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PROJECT MANAGEMENT IN THE DEVELOPMENT OF AN E-COMMERCE PLATFORM USING ARTIFICIAL INTELLIGENCE METHODS

Abstract. We consider the importance and possibilities of using artificial intelligence for project management in the development of e-commerce platforms. We explore how intelligent systems and automation can facilitate and accelerate the development and implementation of such platforms.

Keywords: e-commerce, project management, artificial intelligence, intelligent systems, automation, open-source.

The development of e-commerce platforms requires significant effort, time, and resources. Project management in this area can be challenging as it requires accuracy and efficiency at all stages. Artificial intelligence can solve numerous tasks and simplify processes, which will speed up the development and implementation of platforms [1]. Intelligent systems can be used to automate many aspects of project management in the development of e-commerce platforms. Their implementation for e-commerce platforms can significantly reduce project time and costs. Using tools to automate testing, deployment, and monitoring can provide effective control over processes and allow all team members to focus on more important tasks.

In the open-source world, there are many projects that can help with project management using artificial intelligence methods for optimizing the development, implementation, and management of projects.

An example is the work of Microsoft Research scientists who have implemented artificial intelligence technologies to develop an intelligent system called Project InnerEye, which uses artificial intelligence to analyze data in the field of medical diagnostics and aims to automate the analysis of medical images and help doctors detect tumors and other pathologies in X-ray and CT images [2]. As a result of the implementation of this system in the process of medical diagnosis, the following results were achieved:

1. Significant acceleration of the speed of CT scan analysis compared to even an experienced specialist.
2. Improved diagnostic accuracy. Artificial intelligence helped to detect even the smallest signs of pathologies in the images, which significantly increases the accuracy of diagnosis.
3. Process automation. The InnerEye system can work continuously, which allows doctors to focus on more important tasks, such as choosing treatment methods and scheduling surgeries.

This example demonstrates how the introduction of artificial intelligence into project management can significantly increase project efficiency and effectiveness.

We'll look at some other popular open-source products that help implement AI methods in project management: from data analysis and communication automation to identifying factors that influence project success.

Apache OpenNLP [3]. It is a library for natural language processing (NLP). OpenNLP can be used to analyze textual information such as emails, reports, and comments in project documents. It can automatically highlight keywords, determine the mood of the text, analyze feedback from customers, and perform other tasks to improve the project management process.

Orange [4]. The platform contains tools for creating machine learning models, as well as for visual analysis and data visualization. Orange can be used to analyze project data and predict project outcomes. It helps to identify factors that influence project success and makes it possible to optimize project management based on data analysis.

The introduction of artificial intelligence for project management in the development of e-commerce platforms significantly increases their efficiency and makes the development and implementation process more efficient and faster. Intelligent systems allow automating routine tasks, which helps the development team to focus on strategic aspects of the project. In addition, the availability of numerous open-source solutions makes tools for data analysis, communication automation, and project management optimization available, which reduces the time and costs of developing e-commerce platforms.

Based on the above, we will develop the project "Development of an e-commerce platform for small and medium-sized businesses", the features of which will be presented in future studies and publications.

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This book includes abstracts of the 10th International Conference "Information Technology and Implementation (Satellite) – 2023". Philosophical, theoretical and applied aspects which describe the results, problems and prospects of the creation and use of intelligent computing methods and creating of information systems and technology on their basis are reviewing.

Main tracks of the conference are: Artificial Intelligence Technologies, Cyberspace Protection Technologies, Data Analytics, Digital Project Management Technologies, E-commerce, E-government and E-learning Technologies, Mathematical Foundations of Information Technology, Network and Internet Technologies, Smart Technologies.

До цієї збірки увійшли тези 10-ї Міжнародної конференції «Інформаційні технології та впровадження (сателітної) – 2023». Розглядаються філософські, теоретичні та прикладні аспекти, які описують результати, проблеми та перспективи створення і використання інтелектуальних обчислювальних методів та створення на їх основі інформаційних систем і технологій.

Основні напрямки конференції: Технології штучного інтелекту, Технології захисту кіберпростору, Аналітика даних, Технології цифрового управління проєктами, Електронна комерція, Електронне урядування та Технології електронного навчання, Математичні основи інформаційних технологій, Мережеві та Інтернет-технології, Розумні технології.

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