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PROJECT MANAGEMENT IN THE ERA OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

Humanity is not staying in the same place; it is keeping up with the times. Artificial intelligence is turning at an unreal pace and has become an integral part of project management in many areas in the age of robotization. Today's project managers face increasingly demanding challenges and must effectively interact with AI to be part of the process called 'symbiosis' with AI technology that not only manages projects but also opens new horizons in task scheduling, process automation and overall project efficiency. Project management provides the knowledge, experience, methods and tools to complete tasks and achieve success in any project. Challenging project activities increasingly rely on technical assistance, including AI (Fridirsson et al., 2022.).

The implementation of AI is a challenge for project managers. This is because automation can jeopardize the role of the simple worker. New skills will be required and there is a risk of redundancy. Organizational change needs to be managed effectively so that employees can adapt to the new technological environment. Data protection is also a general issue and companies need to have reliable protection systems in place to handle the large amount of information generated by AI (Fridirsson et al., 2022).

Risk management is another important aspect of applying AI in project management. Given the uncertainty and difficulty of new technologies, managers need to understand the psychological aspects of employees' perception of innovation. Many employees may feel uncomfortable and resist change for fear of losing their jobs due to automation. However, effective strategies for managing change, such as communication campaigns and training programs, can alleviate such feelings and

encourage the adoption of new technologies (Taboada et al., 2023). This psychological shift is decisive because it affects the vitality of the company and the overall success of the project.

Despite these challenges, AI can significantly improve the work of project managers by saving time and creating new possibilities for projects. By automating routine tasks, managers can focus on strategic issues such as key decision-making and optimizing resources, increasing accountability and transparency. Such an evolution not only increases the contribution of individuals to projects, but also improves organizational culture and enhances adaptability.

Using AI in project management also improves the customer experience. Intelligent data analytics is the use of real-time information to detect regularities in large amounts of data, make predictive decisions, improve customer relationships and increase their loyalty (Gulyavets, 2023).

AI analytics provides accurate forecasting and holistic data analysis to support informed decision-making, improve planning accuracy and reduce the risk of overspending. Customer relationship management (CRM) allows companies to store and exchange information about their customers in real time.

Preparation for AI implementation begins with an assessment of a company's readiness. The project manager should conduct a thorough analysis of the company's technology level and adaptive capacity. This includes an assessment of existing resources, infrastructure, knowledge and skills of the workforce; successful AI integration often requires significant changes in business processes and corporate culture (Taboada et al., 2023). Soft skills such as communication, critical thinking and teamwork are decisive for improving operations and increasing company productivity. And not to forget the hard skills acquired through hard work. Technical skills are of course important, but experts in the field believe that project managers should also acquire digital qualities to successfully integrate new technologies into their practice.

Testing new technologies is crucial. Before fully implementing a system, a small amount of testing is advisable. This is why the introduction of AI is an important phased approach. Project managers should coordinate and monitor the efficiency of AI. In this way, the potential of the new technology can be maximized and the project can be managed successfully.

In conclusion, the integration of AI into project management represents a significant shift in the way projects are planned, executed and evaluated. Project managers will have to adapt to new roles that require both technical and soft skills to deal with the complexities created by AI. A focus on effective change management, data protection and risk assessment will be crucial to overcome the challenges posed by this technological revolution. Furthermore, leveraging the capabilities of AI for predictive analytics and customer relationship management will enable organizations to not only increase project efficiency, but also improve customer satisfaction and loyalty. should ensure that the benefits of this transformative technology are maximized in future projects.

References:

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