaving the big decisions to us. |
| #17 | It'll free up time. Instead of spending hours tracking budgets or updating schedules, project managers will be able to focus on leadership, stakeholder engagement, and solving complex problems that AI can't handle. |
| #18 | I'm really curious about AI tools that can analyze meeting notes and emails to identify potential risks or misaligned priorities. That could be a game-changer for keeping projects on track without combing through every detail yourself. |
| #19 | I worry about over-reliance on AI. If we trust it too much, we might overlook important context or miss out on creative solutions. AI should support decision-making, not replace the need for human judgment. |
| #20 | The sweet spot is using AI to handle repetitive, data-heavy tasks while leaving the creative and interpersonal aspects to humans. It's about working smarter, not replacing people. |

#9

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| Jordan M., 53. Business Development<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview conducted before lunch. | |
| #1 | AI, for me, is like having a really smart assistant that doesn't sleep. It can sift through massive amounts of data, look for patterns, and give recommendations that would take me hours (or even days) to figure out manually. In project management, AI helps by making sense of the chaos—whether it's streamlining schedules, forecasting risks, or even optimizing team workloads. |
| #2 | I've used a few AI-enabled features in tools like Monday.com and Wrike. For example, Wrike has a feature that can prioritize tasks based on deadlines and dependencies. I've also dabbled with AI chatbots for stakeholder communications—they helped answer repetitive questions about project timelines, which saved me a ton of back-and-forth emails. |
| #3 | One of my favorite experiences was using an AI-powered risk analysis tool during a product launch project. It flagged a shipping delay as a high-probability risk based on weather forecasts in a key region. We adjusted our timeline and avoided a major bottleneck. Without that AI insight, we might have been scrambling last minute. |
| #4 | AI helps you make more informed decisions because it's better at crunching numbers and spotting patterns than humans. For instance, it can analyze past projects to predict how long a task might take or which risks are most likely to occur. It's not perfect, but it's a powerful second opinion. |
| #5 | Absolutely. AI tools have helped us reduce the time spent on manual updates. For example, automatic progress tracking through AI-powered dashboards has saved hours of admin work every week. That time gets reinvested in strategic tasks, like refining the project roadmap. |
| #6 | In one project, we used an AI-powered scheduling tool that automatically adjusted timelines when resource availability changed. It kept everything running smoothly without requiring constant manual intervention. The end result? The project was delivered two weeks ahead of schedule, which is rare in my line of work. |

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| #7 | I don't think so—and I wouldn't want it to. AI is great for providing data and suggesting options, but it doesn't understand the nuances of human relationships or business priorities. For example, AI might recommend cutting a task to save time, but only a human can evaluate the long-term business impact of that choice. |
| #8 | One challenge I've run into is accuracy. AI tools are only as good as the data they're trained on. If your project data is incomplete or messy, the AI won't give you reliable insights. Another issue is the learning curve—getting everyone on the team comfortable with new tools takes time. |
| #9 | The team is split. Some people are excited because they see how AI can make their jobs easier, while others worry about losing control or being replaced. To address this, I make a point to involve everyone in testing and implementing AI tools, so they feel like they're part of the process. |
| #10 | Yes, there's sometimes resistance to change. People are naturally skeptical of tools they don't fully understand, especially when they're tied to something as critical as decision-making. Overcoming this requires clear communication about how AI will enhance their work rather than replace it. |
| #11 | I think showing results is key. For example, I once demonstrated how an AI tool saved two hours of manual work during a sprint planning session. Seeing that real, tangible benefit convinced the team it was worth giving a shot. |
| #12 | One concern is ensuring fairness. For example, if an AI tool is assigning tasks, is it unintentionally overburdening certain team members? Another issue is transparency—if AI suggests a course of action, the team needs to understand how it arrived at that conclusion. |
| #13 | At the end of the day, the project manager is still responsible for decisions. AI can assist, but you have to validate its recommendations. If something goes wrong, you can't just blame the tool—it's your job to ensure it's being used appropriately. |
| #14 | Yes, it does. AI can't gauge team morale or recognize when someone is overwhelmed. For example, an AI tool might assign tasks purely based on efficiency, but it won't consider how someone feels about their workload. That's where human judgment is essential. |

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| #15 | The best practice is transparency—always make it clear how and why AI tools are being used. Also, involve the team in discussions about AI implementation so they feel comfortable and know their input is valued. |
| #16 | I think AI will evolve into more of a proactive assistant, not just analyzing data but also making suggestions in real time. For example, it might flag a potential issue during a meeting or recommend reassigning resources on the fly. |
| #17 | AI will take over a lot of the repetitive, administrative work, like tracking progress or updating stakeholders. This will free up project managers to focus more on strategy, leadership, and navigating complex challenges. |
| #18 | I'm really interested in natural language processing tools that can summarize meetings or emails. Imagine an AI tool that can pick out the key action items from a meeting and update your project plan automatically—that would be a game-changer. |
| #19 | My concern is over-reliance. If we let AI make too many decisions, we risk losing the creativity and flexibility that come with human problem-solving. AI should support decision-making, not replace it entirely. |
| #20 | It's all about collaboration. AI handles the heavy lifting with data, while humans bring emotional intelligence, creativity, and context. By combining the two, we can create better project outcomes without losing the human touch. |

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| Jordan J., 37. Business Development<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room in their workplace, during lunch break. | |
| #1 | AI is like the Swiss Army knife of modern tech—it's versatile and solves problems in unique ways. In project management, AI helps streamline processes like scheduling, risk assessment, resource allocation, and even team communication. Its ability to process massive amounts of data and identify patterns makes it invaluable for keeping projects on track. |
| #2 | Tools like Microsoft Project with AI-driven insights, Jira Advanced Roadmaps, and Asana's automation features have been game-changers. Also, AI assistants like Monday.com's Workflows simplify repetitive tasks, while chatbots like ChatGPT support stakeholder communication. These tools make work more efficient and reduce manual labor. |
| #3 | Once, I used a predictive analytics tool for resource allocation on a complex project with tight deadlines. The AI flagged a potential resource bottleneck early on, allowing us to reassign tasks before it became an issue. The result? Zero downtime and a happier team. |
| #4 | AI enhances decision-making by offering a data-driven edge, which is vital in project management. For instance, in projects with tight budgets and complex dependencies, AI can analyze historical data and simulate different scenarios. It can show the effects of increasing resources in one area or reallocating them entirely. Tools like Crystal Knows or Planview help by highlighting trade-offs and supporting leaders in making well-informed decisions. In one project I managed, we used AI to prioritize tasks based on potential revenue impact. The tool ranked tasks by their return on investment and timeline feasibility, leading to a smarter deployment of resources. |
| #5 | Absolutely! Automated reporting tools like Power BI with AI features saved countless hours that used to go into manual updates. That freed us up to focus on strategic tasks. |

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| #6 | In a digital transformation project, AI-driven time tracking helped us stay within 5% of the planned timeline—a rare achievement. The metric we tracked? Percentage of tasks completed on time versus projections. |
| #7 | I believe AI cannot fully replace human decision-making. While AI excels in analyzing patterns, logical reasoning, and automating repetitive tasks, it lacks the context, empathy, and creativity that humans bring to decision-making. For example, managing stakeholders often involves understanding non-verbal cues or interpreting the emotional tone of discussions—skills that AI doesn't have. Additionally, AI might recommend cost-cutting measures without recognizing the human impact. It's better to view AI as a powerful assistant rather than a replacement for project managers. |
| #8 | Some team members were skeptical, fearing AI would replace jobs. To address this, we ran workshops to showcase AI as an enabler, not a replacer, focusing on how it could enhance their roles. |
| #9 | Mixed. Some embrace AI for its efficiency, while others resist because it's unfamiliar. A supportive learning environment and clear communication have been key in shifting the needle towards acceptance. |
| #10 | Fear of change and mistrust in automation were major hurdles. Encouraging pilot projects with measurable results helped demonstrate AI's value and ease concerns. |
| #11 | Transparency is huge—sharing success stories, offering training, and engaging early adopters as champions go a long way in easing resistance. |
| #12 | AI raises important ethical concerns, such as biases in its algorithms or potential infringements on data privacy. If AI tools are trained on biased datasets, they could reinforce those biases in decision-making. For instance, I've encountered situations where AI tools tracked team productivity metrics. While helpful, it initially made some team members feel micromanaged. We had to redefine the tool's purpose, focusing on identifying process inefficiencies rather than evaluating individuals' performance. Addressing these concerns requires clear data-use policies, diverse training datasets, and transparency with the team. |
| #13 | The project manager should remain accountable for decisions, even when aided by AI. Think of AI as a consultant, not a decision-maker. Clear documentation on AI's role in decisions helps. |

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| #14 | AI might not catch subtleties like a stressed team member who's falling behind. Emotional intelligence in project management ensures a people-centric approach—something AI can't replicate. |
| #15 | Define clear guidelines for AI use, ensure transparency in algorithms, and establish an escalation process for decisions AI can't make effectively. |
| #16 | AI's role in project management will evolve significantly in the coming years. Beyond task automation, it will become a strategic partner. I foresee AI being used for proactive risk mitigation, such as monitoring real-time data streams to detect risks before they escalate. Another exciting development could be digital twins—AI-driven simulations of projects that allow managers to test strategies virtually before implementing them. By 2030, AI tools will likely become essential for both tactical execution and high-level strategic planning. |
| #17 | Project managers will focus more on strategy, leadership, and stakeholder engagement, with AI handling the heavy lifting of data crunching and task automation. |
| #18 | Natural language processing (NLP) for better team communication and sentiment analysis is exciting. Predictive analytics and adaptive scheduling tools will also become staples. |
| #19 | There are valid concerns about AI automating key decision-making processes. The worry isn't just about potential job losses; it's also about losing the human touch. Teams might over-rely on AI recommendations without critically questioning them. There's also the risk of ethical blind spots. For instance, I've seen AI recommend delaying a deliverable to save costs, but it failed to consider the impact on the client relationship. Ultimately, the human team had to override the suggestion to maintain trust. Organizations must balance automation with human oversight to ensure thoughtful, well-rounded decisions. |
| #20 | Organizations need to see AI as an amplifier of human potential. Blending AI's efficiency with human creativity and relationship-building creates the best outcomes. |

#11

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| Jordan A., 46. Business development<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room in their workplace, before lunch. | |
| #1 | To me, artificial intelligence is like having a supercharged assistant. It excels at analyzing large datasets, recognizing patterns, and automating routine tasks. In project management, AI can predict risks, optimize schedules, and even analyze team dynamics to suggest improvements. For example, AI-powered tools can flag when a project is veering off course or identify which team members may need extra support based on workload trends. |
| #2 | I've worked with tools like Trello and Monday.com, which incorporate automation for task tracking and workflow optimization. Additionally, I've used AI chatbots for stakeholder communication and tools like Tableau, which leverage machine learning to analyze project performance. These technologies save time and provide clarity, helping me focus on strategic priorities rather than micromanaging day-to-day operations. |
| #3 | One time, I used an AI-powered resource allocation tool for a business expansion project. The tool suggested reallocating resources from a low-priority initiative to a high-impact marketing campaign. This wasn't something that immediately stood out to me, but after following the recommendation, we saw a 15% boost in campaign ROI. It taught me to trust AI for data-backed insights while still applying human judgment for final decisions. |
| #4 | AI enhances decision-making by presenting insights we might otherwise miss. For instance, it can predict which milestones are at risk of delay and why, allowing teams to pivot early. In one project, we used an AI-driven sentiment analysis tool to gauge how clients felt about our deliverables. When negative sentiment spiked, we quickly adjusted our approach, improving client satisfaction by 20%. AI gives you the data to act proactively rather than reactively. |
| #5 | Absolutely. During a product launch, we used AI to analyze historical data and optimize our marketing timeline. The tool identified the best dates to target key |

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| | demographics, shaving two weeks off our original timeline while improving engagement metrics. AI's ability to consolidate and process data made the process much more efficient than traditional methods. |
| #6 | In a customer onboarding project, an AI-driven tool personalized client workflows based on their engagement patterns. We tracked customer satisfaction scores and time-to-onboarding as metrics. Both improved significantly, with a 30% faster onboarding process and a noticeable uptick in positive client feedback. |
| #7 | No, I don't think AI can completely replace human decision-making. While AI provides valuable insights, it lacks emotional intelligence and context. For example, AI might recommend delaying a deliverable due to resource constraints, but it wouldn't understand the reputational risk of missing a deadline with a high-profile client. Humans bring empathy, creativity, and a nuanced understanding of relationships—qualities that are irreplaceable in project management. |
| #8 | One challenge was resistance from team members who felt AI tools might micromanage or replace them. To address this, we focused on educating the team about AI's role as a support tool, emphasizing how it would reduce repetitive tasks and allow them to focus on strategic work. This transparency helped shift their perspective and built trust. |
| #9 | My team has been cautiously optimistic. They appreciate the efficiencies AI brings but remain wary of over-dependence. Factors influencing this attitude include their past experiences with technology adoption and the clarity of communication about AI's purpose. Providing hands-on training and clear use cases has been key in building trust. |
| #10 | A significant barrier is the "fear of the unknown" that some team members or leaders have regarding AI. This often stems from a lack of understanding about how AI works. To address this, we've implemented workshops and case studies to demonstrate AI's practical benefits and how it complements human roles rather than replacing them. |

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| #11 | Involving teams early in the decision-making process is crucial. When people feel like they have a say in how AI will be used, they're more likely to embrace it. Additionally, focusing on small, successful pilot projects helps build confidence and showcases AI's value. |
| #12 | One concern I've encountered is the potential for AI tools to create unfair performance metrics. In one project, an AI tool flagged a team member as underperforming based solely on output numbers, ignoring their role in brainstorming and problem-solving. It became clear that we needed to use AI responsibly by combining its insights with qualitative assessments. Ethical use means ensuring AI complements rather than diminishes the value of human contributions. |
| #13 | Accountability should remain with the humans overseeing the AI tools. While AI can provide recommendations, decisions must ultimately be reviewed and approved by managers. Clear guidelines on how AI-generated insights are used can help establish accountability. |
| #14 | AI lacks the ability to read between the lines or gauge emotions. In one project, AI recommended scaling back a team's workload, but it didn't account for their motivation to overdeliver on a high-stakes task. Relying solely on AI might have caused a disconnect with team dynamics. |
| #15 | Organizations should establish policies that emphasize transparency, data privacy, and the ethical use of AI-generated insights. For instance, there should be clear communication about what data AI tools use and how decisions are reviewed to ensure fairness. |
| #16 | AI will likely evolve from being a support tool to an active collaborator in project management. I see it helping not just with execution but with strategic planning. Tools may soon integrate predictive analytics with real-time adaptive learning to adjust project plans dynamically as situations change. Imagine a project dashboard that not only highlights risks but also suggests actionable solutions in real-time. |

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| #17 | Project managers will shift from task oversight to becoming strategic facilitators. AI will handle the routine tasks, allowing managers to focus more on stakeholder engagement, team leadership, and innovation. |
| #18 | AI-powered decision intelligence systems are an emerging trend that excites me. These systems integrate data from multiple sources—finance, HR, market trends—and provide a holistic view to guide decisions. Another trend is the use of generative AI for drafting reports, proposals, or even brainstorming solutions. These tools will likely reduce manual effort and boost creativity. |
| #19 | My main concern is over-reliance on AI, which could lead to decisions that lack context or human judgment. For example, AI might prioritize cost-saving measures without considering long-term relationships or brand reputation. Balancing AI insights with human oversight is essential. |
| #20 | The key is to view AI as a partner rather than a replacement. Organizations should focus on integrating AI where it adds value, like automating repetitive tasks or analyzing complex data, while reserving human effort for areas requiring empathy, innovation, and strategic thinking. For instance, let AI handle risk prediction, but let humans lead discussions on how to address those risks. Encouraging collaboration between people and AI ensures a balanced and effective approach. |

## #12

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| Jordan B, 39. Business Development<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room in their workplace, at the end of a workday. | |
| #1 | My understanding of AI in project management is that it involves using smart technologies to assist with tasks like scheduling, tracking progress, and analyzing data. While I haven't worked extensively with it, I see its potential to make processes more efficient by automating repetitive tasks and identifying patterns we might miss. |
| #2 | I've had some exposure to basic AI features in tools like Microsoft Teams and Asana, such as automated task reminders or simple analytics. While these aren't advanced AI tools, they've helped me stay organized and track team performance more effectively. |
| #3 | One project involved using a basic chatbot integrated with our CRM system. It helped streamline customer queries, freeing up the team to focus on other priorities. It wasn't perfect, but it showed me how even simple AI tools can save time. |
| #4 | AI can enhance decision-making by providing data-driven insights. For example, it can flag overdue tasks or highlight areas where the team might need support. I've seen this happen in a limited capacity, and I'm eager to explore how it could do more. |
| #5 | While my experience is limited, I've noticed that automated notifications and reminders in project management tools have helped reduce manual follow-ups. This small change has made communication smoother and saved time. |
| #6 | In one project, using an AI-powered scheduling tool helped us avoid double-booking resources. It wasn't a drastic improvement, but it ensured the team's time was used more effectively, which improved overall morale. |
| #7 | I don't think AI can fully replace human decision-making. Project management often involves understanding people's emotions and navigating team |

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| | dynamics—things that AI can't handle. AI is a tool, not a substitute for human judgment. |
| #8 | One challenge I've faced is the steep learning curve with new tools. Sometimes, the team struggled to adapt, especially when the interface wasn't user-friendly. Providing hands-on training helped ease the transition. |
| #9 | My team has been curious but cautious about AI. They appreciate tools that make their jobs easier but worry about being replaced. Open conversations about AI being a helper, not a threat, have been key to building trust. |
| #10 | Fear of the unknown and skepticism about AI's accuracy have been common barriers. Addressing these requires clear communication about how the tools work and their potential benefits. |
| #11 | Starting with small, non-critical AI tools and showcasing their benefits has helped reduce resistance. For instance, using AI for task prioritization showed the team how it could simplify their workload without taking control. |
| #12 | I worry about over-reliance on AI and how it might lead to unfair decisions if the algorithms are biased. For example, relying solely on AI for performance evaluations could miss important context about someone's contributions. |
| #13 | In my view, humans should remain accountable for decisions, even when using AI. Tools should support our decisions, not replace our responsibility for them. |
| #14 | AI can't understand subtle team dynamics or emotional factors. For instance, if a team member is struggling but doesn't say anything, an AI tool might not notice. That's where human intuition is crucial. |
| #15 | Organizations should ensure transparency in how AI tools work and provide guidelines for their use. It's also important to monitor outcomes regularly to identify any unintended consequences. |
| #16 | I imagine AI will take on more administrative tasks in the future, like generating reports or tracking progress, allowing project managers to focus more on strategy and leadership. |

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| #17 | As AI takes over routine tasks, project managers will likely need to focus more on skills like problem-solving, creativity, and team building—areas where humans have an edge over machines. |
| #18 | I've heard about AI tools for real-time risk analysis and virtual assistants for managing projects. While I haven't used these yet, they seem promising for improving efficiency and decision-making. |
| #19 | I'm concerned that relying too much on AI might lead to losing the human touch in project management. Balancing automation with personal oversight will be crucial to maintaining quality outcomes. |
| #20 | I think it's important to use AI for what it does best—analyzing data and automating tasks—while leaving more complex, people-focused decisions to humans. Training teams to work alongside AI is key to striking this balance. |

## #13

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| Jordan C, 48. Business Development<br><br>Interview conducted via Zoom, as per the subject's request. In their own place, working from home. Interview before lunch. | |
| #1 | To me, AI in project management means using technology to assist with tasks like predicting project delays, automating workflows, and analyzing team performance. I've seen how AI can act as a helpful assistant, even if I'm still exploring all its capabilities. |
| #2 | I've come across features like automated task reminders in tools like Trello and Slack, as well as basic analytics in tools like Power BI. While these aren't groundbreaking AI, they've shown me how small integrations can make everyday tasks more manageable. |
| #3 | In one project, we used a chatbot to handle simple customer queries. While it wasn't perfect—some questions still needed a human touch—it significantly reduced the load on our support team, allowing them to focus on complex issues. |
| #4 | AI can provide quick insights that help guide decisions, like flagging potential risks or showing patterns in team performance. For instance, a tool we used once highlighted delays in specific tasks, prompting us to investigate and resolve bottlenecks. |
| #5 | One example is using AI-driven email reminders for deadlines. It might seem small, but it reduced the number of manual follow-ups I had to do, saving time for higher-priority tasks. |
| #6 | We once used a simple forecasting tool to predict resource needs for a marketing campaign. It wasn't entirely accurate but gave us a good starting point. The project stayed within budget, which I think was partly due to having those early insights. |
| #7 | I don't think so. AI can provide data and insights, but it can't fully understand the human side of projects, like team morale or stakeholder expectations. For |

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| | example, AI might suggest a cost-cutting measure without understanding the potential impact on relationships. |
| #8 | One challenge I've seen is skepticism from team members who are unsure if AI is reliable. In one case, we had to test the tool on smaller tasks first to build trust before using it for more critical processes. |
| #9 | My team is open to AI as long as it's easy to use and doesn't disrupt their workflow. They're more hesitant when tools feel complex or seem like they'll add extra work. |
| #10 | There's often a mindset that AI is too "high-tech" for our organization, especially among more traditional team members. To overcome this, I've focused on showing how even simple AI features can help with everyday tasks. |
| #11 | Starting small has worked well—introducing AI tools for non-critical tasks first, then scaling up once the team sees the benefits. This approach builds confidence and reduces resistance. |
| #12 | One concern is data privacy. For example, if an AI tool analyzes team performance, there's a risk of sensitive information being mishandled. Clear policies and proper safeguards are essential to address these concerns. |
| #13 | In my opinion, the project manager should always be accountable for decisions, even if they're based on AI recommendations. AI can provide guidance, but humans need to take responsibility for the outcomes. |
| #14 | AI can't account for things like team dynamics or individual stress levels. For example, it might suggest reallocating someone to a critical task without knowing they're already feeling overwhelmed. |
| #15 | Organizations should ensure transparency about how AI tools work and involve the team in decisions about their use. Regular reviews of AI outcomes can help catch any unintended issues early on. |
| #16 | I think AI will become more of a behind-the-scenes helper in project management, handling data-heavy tasks like reporting and risk analysis. This will allow project managers to focus more on leadership and strategic planning. |

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| #17 | As AI takes on routine tasks, project managers will need to become more like facilitators and coaches, focusing on team dynamics, creativity, and long-term strategy. |
| #18 | I've heard about tools that use AI to simulate project outcomes based on different scenarios. While I haven't used them, they sound like a great way to plan more effectively and avoid potential pitfalls. |
| #19 | My concern is that over-reliance on AI might lead to missing the bigger picture. For example, AI might prioritize short-term efficiency without considering long-term impacts. Human oversight is crucial to keep things balanced. |
| #20 | I think the key is to use AI to handle repetitive or data-driven tasks while leaving creative and interpersonal aspects to humans. This way, we can get the best of both worlds without compromising project quality. |

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| Jordan F, 48. Business Development<br><br>Interview conducted via Zoom, as per the subject's request. In their workplace. Interview by the end of a workday. | |
| #1 | My understanding of artificial intelligence is quite basic. I see it as a way for computers or systems to assist with tasks by analyzing information and providing useful outputs, like suggestions or predictions. In project management, I think AI might be used for things like helping to set schedules or keeping track of resources. While I've not directly used it, I can imagine it helping with routine tasks. |
| #2 | I haven't really encountered advanced AI tools. The closest I've come is using task management software like Asana or simple automation features in email and scheduling platforms. These tools have been helpful for organizing tasks and sending reminders automatically. They save some time, but I wouldn't call them truly "intelligent." |
| #3 | I don't have direct experience with AI tools in projects, but I've used basic automation to send meeting reminders or to track the progress of tasks. For example, a scheduling tool once notified me of overlapping deadlines, which helped avoid potential confusion. It was a small thing, but it made a difference in keeping things on track. |
| #4 | I think AI could help by giving project managers better data to work with. For example, an AI tool could point out trends in how teams spend their time or suggest which projects might need more resources. While I haven't seen this in action, it seems like it could be helpful for making more informed decisions. |
| #5 | Not really with AI, but using automated tools has improved some basic processes. For instance, tools that automatically update task boards or notify team members when a deadline is approaching help reduce delays and keep everyone aligned. I assume AI could take this even further by analyzing why delays happen and suggesting fixes. |

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| #6 | I don't have examples from my own experience, but I imagine AI could improve outcomes by increasing efficiency or cutting down on errors. For example, an AI tool might analyze past projects and suggest better ways to allocate resources, leading to faster delivery times or staying within budget. Metrics like time saved or reduced costs could be used to measure success. |
| #7 | No, I don't think AI could fully replace human decision-making. There's a lot about managing a project that requires understanding people, emotions, and the context of decisions. AI might suggest options, but humans would still need to make the final call based on what feels right in the situation. |
| #8 | Since I haven't implemented AI technologies, I can only guess at the challenges. I imagine one might be understanding how the tool works or what it can really do. If I were to face this, I'd probably start small—maybe using one simple feature—and build my confidence from there. |
| #9 | I think my team would be curious but cautious about AI tools. Some might worry about learning something new or how it might change their jobs. If there was clear training and a focus on how AI can make things easier without replacing people, they'd probably be more open to it. |
| #10 | I haven't seen AI adoption directly, but I know people can be resistant to new tools in general. Fear of change or a lack of time to learn new systems might be barriers. Steps like providing clear benefits, small-scale pilots, and training could make a difference in getting people on board. |
| #11 | Demonstrating small wins would be a good approach. For example, if a tool can automate one simple, repetitive task, that success might help build confidence. Offering training sessions or workshops could also reduce fears and make the transition easier. |
| #12 | I'd be concerned about privacy and fairness. For example, if an AI tool is making decisions about workloads or assigning tasks, I'd want to know it's treating everyone equally and not creating problems. Regularly checking how the tool works and using it transparently could help address these concerns. |
| #13 | Humans should remain responsible for decisions, even when using AI tools. The AI might provide advice or insights, but it's the project manager's job to |

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| | make sure those decisions are appropriate. Clear guidelines about who is accountable for what would be important. |
| #14 | I don't have direct experience, but I imagine AI might miss out on understanding how people feel or what motivates them. For example, it might suggest moving resources without considering how that affects team morale. That's where humans would need to step in. |
| #15 | Organizations should be transparent about how AI is used and ensure people know how decisions are made. Regular reviews to catch errors or biases and clear rules about data privacy would also help keep things ethical. |
| #16 | I think AI might take on more of the repetitive and administrative tasks, like tracking progress or sending updates. This would give project managers more time to focus on leading their teams and solving problems. |
| #17 | AI might make project managers less focused on routine tasks and more focused on big-picture strategy and team management. It could help by giving them better tools to make decisions but wouldn't replace the need for human leadership. |
| #18 | I've heard about tools that predict project risks or help with scheduling. If these tools become more accessible, they could be really useful for avoiding problems and keeping projects on track. |
| #19 | My main concern would be losing the human touch. If AI makes decisions without understanding the bigger picture or the people involved, it could lead to problems. Keeping humans involved in key decisions is important to avoid this. |
| #20 | Organizations can balance this by using AI for the tasks it does best, like data analysis or tracking progress, while making sure humans stay in charge of creative and interpersonal aspects. Investing in training and emphasizing teamwork will also help keep the human element strong. |

## #15

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| Jordan D., 52. Business Development<br><br>Interview conducted in person, in a relaxed and comfortable environment, in a climatized room, after lunch on a weekend. | |
| #1 | I have some knowledge about AI as a field that involves machines or systems learning from data and performing tasks, often improving over time. Within project management, I understand that AI can support tasks like forecasting project risks, optimizing schedules, or even analyzing team productivity. While I haven't used AI professionally, I can see its potential to make managing complex projects more efficient. |
| #2 | Although I haven't worked directly with AI tools, I'm familiar with their concepts and examples like chatbots or recommendation systems. I've used project management tools like Monday.com and Trello that offer basic automation features, which may use AI in small ways, like suggesting timelines. These have streamlined task management but didn't feel heavily AI-driven. |
| #3 | I haven't had hands-on experience with AI tools specifically designed for project management, but I've experimented with predictive text and calendar assistants that might incorporate AI. For instance, an AI-powered email assistant once helped me draft follow-ups faster, saving a lot of time for other tasks. |
| #4 | AI can enhance decision-making by identifying patterns that humans might miss. For example, an AI could analyze past project data to highlight common delays or suggest where to allocate resources for the highest impact. Even though I haven't seen this firsthand, I think it could be invaluable for long-term planning. |
| #5 | I've noticed small improvements in efficiency through tools with some level of AI, like email platforms that flag important messages or scheduling apps that optimize meeting times. These small conveniences have helped me focus on core project tasks without worrying about minor scheduling issues. |

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| #6 | While I haven't directly observed AI-driven project outcomes, I think AI could positively influence results by improving timelines or reducing errors. For instance, predictive analytics might help flag bottlenecks before they happen. Metrics like meeting deadlines or staying within budget could indicate success. |
| #7 | I don't think AI will ever fully replace human decision-making. It lacks the ability to interpret nuances like team dynamics or company culture. AI could offer options, but humans are better equipped to weigh those against emotional and ethical factors. |
| #8 | I haven't implemented AI, but I imagine one challenge would be understanding its capabilities and limitations. Training and focusing on a phased implementation could help overcome such obstacles. |
| #9 | My team would probably approach AI tools with curiosity and a bit of skepticism. Concerns like job displacement or steep learning curves might slow adoption, but clear demonstrations of value and ease of use would likely win them over. |
| #10 | I think barriers could stem from a lack of understanding or fear of change. To address this, providing training and involving teams early in the process would help mitigate resistance and foster buy-in. |
| #11 | Starting with pilot projects to showcase quick wins would be a great way to build confidence. Involving employees in feedback loops and providing user-friendly training would also ease transitions. |
| #12 | Ethical concerns I'd consider include data privacy and decision-making transparency. For example, if an AI tool determines workload distribution, it's important to ensure it doesn't inadvertently introduce bias. Regular audits could address such issues. |
| #13 | Responsibility should always rest with the human team, even if AI is used to inform decisions. Clear accountability frameworks should define how much influence AI has and who ultimately signs off on critical decisions. |
| #14 | Although I haven't directly experienced this, I'd imagine AI systems might struggle with team morale issues or interpersonal conflicts. For instance, |

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| | reallocating tasks based on data alone might unintentionally frustrate team members, which humans would notice and adjust for. |
| #15 | Organizations should prioritize transparency, requiring clear explanations of AI-driven decisions. Regularly reviewing data inputs for biases and maintaining strict privacy protocols would also be essential. |
| #16 | AI will likely take on more advanced predictive and analytical roles, such as real-time risk assessment or automated resource allocation. This would free project managers to focus on strategy and leadership. |
| #17 | I think project managers will transition from task overseers to strategic leaders, focusing more on guiding teams and less on day-to-day administrative tasks. AI will act as an assistant, providing data-driven insights. |
| #18 | Predictive analytics and AI-driven communication tools are two trends that seem promising. For example, tools that analyze team interactions to suggest improvements in collaboration could be game changers. |
| #19 | Automating decisions without human oversight might lead to unforeseen issues, like neglecting team morale. Maintaining a balance between automation and human intervention is crucial to avoid these pitfalls. |
| #20 | Organizations can use AI to handle repetitive and data-heavy tasks while emphasizing the importance of human judgment and creativity. Training programs that highlight how AI complements rather than replaces human skills would help maintain this balance. |

## #16

| Jordan F, 34. Interview questions sent via email and answered at the time of subject's convenience. | |
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| #1 | Artificial intelligence consists of the replication of human cognitive capabilities through systems/algorithms capable of simulating aspects of human intelligence such as data interpretation, pattern identification and decision-making. In the context of project management, especially in financial and consulting projects, AI makes it possible to process large volumes of information, identify patterns, and anticipate risks. This is particularly relevant in an environment where consistency, accuracy of analysis, and rigorous risk and resource management are crucial to maintaining visibility into process developments and regulatory compliance. |
| #2 | Taking into account my academic and professional background, I was able to integrate several AI solutions, such as:<br>• Machine Learning and Predictive Analytics: Applied to identifying market trends and assessing risks;<br>• Optimization algorithms: focusing on resource allocation and defining the best investment strategy, respecting investment guidelines and risk parameters;<br>• Large language models (LLMs): used in the interpretation of financial reports, news and technical reports, allowing for more comprehensive/detailed market analysis as needed and better insight into key points.<br>These "technologies" have contributed to a more robust analysis, allowing for better-founded decisions and less exposure to operational errors. |
| #3 | In my final master's thesis, I implemented a predictive analytics tool that integrated historical data from currency pairs. This study, although not yet having a practical applicability, may evolve into a quantitative investment strategy or even into a system/algorithm for exchange risk management, reducing, for example, the exchange risk in the allocation of financial resources. |

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| #4 | In an environment where decisions have a direct impact on financial security, AI can simulate multiple scenarios based on historical data and market variables. For example, scenario analysis makes it possible to identify the probability of certain economic fluctuations affecting projects, guiding the redefinition of plans and the redistribution of resources in a preventive manner, thus improving the so-called "Real options" models. In this way, decision-making is supported by hybrid quantitative models that, complemented by human value judgment, contribute to safer and more reasoned decisions. |
| #5 | The automation of processes, combined with the real-time analysis of project indicators, has made it possible to significantly reduce the time dedicated to monitoring and manual analysis. For example, the use of dashboards, equipped with these technologies, which compile and interpret data enables a faster response to deviations, ensuring the execution of projects within the planned parameters. This efficiency not only improves the results obtained but also reinforces credibility with regulators and customers. |
| #6 | In practice, and within the scope of project management, the results of the implementation of AI solutions can be measured through indicators such as:<br>• The percentage of tasks completed within the stipulated timeframe;<br>• Reduction of unforeseen costs and budget control;<br>• The reduction of identified operational risks.<br>In projects where predictive analytics is applied, improvements can be evidenced in two ways: via increased revenue or cost reduction. In this sense, we believe that a greater emergence of successful use cases may also contribute to an increase in capital flows directed to this type of solutions. |
| #7 | Despite the analytical capacity and efficiency of AI systems, they cannot completely replace the interpretation of a professional, the product of the experience gained over the years. In the financial sector, where decisions have significant consequences and are subject to strict regulations, the role of the manager remains essential to interpret complex contexts, consider ethical aspects and ensure compliance with standards. AI should be seen as a supporting tool that complements, not replaces, human analysis. In addition, |

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| | at Banco Carregosa, we give the utmost importance to the close relationships we have with our customers. |
| #8 | Among the main obstacles identified are:<br>• The quality and integrity of the data, which are fundamental for the proper functioning of the algorithms;<br>• The need to integrate new solutions with existing systems.<br>To overcome these challenges, measures such as carrying out pilot projects and drafting data validation protocols have been implemented, ensuring that new solutions adapt to the rigorous standards of the banking sector. |
| #9 | In an investment bank, especially in an area as critical as financial advice, the team tends to be cautious and demanding about the robustness and security of new technologies. However, the need to maintain competitiveness and optimize processes has motivated the acceptance of AI solutions, as long as they are accompanied by specific training and a clear demonstration of their benefits in terms of risk reduction and efficiency improvement. |
| #10 | It is common to find greater barriers to change, especially when it comes to technologies that affect sensitive areas such as financial analysis. Overcoming these barriers involves implementing pilot projects that demonstrate real gains, transparently communicating results, and ensuring that new solutions meet the sector's high safety and compliance requirements. This adaptation process must be conducted gradually and collaboratively, involving all hierarchical levels. |
| #11 | To mitigate resistance, an approach can be adopted that combines:<br>• Specialized training: training programs to enable employees to become familiar with new technologies;<br>• Active involvement: creation of multidisciplinary teams that participate in the definition, implementation and evaluation of AI systems;<br>• Demonstration of results: presentation of success stories and positive indicators that highlight the concrete benefits of innovation.<br>These strategies help build an environment of trust, where technology is perceived as an ally in improving processes and managing risks. |

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| #12 | In a sector as regulated as finance, ethical issues are fundamental. The use of AI poses challenges such as:<br>• The need to ensure the transparency of algorithms and the auditability of decision-making processes;<br>• The protection of confidential customer and project data;<br>• The prevention of biases that could lead to mistaken decisions or distorted risk analysis.<br><br>It is essential that the systems are periodically reviewed and that the processes are aligned with the ethical principles and requirements of the regulators. |
| #13 | Even with the use of AI tools, the ultimate responsibility for decisions lies with (human) managers. To ensure strict control, it is necessary to establish protocols that clearly define roles and responsibilities, as well as to implement regular internal audits. In this way, in the event of a failure or contested decision, it is possible to identify and correct the source of the problem, maintaining the integrity and reliability of the processes. |
| #14 | AI systems stand out for their ability to process quantitative data, but they lack the intuition and emotional intelligence necessary to understand complex contexts, especially in situations of crisis or extreme uncertainty. For example, in a scenario of market instability, an experienced manager may perceive signals that algorithms cannot yet interpret. In addition, the algorithms end up not being able to fully interpret the client's framework, which goes beyond their financial situation, risk profile and investment objectives. For this reason, we continue to stress the importance of having a close relationship with our customers. However, we believe that the complementarity between the analytical support of AI and the critical judgment of the professional is fundamental for balanced decision-making. |
| #15 | For AI integration to be done responsibly, in my opinion it is crucial to establish the following measures:<br>• Transparency: learning processes and algorithms must be accessible and subject to review; |

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| | • Data protection: implementation of advanced security measures to safeguard sensitive information;<br>• Periodic audits: continuous monitoring of systems to identify and correct any deviations or biases;<br>• Human feedback and oversight: The results produced by the systems must be reviewed by experts, ensuring that final decisions are reasoned and ethical.<br><br>These practices ensure that technology supports the high standards required in the financial sector. |
| #16 | The trend is for AI to become increasingly integrated at all levels of project management and financial advice, from risk analysis to investment portfolio management. Several analysts point to the development of more sophisticated models that allow real-time monitoring, dynamically adjusting project plans based on market variations and the introduction of new variables that can be fitted into the model throughout the life of the project. This evolution will provide greater predictability, agility and responsiveness, essential elements in a dynamic environment with periodic changes in regulation. |
| #17 | With the automation of operational tasks, project and consulting managers will focus on strategic analysis and interpretation of the data generated by AI systems. The manager's role will evolve into that of "conductor" of processes, who integrates technological insights with human experience, making critical decisions that respond not only to quantitative indicators, but also to qualitative aspects of the market context. |
| #18 | In the financial sector, some areas that are expected to be of particular relevance include:<br>• Big Data and machine learning: for in-depth analysis of market data, allowing you to identify investment opportunities and anticipate risks more accurately.<br>• Large language models (LLMs): which enables the automated interpretation of reports, news and stakeholder opinions, offering a comprehensive view of market sentiment. |

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| | • Integrated risk management platforms: which combine historical data with real-time information, providing dynamic analysis and the ability to respond immediately to changes in the economic environment.<br><br>These innovations will be crucial to maintain the competitiveness and robustness of processes in a sector where precision and safety are paramount. |
| #19 | In a more conservative investment banking environment, there is always the concern that over-reliance on automated systems can lead to decisions without proper consideration of intangible factors and the regulatory context. Full automation can reduce flexibility and responsiveness to unforeseen situations. Therefore, the most prudent strategy is to use AI as a support tool that strengthens the analysis, but without removing the responsibility and final judgment of the experienced professional. |
| #20 | The key to success lies in a symbiosis between technology and human cognitive abilities. In the consulting service, for example, AI can provide robust analysis and scenario simulations, but the interpretation of this data, the identification of market nuances, and the advice on strategic decision-making should be the responsibility of the consultant. To ensure this balance, it is essential to invest in continuous training, establish supervision protocols, and promote a culture of collaboration where technology is valued as a tool that enhances the experience and intuition of professionals. |