

Augmented Competency in the management of IT projects in the environment of Artificial Intelligence

Authors:



Sergiy Bushuyev

Natalia Bushuyeva

Svetlana Murzabekova

Maira Khussainova

Rakhmatullo Saidullayev





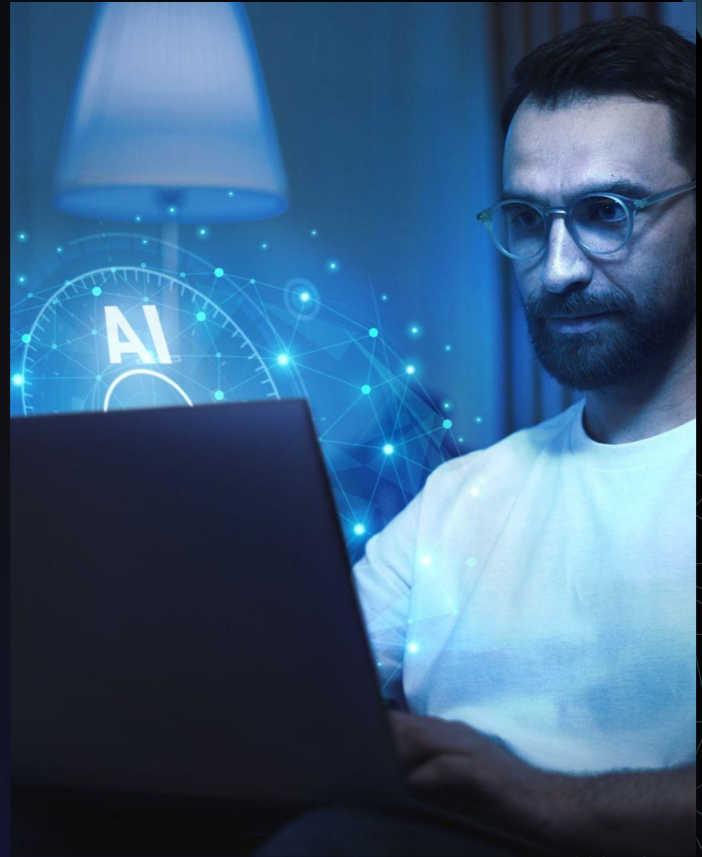
Introduction

What is Augmented Competency?

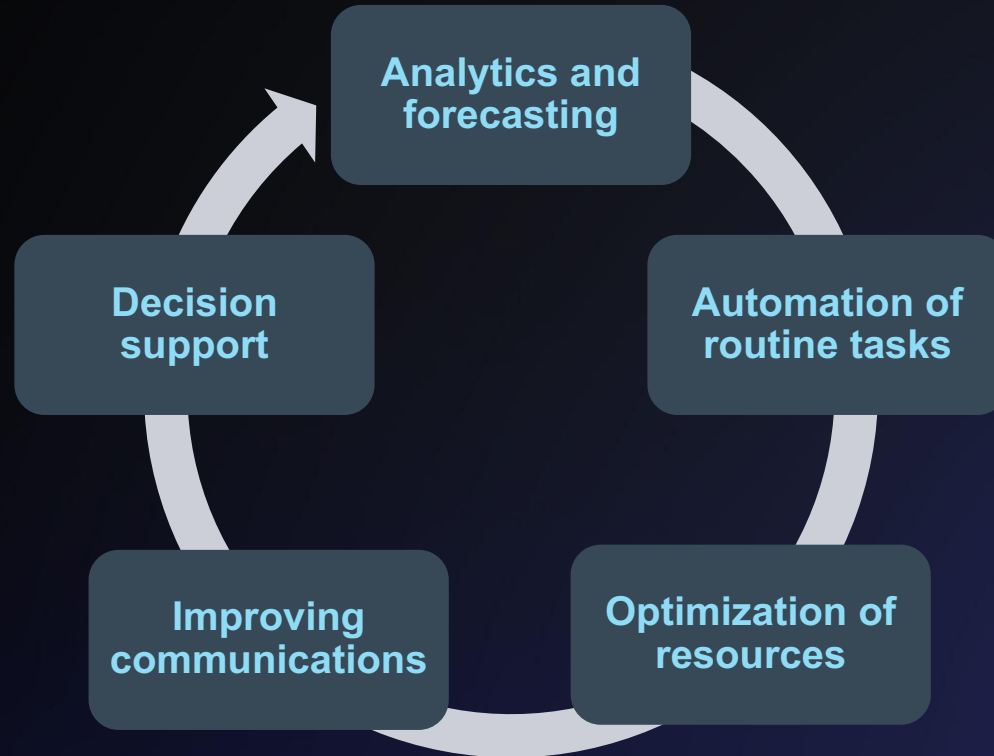
A collaboration between human expertise and AI capabilities.

Objective: Improve decision-making, efficiency, and innovation in IT project management.

Key Principle: AI complements, not replaces, human project managers.



Principle of Augmented Competency





Challenges of AI in Project Management

Cost: High upfront investment in AI tools and training.

Data Quality: Poor-quality data can lead to inaccurate outcomes.

Integration: Adapting AI to existing workflows can be complex.

Cultural Resistance: Teams may fear job loss or struggle with change.

Technical Limitations: AI systems are not foolproof and require ongoing updates.

SWOT Analysis of Augmented Competency

STRENGTHS:

Increased Efficiency

AI automates routine tasks, enabling managers to focus on strategic aspects of project management.

More Informed Decisions

AI provides deep data analysis and forecasting, supporting better decision-making.

Resource Optimization

AI helps allocate resources effectively, reducing costs and increasing team productivity.

Improved Communication

Intelligent systems enhance collaboration among team members and stakeholders.

Risk Reduction

AI identifies and minimizes risks through forecasting and data analysis, improving project safety.

OPPORTUNITIES:

Innovative Products and Services

AI creates opportunities for innovative solutions, providing a competitive market advantage.

Market Expansion

Efficiency gains enable companies to enter new markets and segments.

Enhanced Customer Satisfaction

AI tailors services to customer needs, improving satisfaction.

Increased Competitiveness

Advanced AI technologies help businesses stay ahead of competitors.

Managing Complex Projects

AI improves coordination and control over complex project aspects.



WEAKNESSES:

High Initial Costs

Significant investment in AI development, implementation, and training is required.

Dependence on Data Quality

AI effectiveness relies heavily on accurate and sufficient data.

Integration Challenges

Integrating AI with existing systems requires significant technical effort.

Technical Limitations

AI systems may have accuracy and reliability constraints.

THREATS:

Competition

Competitors adopting similar technologies can reduce uniqueness.

Regulatory Challenges

New technologies face data security, privacy, and regulatory restrictions.

Technological Risks

Failures and cyber-attacks can disrupt AI systems.

Ethical Concerns

AI raises questions about transparency, fairness, and privacy.

Economic Instability

Fluctuations may hinder investments in innovative technologies.





Basic competencies of effective IT project management

No	Name of competences	Assessment of the impact of AI
1	Technical knowledge	
1.1	Understanding of IT infrastructure and architecture. Knowledge of the basic principles of computer systems, networks, databases and software.	
1.2	Knowledge of software development methodologies. Understanding of methodologies such as Agile, Waterfall and DevOps for software planning, development and testing.	
1.3	Knowledge of programming languages and development tools. Proficiency in programming languages such as Java, Python or C# and skills in development tools such as IDEs, version control systems and testing tools.	
2.	Management skills.	
2.1	Planning and organization. Ability to clearly plan a project, prioritize tasks, allocate resources and monitor progress.	
2.2	Team management. Effectively manage the development team, delegate tasks, monitor their work and solve problems.	
2.3	Risk management. Identifying, assessing and mitigating potential risks that may affect the project.	
2.4	Communication and cooperation. Clear and effective communication with all project stakeholders, including management, team, customers and suppliers.	
2.5	Solving problems and making decisions. Ability to analyze problems, find creative solutions and make informed decisions.	



№	Name of competences	Assessment of the impact of AI
3	Personal qualities	
3.1	Leadership Inspire and motivate the team, lead it to achieve project goals.	
3.2	Responsibility. To be responsible for the results of the project and for the actions of the team.	
3.3	Orientation on the result. Focus on achieving project goals and meeting deadlines and budgets.	
3.4	Analytical thinking. Ability to gather and analyze information, identify problems and find solutions.	
3.5	Flexibility and adaptability. Be able to adapt to changes in the project and respond to unforeseen situations.	
4	Additional competencies	
4.1	Industry knowledge. Understanding the specific needs and requirements of the industry in which the IT project is implemented.	
4.1	Negotiation skills. Ability to negotiate with suppliers, customers and other stakeholders.	
4.3	Presentation skills. To be able to clearly present information about the project to various managers.	
4.4	Time management. Allocate time efficiently and complete tasks on time.	
4.5	Computer skills. Proficiency in working with a personal computer and common software packages.	
4.6	Technical knowledge	



Management of IT projects in the environment of AI

Step 1:

Setting Goals and Expectations

- Ensure that AI project goals are formulated within the SMART framework.
- Verify alignment of project goals with the organization's overall strategy.

Step 2:

Risk and Ethical Considerations

- Identify potential risks, such as bias, discrimination, data security, and privacy issues.
- Develop a risk mitigation plan to minimize negative consequences.
- Consider ethical aspects: transparency, accountability, and responsibility.

Step 3:

Evaluating Effectiveness of AI Systems

- Assess if the AI systems meet the stated goals, requirements, and accuracy standards.
- Ensure proper integration of AI systems with IT infrastructure.



Step 4:

Data Management and Security

- Ensure the quality and ethical collection of data used for AI training.
- Analyze measures to protect data from unauthorized access and breaches.

Step 5:

Control and Oversight

- Clearly define roles and responsibilities for managing and monitoring AI systems.
- Establish processes for monitoring, updating, and potentially decommissioning AI systems.

Step 6:

Impact on People and Organization

- Assess how AI affects workplace processes, skills, and organizational culture.
- Develop training and support plans to help employees adapt to changes.

Step 7:

Documentation and Reporting

- Fully document the project's goals, methods, results, and conclusions.
- Prepare reporting processes to keep stakeholders informed about progress and outcomes.

Conclusions

The SWOT analysis highlights the transformative potential of AI in IT project management. By leveraging AI, companies can achieve greater efficiency, improved decision-making, optimized resources, and enhanced communication, ultimately leading to higher productivity and better project outcomes. However, the analysis also reveals significant challenges, including high initial implementation costs, technical complexities, and the need for substantial organizational adjustments.

Despite these challenges, AI opens up opportunities for innovation, market expansion, and improved customer satisfaction, helping businesses remain competitive in a rapidly evolving market. At the same time, companies must navigate threats such as regulatory changes, ethical concerns, and economic instability. Successfully implementing AI requires strategic planning, investment, and readiness to adapt to new technologies. Those who rise to these challenges can harness AI's potential to gain a lasting competitive advantage.





Thanks!

Do you have any questions?



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Rakhmatullo Saidullayev