



Future Trends in SEPM

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Introduction

Why Robotic Process Automation (RPA) Will Revolutionize Software Engineering Project Management

Robotic Process Automation (RPA) is an innovation that uses AI and machine learning to take over repetitive tasks from humans. It decreases the necessity for human operators in test planning and stakeholder management tasks and can be implemented in chatbots or other types of automation (Van der Aalst et al., 2018).



Challenges in SEMP – Solution for SEMP & Benefits of RPA

- The challenges in software engineering project management include time-consuming manual tasks, repetitive administrative burdens on developers and project managers, and human error affecting efficiency and quality (Tabassi et al. 2019).
- The introduction of Robotic Process Automation (RPA) can streamline repetitive tasks, free up human resources for higher-value activities, and enhance project execution accuracy and efficiency (Vijai & Mariyappan, 2023).
- According to Wewerka and Reichert (2020), RPA benefits include faster processes, shorter case durations, increased availability, enhanced compliance, and improved quality. However, Khatib et al. (2023), citing Kedziora et al. (2021), argue that while RPA lacks back-end integration capacity, it temporarily bridges the gap between manual operations and automated processes in legacy IT systems.



Conclusion

Robotic Process Automation (RPA) is crucial for improving the efficiency of software engineering project management. Its integration promotes Intelligent Automation, streamlining human efforts and enhancing speed, productivity, and quality, as Ganeshayya Shidaganti et al. (2023) highlighted. RPA tools notably improve processes by enhancing recognition, data extraction, forecasting, classification, and optimisation.



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