Unlocking AI's Potential in Project Management: Insights from 100 Blog Articles

Daniel Karlsson
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About **TOK**STARK●

We are committed to achieve better results together.

We provide services within AI, project management and business development. Our expertise lies in highly regulated markets.

Our goal is to be proud of what we achieve together while enjoying the process. We exist because we are a trustworthy partner committed to our partners success while being easy to collaborate with.
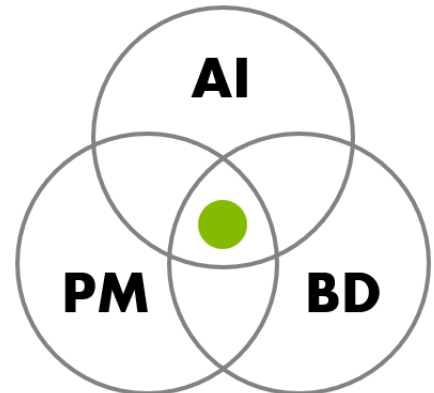
Founders

Daniel Karlsson
PhD

Experienced project leader with passion to empowering individuals and organizations to achieve their objectives through the pillars of transparency, efficiency, and trust. With a robust background in the life sciences-, technical-, and IT sectors, Daniels career spans various roles within companies of different sizes and stages of their development journey.

Martin Tilly
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Described as a hardworking and result-driven person, with a strong track record of managing several strategic corporate projects at international companies. Martin loves to deliver result through inspiring others to join up towards a common goal.

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Table of Content

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Executive Summary

Artificial intelligence (AI) has moved beyond being just a buzzword; it's on its way to becoming game-changer in project management, by automating tasks, offering predictive insights, and optimizing resources. Staying on top with recent AI progress is important. This study looks into the current online landscape to see how AI is helping organizations achieve efficiency gains, aiming for strategic advantages.

We analyzed 213 Google search results from July 10, 2024, for "AI in project management". Using AI and automation tools combined with manual review 100 relevant blogs articles written between January 2022 and July 2024 were identified.

In summary, AI has the potential to improve

- **Risk Management**: AI's predictive analytics capabilities could enable early identification and mitigation of potential project delays, resource bottlenecks, and budget overruns, reducing project risks significantly.

- **Resource Utilization**: AI has the potential to ensure efficient matching of skills, availability, and project needs, leading to maximum resource utilization and minimizing downtime.

- **Decision Making**: AI provides clear, data-backed insights, enhancing decision-making processes across all project stages and ensuring optimal project outcomes.

- **Collaboration**: AI-powered tools could facilitate better communication and conflict resolution by analyzing team sentiment and automating routine communications, fostering a collaborative project environment.

- **Project Success Rates**: Organizations leveraging AI could achieve higher project success rates through proactive risk management, optimized resource allocation, and data-driven decision-making, leading to on-time and within-budget project deliveries.

However, AI in project management is still in its early stages. Most articles on the topic are theoretical and forward-looking, lacking real-world use cases.

This seems to shift now.

In early 2023, articles were focused on the potential and theoretical aspects of AI in project management, including initial implementation steps and ethical considerations. By mid-2024, more focus is on practical applications, indicating a transition from theoretical discussions to actual implementation and integration of AI in real-world project management.

Now is a good time to start using AI in project management.

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Chapter 1

Introduction

Introduction

In today's fast-paced and ever-evolving business environment, staying ahead of the curve is essential for successful project management. Artificial Intelligence is no longer just a buzzword but is becoming a transformative technology reshaping how projects are managed across various industries.

This article seeks to answer the question:

How is AI currently being portrayed and analyzed in online blogs focused on project management?

By examining a wide range of blogs, we aim to understand the current status and trends of AI in project management. Through this analysis, we also extract actionable insights to help project managers effectively integrate AI into their workflows.

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Chapter **2**

Methodology

Methodology

The initial sample consisted of the first 215 search hits from a Google search for "AI in project management" and "Artificial Intelligence in Project Management" conducted on July 10, 2024. The results were then filtered using make.com and ChatGPT, followed by a manual review that excluded 116 blogs that either lacked relevant AI content or were solely promotional, ending up with 100 relevant articles written between January 2022 and July 2024.

Note: the tools identified through this process are excluded from this article but will be detailed later in a separate article.

The selected blogs were scraped primarily using make.com and ChatGPT, with some manual extraction as needed. This process resulted in a comprehensive table that included the URL, title, content, summary, and publishing date of each blog.

Google Gemini 1.5 Pro was subsequently employed to extract all unique information from the blogs, yielding 326 paragraphs of relevant content. These paragraphs, along with the full texts and summaries of the blogs, formed the basis for the analysis presented below.

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Chapter **3**

The Blog Articles

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The Blog Articles

The bar chart below displays the number of articles published on this topic across different quarters from 2023 to 2024.

Articles related to AI in project management
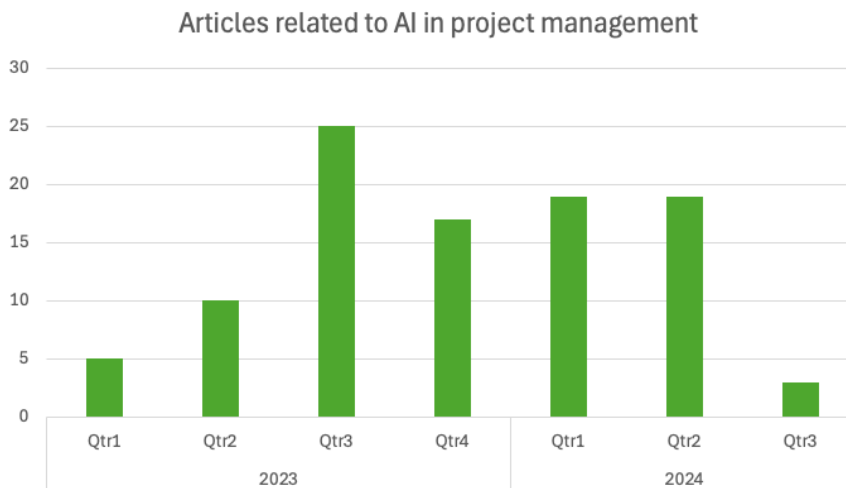
This chart indicates a growing interest in AI in project management through 2023, Qtr3 only contains data for 10 days, hence should not be taken as a decrease in publications.

Sentiment

A simple sentiment analysis shows that most blog-writers are positive for AI in Project management, as seen in the plot below.

Distribution of sentiment scores
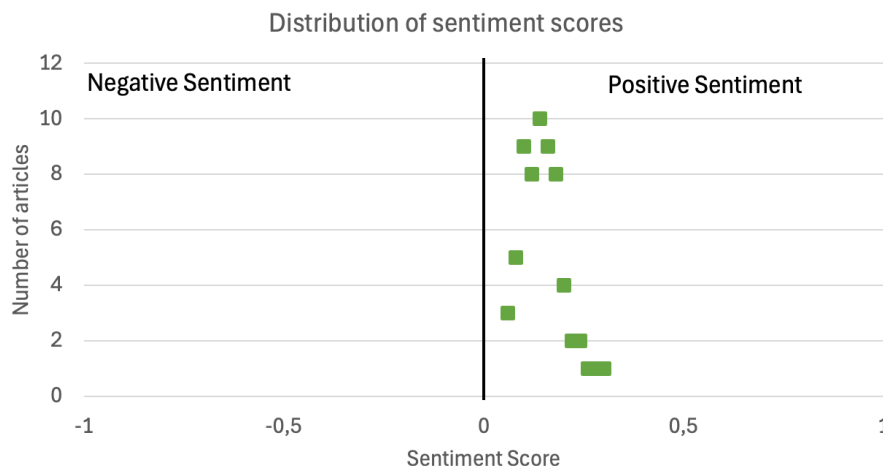
Negative sentiment ranges from -1 to 0, neutral sentiment is 0, and positive sentiment ranges from 0 to 1.

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The Blog Articles

Looking at how the sentiment evolves over time, there is an observable increase in Q1 2023, see below. However, there appears to be a trend towards decreasing positive sentiment towards AI and project management. Although the change is small, this trend, if stretched, aligns with the Gartner Hype Cycle, suggesting a move closer to the "Trough of Disillusionment".
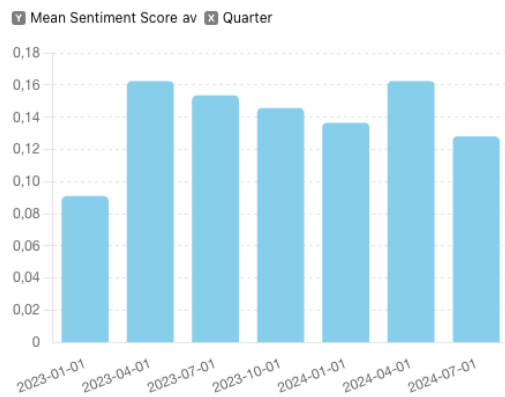

Y Mean Sentiment Score av X Quarter

Blog Categories

The article content can be categorized into four main categories:

1. AI Capabilities and Applications in Project Management, focusing on how AI technologies enhance decision-making, automation, and efficiency within project management practices.

2. Human Skills and Adaptation to AI, exploring the evolving role of project managers and the necessary skills to effectively integrate AI into their workflows

3. AI's Broader Impact on Business and Society, examining the wide-ranging effects of AI on various industries and societal norms.

4. Practical Advice and Resources for Project Managers, offering actionable guidance, best practices, and resources to help project managers successfully implement AI tools and strategies in their projects.
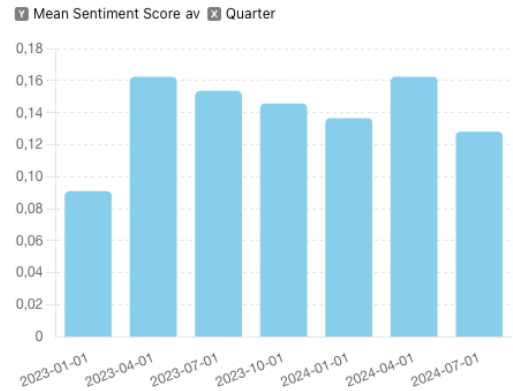
A major fifth theme is tools which is covered in a separate report.

The distribution of the unique content for each of the categories is given in the graph below, the largest piece of the pie representing most mentions

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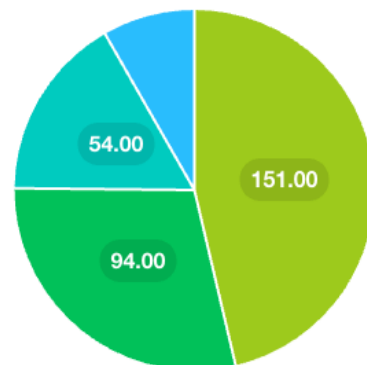
Category and sub category	Approximative Weight of Total
AI Capabilities and Applications in Project Management	
Automation and Efficiency	24%
Decision-Making and Insights	11%
Specific AI Tools and Features	5%
Generative AI in Project Management	6%
Human Skills and Adaptation to AI	
Evolving Role of Project Managers	14%
Ethical Considerations and Governance	13%
Organizational Culture and Adoption	2%
AI's Broader Impact on Business and Society	
Impact on Workforce and Jobs	9%
AI in Specific Industries	3%
Sustainability and AI	4%
Practical Advice and Resources for Project Managers	
Implementation Strategies	6%
Training and Education	1%
Tools and Platforms	1%

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Chapter 4

Topic Coverage

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Topics Coverage

The analysis of the collected articles reveals various well-covered, partially covered, and uncovered topics related to AI's impact on project management. This chapter highlights the areas where AI is more straight forward to integrated into project management practices, as well as those that require further exploration and development.

Well Covered Topics

Practical AI Implementation Tips

- Pilot Projects: Articles consistently emphasize starting small with pilot projects, leveraging existing AI features in current tools, and gradually scaling up AI integration.

- Concrete Implementation Steps: Several articles provide concrete steps for implementation, such as defining clear goals, gathering and refining data, training teams, and addressing data security concerns (IDs 94, 60, 113, 56).

Impact of AI on Project Management

- Increased Automation and Role Shift: Articles consistently predict AI will significantly impact project management, leading to increased automation and a shift in the project manager's role towards strategic planning, leadership, and communication (IDs 100, 61, 50, 41, 33, 19, 15).

- Upskilling Importance: The importance of upskilling in AI technologies, data analysis, and soft skills is repeatedly emphasized (IDs 100, 61, 28, 39, etc.).

AI's Role in Solving Key Project Management Challenges:

- Risk Management: Articles frequently mention AI's ability to analyze data and predict potential risks, enabling proactive mitigation strategies (IDs 80, 77, 75, 26, etc.).

- Resource Allocation: Many articles highlight AI's capability to optimize resource allocation based on project needs, skills, and availability (IDs 80, 78, 31, 27, etc.).

- Scheduling and Timing: Several articles discuss AI's role in streamlining project scheduling, creating realistic timelines, and predicting potential delays (IDs 92, 87, 78, 31, etc.).

- Budget Management: Some articles mention AI's ability to analyze data and predict potential cost overruns, enabling more accurate budgeting (IDs 80, 75, 60, 42, etc.).

Partially Covered Topics

AI Security and Data Protection in Project Management:

- Data Security and Privacy Concerns: While numerous articles mention data security and privacy as concerns, they often lack in-depth discussion or concrete strategies (IDs 101, 84, 68, 37, 19).

- General Advice: A few articles provide general advice, such as ensuring data quality, implementing robust cybersecurity measures, and adhering to ethical guidelines (IDs 113, 69, 27).

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Topics Coverage

ROI of AI in Project Management:

- Cost Savings and Efficiency Gains: Some articles mention cost savings and efficiency gains resulting from AI implementation, but few provide detailed analysis or case studies (IDs 80, 85, 26).

Relevant project management topics not covered

AI's Role in Solving Specific Problems:

- Managing Changes in Project Scope: how AI can be used to manage scope creep and adjust project plans accordingly.

- Managing Team Dynamics: AI's potential role in managing team dynamics and conflicts.

AI's Role in Addressing Communication and Documentation Issues:

- Communication Problems: While AI's role in communication is mentioned (e.g., chatbots, automated updates), its ability to address ineffective communication is not extensively explored.

- Stakeholder Management: AI's potential to improve stakeholder communication is touched upon, but its role in managing stakeholder expectations and requirements is not explicitly addressed.

- The initial sample consisted of the first 215 search hits from a Google search for "AI in project management" and "Requirements Gathering and Documentation: Some articles mention AI's ability to generate project documentation, but its role in gathering requirements and ensuring understanding among all parties is not fully covered.

- Quality Control: While AI is mentioned as a tool for quality assurance, its specific applications in this area are not extensively detailed.

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Topics Coverage

Remarks – skewed data

- The analysis reveals an imbalance in focus. The majority of content emphasizes implementation strategies and the evolving role of project managers in an AI-driven landscape. Numerous pieces offer detailed guides, best practices, tool recommendations, and training advice aimed at helping PMs adopt AI technologies. There's also a consistent narrative around how AI is reshaping the project manager's role, highlighting the growing importance of strategic thinking, data analysis skills, and the ability to collaborate effectively with AI systems.

- However, this emphasis on implementation and role adaptation comes without in-depth exploration of how AI concretely solves real-world project management challenges. While common issues like risk management and resource allocation are mentioned, the discussion often remains surface-level, lacking the detailed problem-solution analysis that many practitioners might find most valuable.

We lack, for example:

- Detailed Case Studies: Showing how AI actually solved a communication breakdown or prevented scope creep on a real project.

- Problem-Specific AI Features: Articles rarely say "For scope issues, look for tool X with Y capability," it's more generic AI benefits.

Reasons for This Skew

- AI Adoption Stage: We're still early. The focus is on getting people on board, hence the implementation push. Case studies take time to develop.

- Tool-Centric Marketing: Many articles are tied to specific tools, so they highlight features broadly, not problem-specific solutions.

- Problem Complexity: Some issues (team dynamics, scope,...) are so nuanced, AI alone can't solve them. It's hard to showcase that convincingly yet.

Conclusion

The "how to" is well covered, but PMs hungry for proven AI solutions to their daily struggles are likely left wanting more. As AI matures, we expect this balance to shift, with more concrete problem-solving examples emerging

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Chapter 5

Practical Applications

"Real-world use cases are not easy to find"

As indicated in the previous chapter, real-world use cases are not easy to find, hindering assessment of AI's proven effectiveness in solving complex problems. Task automation is the most concretely demonstrated use, while complex problem-solving applications remain less clear.

Envorso's Automotive Project (ID 51) - Migrating and rewriting over 100,000 product requirements for a global automotive OEM.

- Outcome: Completed the task in days, a process that would have taken years manually.

- Impact: Demonstrates AI's ability to drastically accelerate documentation tasks.

Gleeds' Construction Project (ID 100) - Providing real-time project updates on a construction site.

- AI Solution: "Visualise" technology, likely utilizing computer vision and 360-degree imaging.

- Outcome: Real-time 360-degree project updates.

- Impact: Enables better monitoring, faster issue identification, and improved communication.

Previous studies focusing on case-studies on AI in project management and master thesis related to this subject also found a relatively small number of real-world use cases underlining that we are early on, see references 117 and 118. A follow up-study on academic papers is ongoing.

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Chapter **6**

Concrete Tips on Getting Started with AI in your projects

Concrete Tips on Getting Started with AI in your projects

Many blog articles revolve around how to get started with AI in your projects we have compiled all the best tips and tricks into an easy-to-follow guide

Phase 1:
Preparation and Planning

Understand the Basics of AI

Define The Objectives

Phase 2:
Feasibility and Evaluation

Evaluate Technological &DataReadiness

Conduct a Feasibility Study

Choose the Right Tools and Platforms

Phase 3:
Implementation and Testing

Build a Competent Team

Implement AI in Your Project

Conduct a Pilot Study

Phase 4:
Scaling

Evaluate Pilot Results

Expand to Other Projects

Phase 5:
Continuous

Encourage Innovation

Stay Updated

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Concrete Tips on Getting Started with AI in your projects

Phase 1: Preparation and Planning

1. Understand the Basics of AI

- **Learn Key Concepts**: Familiarize yourself with fundamental AI concepts such as machine learning, natural language processing, and neural networks. Utilize free resources like online courses and tutorials.

- **Identify AI Applications in Project Management**: Understand how AI can be applied in project management, including predictive analytics, risk management, resource allocation, and automation of routine tasks.

2. Define Your Objectives

- **Set Clear Goals**: Determine what you want to achieve with AI. Objectives could include improving project forecasting accuracy, enhancing resource utilization, or automating repetitive tasks.

- *Examples*: Address specific pain points such as managing meeting notes, improving estimate accuracy, or resolving resource allocation conflicts.

- **Assess Current Processes**: Analyze your current project management processes to identify areas where AI can add the most value.

Phase 2: Feasibility and Evaluation

1. Conduct a Feasibility Study

- **Purpose**: Determine whether the proposed AI project or solution is viable and worth pursuing. Assess the practicality, cost, and potential success of the project.

- Benefits: Low stakes for initial testing, quantifiable results.

- **Evaluate Readiness**:

- Technological: Assess your organization's technological infrastructure to ensure it can support AI integration.

- Data: Ensure you have access to quality data, as AI systems rely heavily on data to function effectively.

2. Choose the Right Tools and Platforms

- **Evaluate Current Tools**: Check if your current project management (PM) platform offers basic AI functionalities such as task suggestions, automated reminders, or basic data analysis.

- Advantage: Low-cost, hands-on experience to clarify needs before bigger investments.

- **Select AI Tools**: If current tools are insufficient, choose AI tools and platforms that align with your project needs. If your focus is on automating repetitive tasks and communication, look for tools strong in NLP. If accurate forecasting is key, prioritize those with robust machine learning features

- **Consider Custom Solutions**: If off-the-shelf tools do not meet your needs, consider developing custom AI solutions.

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Concrete Tips on Getting Started with AI in your projects

Phase 3: Implementation and Testing

1. Build a Competent Team

- **Hire or Train AI Talent**: Ensure your team includes members with AI expertise, such as data scientists and AI engineers. Alternatively, provide training for your existing team.

- **Collaborate with Experts**: Engage with AI consultants or partner with organizations specializing in AI to guide your implementation process.

2. Conduct a Pilot Study

- **Purpose**: Test the implementation of the project or solution on a small scale before a full-scale rollout.

- **Define Metrics for Success**: Establish clear metrics to evaluate the success of your pilot project, such as project completion time, cost savings, or accuracy of predictions.

3. Implement AI in Your Project

- **Integrate AI Tools**: Implement the selected AI tools into your project management processes.

- **Monitor and Adjust**: Continuously monitor the performance of AI tools and make necessary adjustments to improve efficiency and effectiveness.

Phase 4: Scaling

1. Scale Up AI Implementation

- **Evaluate Pilot Results**: Analyze the results of your pilot project to identify successes and areas for improvement.

- **Expand to Other Projects**: Based on the success of the pilot, gradually expand AI implementation to other projects within your organization.

Phase 5: Continuous Improvement

1. Foster a Culture of Continuous Improvement

- **Encourage Innovation**: Promote a culture that encourages innovation and continuous improvement. Encourage team members to suggest new ways to leverage AI in project management.

- **Stay Updated**: Keep up with the latest advancements in AI technology and project management practices to continuously enhance your processes.

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Concrete Tips on Getting Started with AI in your projects

Tips for Successful AI Implementation

- **Prioritize Data Quality**: Ensure the data used for AI is accurate, relevant, and up-to-date.

- **Maintain Transparency**: Clearly communicate the goals, benefits, and changes associated with AI implementation to all stakeholders.

- **Focus on User Adoption**: Provide training and support to ensure team members are comfortable and proficient in using AI tools.

- **Measure ROI**: Regularly measure the return on investment (ROI) of AI initiatives to ensure they deliver value to your projects.

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Chapter **7**

Trends

Trends

As artificial intelligence (AI) continues to evolve, its integration into project management has followed a transformative path. The articles from early 2023 focus on the potential and theoretical aspects of AI in project management, including initial steps for implementation and ethical considerations. By mid 2024, the articles shift towards practical applications, case studies, advanced tools, and strategies for maximizing ROI.

Early 2023

- Focus on Potential and Benefits

- General Overviews and Predictions

- Limited Real-World Examples

- Emphasis on Adaptation and Upskilling

Mid-2024

- Shift Towards Practical Implementation

- Emergence of Concrete Examples and Case Studies

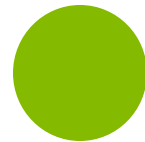- Growing Awareness of Challenges

- Focus on Specific AI Capabilities

Suggesting a move from theoretical discussions to the actual implementation and integration of AI into real-world project management workflows.

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Chapter 8

Future Outlook

Future Outlook

Based on the articles analyzed, here are some key predictions for the future of AI in project management:

1. **Continued Growth and Integration**:

- **Inevitable Integration**: AI is not a passing trend; its integration into project management is inevitable and will accelerate. Market projections anticipate significant growth (IDs 26, 101).

- **Accessible AI Features**: More project management software will incorporate AI features, making them accessible even without specialized tools.

- **Advanced Capabilities**: We will see a shift from basic automation to more sophisticated AI capabilities, such as generative AI, predictive analytics, and decision support.

2. **Transformation, NOT Replacement**:

- **Augmenting Roles**: AI will augment, not replace, project managers (IDs 91, 112, 104). The role of project managers will shift towards strategy, leadership, communication, and ethical oversight of AI.

- **Human-in-the-Loop**: Approaches where AI assists but humans make the final decisions will become the norm, ensuring human oversight in critical decisions.

3. **Rise of Specialized Roles**:

- **New Skills Demand**: There will be a rising demand for project managers skilled in AI, data analysis, and prompt engineering (IDs 61, 39, 28).

- **Emerging Roles**: New roles focused on ethical AI governance, data quality management, and AI system integration will emerge (IDs 37, 55).

- **Bridging the Gap:** The AI Translator: Beyond technical expertise, there's a growing need for project managers who can bridge the gap between specialized AI teams and business stakeholders. These "AI translators" possess a solid understanding of AI concepts and capabilities, allowing them to effectively communicate technical insights to non-technical audiences, translate business needs into actionable AI initiatives, and advocate for the ethical and transparent use of AI within projects. This hybrid skillset will be invaluable in ensuring that AI investments deliver tangible business value while fostering trust and collaboration across diverse teams.

4. **Data-Driven and Adaptive Project Management**:

- **Real-Time Analysis**: Real-time data analysis and predictive capabilities will enable more proactive and adaptive project management (IDs 103, 57, 42, 26). Imagine an AI tool that integrates with your team's communication platform. It detects a sudden increase in negative sentiment related to a specific task and alerts the PM to a potential conflict before it impacts the timeline.

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Future Outlook

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- **Dynamic Project Plans**: Project plans will become more dynamic, allowing for faster adjustments based on AI-generated insights.

- **Generative AI:** This technology goes beyond analyzing existing data to actually creating new content. Imagine feeding a generative AI tool your project requirements and having it draft different versions of your proposal, complete with outlines, budget estimations, and even visualized timelines. This can free up significant time for project managers to focus on strategy and stakeholder engagement. Beyond proposals, generative AI can also build realistic project simulations, allowing teams to test different scenarios and risk mitigation strategies before actual implementation.

- **Predictive Analytics:** While basic AI can highlight potential risks, advanced predictive analytics will forecast potential bottlenecks with far greater accuracy. By analyzing historical project data and real-time inputs, AI can anticipate resource constraints weeks or even months in advance. For example, if a project requires a specific skill set down the line, the AI can alert the PM early enough to secure those resources, preventing costly delays and ensuring smoother project execution.

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Future Outlook

Areas for Future Development

1. **Addressing Ethical and Societal Concerns**:

- **Ethical Guidelines**: There is a need for clearer guidelines and regulations for ethical AI usage in project management (IDs 68, 37, 19).

- **Bias Mitigation and Data Privacy**: Mitigating bias in AI algorithms and ensuring data privacy and security are crucial (IDs 116, 69, 58, 33).

- **Equitable Access and Job Displacement**: Addressing potential job displacement and ensuring equitable access to AI benefits require careful consideration (IDs 116, 61).

2. **Moving Beyond Task Automation**:

- **Complex Challenges**: While AI excels at automating routine tasks, future development should focus on solving more complex project management challenges (IDs 52, 40). Take, for example, the intricate realm of team dynamics. While AI can readily automate simple task assignments based on availability and skill sets, teaching it to truly understand the complexities of human interaction— personalities, working styles, team history, and unspoken communication— to optimize collaboration and preemptively mitigate conflicts is a far more challenging endeavor. This is where deep learning, with its ability to process vast amounts of unstructured data and uncover subtle patterns, holds promise, but it's still an area under active research and development.

- **Improving Team Dynamics**: This includes addressing communication breakdowns, managing scope creep, and improving team dynamics, where AI's capabilities are still developing.

3. **Developing More Robust and Explainable AI**:

- **Handling Subjective Scenarios**: Improving AI's ability to handle subjective and complex scenarios is crucial (IDs 58, 30).

- **Transparency and Trust**: Focus on developing AI systems that are transparent and explainable, allowing humans to understand their reasoning and build trust (ID 68).

4. **Closing the Knowledge Gap**:

- **Case Studies and Examples**: More comprehensive case studies and real-world examples of AI solving complex project management problems are needed (IDs 100, 51).

- **Enhanced Training Programs**: Enhanced training programs and resources for project managers to develop AI skills and literacy are essential (IDs 115, 39, 28).

5. **Integrating AI Across the Entire Project Lifecycle**:

- **Seamless Integration**: Current AI tools often focus on specific tasks or phases. Future development should aim for seamless AI integration across the entire project lifecycle, from initiation to closure.

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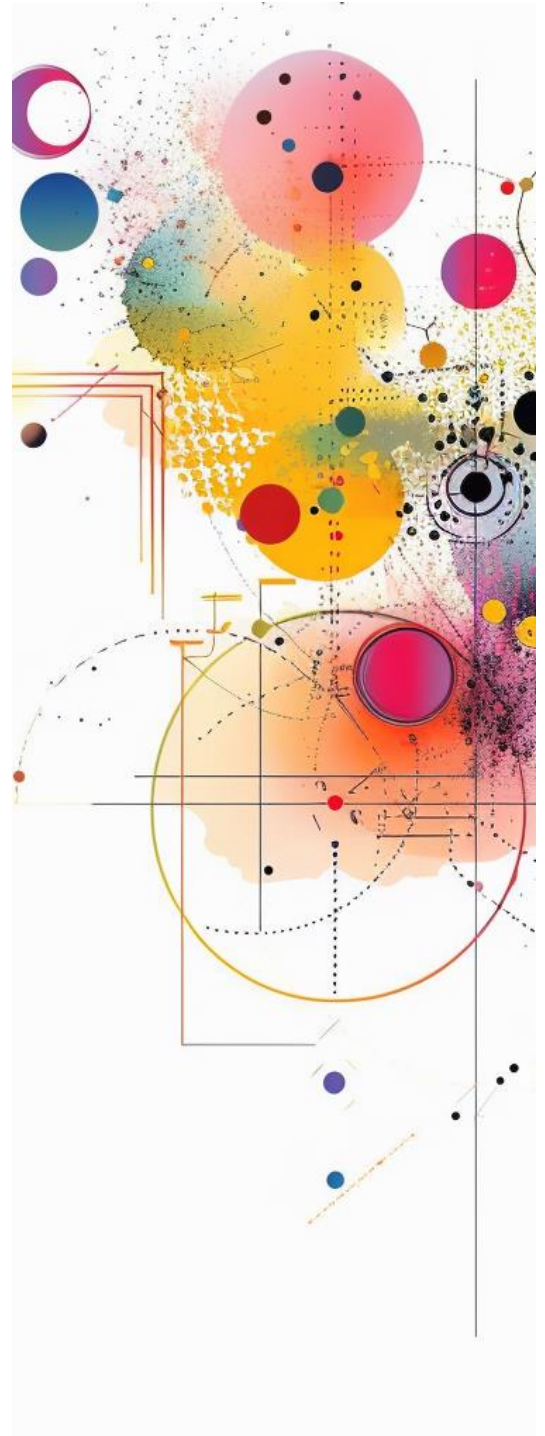# Chapter 9

Summary and Conclusion

Summary and Conclusion

The analysis of 100 articles on AI in project management underscores AI's transformative potential, revealing a future where AI significantly enhances efficiency and reshapes the project manager's role. Key findings highlight AI as an augmentation tool, supporting decision-making and automating tasks, thereby boosting efficiency and productivity. Project managers must evolve, developing skills in data analysis, AI tool usage, and ethical governance to manage both AI systems and human teams effectively.

However, the early stage of AI adoption means detailed case studies and problem-specific solutions remain scarce. As technology matures, we expect more comprehensive examples and advanced capabilities, addressing challenges like risk management, resource allocation, and scheduling with greater depth.

Organizations must prioritize data quality, foster innovation, and maintain transparency to fully leverage AI's potential. Continuous learning and upskilling will be essential for project managers to stay effective in this evolving landscape. This study provides strategic insights to help organizations prepare for and navigate the transformative impact of AI in project management, ensuring improved efficiency, decision-making, and overall project success.
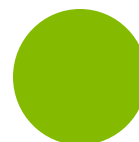
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Chapter 10

References

References

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16	The Role of Artificial Intelligence in Project Management	https://xergy.com/proteus-blog/the-role-of-artificial-intelligence-in-project-management/
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18	How Shifting Mindsets Unlock AI's Potential in Projects	https://blog.iil.com/breaking-barriers-how-shifting-mindsets-unlocks-ais-potential-in-project-management/
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25	AI in Project Management: 10 Critical Ways it Will Change ...	https://www.bcsprosoft.com/ai-in-project-management/
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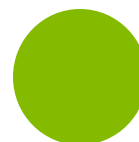TOKSTARK.COM

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Appendix 1 – Glossary of terms

References

Term	Definition	Relevance to Project Management
Artificial Intelligence (AI)	The ability of a computer or machine to mimic human intelligence, learning from experience and performing tasks that typically require human cognition.	Encompasses various technologies used to automate, analyze, and optimize project processes.
Machine Learning (ML)	A type of AI that allows systems to learn from data without explicit programming.	Used for predictive analytics (e.g., forecasting project timelines and costs) and identifying patterns in project data.
Deep Learning	A subset of ML that uses artificial neural networks with multiple layers to process complex data patterns.	Applied in areas like image recognition for construction progress tracking and natural language understanding for complex project requirements.
Natural Language Processing (NLP)	Enables computers to understand, interpret, and generate human language.	Used for automating documentation, analyzing communication sentiment, and powering chatbots for project-related queries.
Generative AI	AI models capable of generating new content (text, images, code, etc.) based on patterns learned from data.	Can be used for automating proposal writing, creating project simulations, and summarizing lengthy reports.
Predictive Analytics	Using data, statistical algorithms, and ML to predict future outcomes.	Helps anticipate project risks, resource needs, and potential bottlenecks, enabling more proactive decision-making.
Human-in-the-Loop (HITL)	A system where AI assists humans in decision-making, but the final decision rests with the human.	Ensures ethical considerations and complex project nuances are handled by humans while benefiting from AI insights.
Algorithm	A set of rules or instructions that a computer follows to solve a problem or complete a task.	The foundation of AI systems, used to process data and generate insights or predictions.

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Appendix 2 – Lessons learned and personal reflections

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Lessons learned and personal reflections

Difficult to find non-commercial knowledge using simple google search

- Most of the information found in the google search was company blogs promoting their products in one way or another.

- No search results from social platforms such as medium.com, substack.com, or LinkedIn.

- No search results from scientific papers. I will use scholar.google.com for my next project

Cost of using the top tier models is high, one advanced filtering using GPT4-o, applied on 150 articles was around 6 USD. Now with the GPT4mini model this cost is significantly lower and faster, enabling a totally different way of using it. Remains to see if the quality of the responses are good enough.

Generative AI opens up for working with unstructured data in a completely new way, which is very rewarding.

Daniel

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