stronger connections with their followers and collaborators. However, to maximize the effectiveness of social media as a project management tool, artists must also be aware of its limitations, including the potential for distraction and the need for supplementary management tools (Sheresheva, 2024) (Yang, 2024) (Chakraborty & Jain, 2022). With careful planning and a disciplined approach, digital artists can successfully integrate social media into their project management strategies, enabling them to thrive in a fast-paced and competitive digital landscape (Yang, 2024).

References:

1. Chakraborty, Amrita & Jain, Varsha. (2022). Leveraging Digital Marketing and Integrated Marketing Communications for Brand Building in Emerging Markets. 10.1007/978-3-030-88678-3_13.

2. Sheresheva, M. (2024). The Role Of Digital Media In Promoting Artists' Personal Brands In The Art Market. International Scientific Journal Of Media And Communications In Central Asia.

3. Yang, Y. (2024). The Impact of Social Media on the Commercialization and Market Value of Visual Art. *Lecture Notes in Education Psychology and Public Media*, 40(1), 144-150.

Ternopolska S.O.,
student,
*Supervisor: **Vyshnevska M.O.**,*
associate professor,
Kyiv National University of Technologies and Design

ARTIFICIAL INTELLIGENCE IN RISK FORECASTING AND PROJECT MANAGMENT

In today's business environment, project management is becoming increasingly complex due to heightened uncertainty, market globalization, and rapid technological advancements. Project managers must anticipate potential risks, make informed decisions, and respond swiftly to new challenges that arise during project

implementation. Given the vast amount of data and the complexity of analysis, traditional risk management methods are becoming less effective. As a result, modern technologies, including artificial intelligence (AI), are stepping in to offer solutions.

AI is transforming the approach to risk forecasting and project management by enabling automated analysis of large amounts of information, identifying hidden patterns, and generating more accurate predictions. AI tools can help forecast delays, budget overruns, technical issues, and other risks that may arise during project execution. This proactive approach allows managers to influence processes early and minimize negative outcomes.

Given the importance of project management processes and the rapid development of artificial intelligence, studying their interaction has become highly relevant. An increasing number of companies are using AI to enhance project management and mitigate risks. The latest Capterra survey (2023) confirms AI's positive impact on project management: 93% of project managers reported improved project outcomes with the use of AI tools, while only 8% of companies do not plan to implement AI in their operations (Vasylenko & Vakalyuk, 2024). Therefore, researching the possibilities and practical applications of AI in this area is a crucial step toward enhancing business process efficiency and market competitiveness.

Artificial intelligence plays a significant role in risk prediction and project management, particularly through the use of machine learning and big data analysis. A key aspect of AI implementation is its ability to analyze vast amounts of data from past projects and identify patterns that aid in predicting risks in current projects. The use of such technologies can improve the accuracy of forecasts, helping managers better assess possible threats and adapt management decisions. This, in turn, helps to reduce risks and improve overall project performance (Bachynskyi, 2024).

For example, AI in risk management can be seen in the use of neural networks, which can account for numerous factors, including economic, technical, financial, and social variables. This enables the prediction of risks such as budget non-compliance, delays, requirement fulfillment issues, resource shortages, operational

XV Міжнародна науково-практична конференція, Одеса, ОДАБА, 17-18 жовтня 2024 р.

414

risks, and more. Additionally, AI algorithms can utilize predictive tools like "what if" modeling, allowing project managers to assess the potential impact of different scenarios on project outcomes. This leads to more effective risk management throughout all stages of a project, from planning to execution.

Moreover, Artificial intelligence creates new opportunities in project management, significantly enhancing processes at every stage. It enables the automation of critical tasks such as resource planning, task allocation, and progress monitoring. This not only increases task accuracy but also reduces risks related to human error and improves team efficiency. AI also supports decision-making by allowing managers to respond more quickly to project changes, which is particularly valuable in large and complex software projects (Bedratiuk, 2024). Besides, AI helps analyze various project scenarios and identify the most optimal paths to achieve goals, thereby minimizing the risk of poor management decisions.

Furthermore, AI provides continuous real-time monitoring of projects, enabling the quick identification of problems and preventing their negative impact on the final outcome. This automation optimizes resource allocation, making management more flexible and adaptive to changing conditions. This is especially important for large, long-term projects, where circumstances can shift rapidly and unpredictably. AI not only analyzes the current situation but also predicts future trends, providing managers with data-driven insights to make informed decisions based on objective indicators.

The integration of AI with Agile and Scrum methodologies is becoming increasingly common, as AI facilitates the management of iterations, sprints, and task tracking. By automatically collecting feedback and analyzing completed tasks, AI helps to improve teamwork efficiency and accelerate development cycles.

In addition, AI-based tools can analyze team performance and provide individualized recommendations for improvement. This not only optimizes workflows but also helps to maintain employee motivation and productivity.

Conclusion. Artificial intelligence is a key factor in the transformation of project management, opening up new opportunities for automation, increased

XV Міжнародна науково-практична конференція, Одеса, ОДАБА, 17-18 жовтня 2024 р.

415

accuracy, and reduced costs. By implementing AI, companies gain competitive advantages through optimized workflows, more efficient resource planning, and deeper data analysis. AI helps minimize human errors, automate risk forecasting, and improve data-driven decision-making, ultimately increasing the efficiency of project activities. Prospects for further research in this area include a more detailed analysis of the impact of AI on the dynamics of project work, particularly regarding responsiveness to changes, resource optimization, and adaptability to new conditions. Additionally, an important area of focus is the development of tools to enhance communication within teams, where artificial intelligence can serve as an intelligent intermediary, ensuring effective interaction and coordination among team members. This opens up opportunities for even deeper integration of AI into management processes, which will not only increase productivity but also improve the quality of the final project outcomes.

References:

1. Bachynskyi, O. (2024). The use of artificial intelligence as a tool for project management. Economy and society, (61).

2. Bedratiuk, G. I. (2024, March). Optimization of software projects using artificial intelligence. In *The 7 th International scientific and practical conference "Topical aspects of modern scientific research"(March 21-23, 2024) CPN Publishing Group, Tokyo, Japan. 2024. 333 p.* (p. 119).

3. Vasylenko, V. M., & Vakalyuk, T. A. (2024). Artificial intelligence in project management: an analysis of current research and development prospects. Scientific notes, 4202460.

XV Міжнародна науково-практична конференція, Одеса, ОДАБА, 17-18 жовтня 2024 р.

416