
IMPROVEMENT IN AI HELPS IN SYNCHRONISING PROJECT MANAGEMENT FUNCTIONS

Madhusudhana Rao Yeluri

Abstract

Keywords:

*Artificial Intelligence,
Project management,
Procurement activities,
Data security challenges,
Project managers*

AI technologies provide a way of handling project tasks and provide required information that is helpful for project managers and members. It can improve accuracy and control the balance between performance and procurement activities within project assignment. In project assignment, project members can understand their choices and make decisions to develop their project progression rate and handle success rate. However, data security and data management issues can hinder the overall structure of data managerial operations that can negatively impact the process of performance structure. Project managers can identify the sequence and incorporate strategic changes to lead the way of executing all tasks and requirements. It would help in achieving targets and improve confidence for employees.

Author correspondence: ms_yeluri@yahoo.com

1. Introduction

Project management functions develop the procedure of project task management processes and AI increases speed of project performance according to specifications. Through project management functions, project managers develop their ideas and arrange a systematic process to execute activities of a project. AI improves the transformation speed of all project activities and develops accuracy in operating all project tasks depending on requirements. Through the implementation of AI in project management, project operators and managers can easily incorporate strategic changes to develop managerial processes of triple constraints. Key project performance parameters can also be improved with the help of project managers according to the specifications and requirements. It would bring development in the project environment due to which project operational tasks can be organised properly and avoid complications in terms of performance development. The purpose of this study is to analyse the role of AI in project management in terms of performance evaluation and development without any issues.

This study helped in understanding key requirements of AI that can improve project management operations according to requirements to synchronise all activities of a project. From different functional and non-functional requirements, project operators can make creative changes to develop their knowledge and ideas. Identification of different challenges of handling AI in project management can decline the effectiveness and performance structure within a project assignment. Due to some challenges, project managers have failed to enhance their performance capacity according to requirements that can be helpful for creating some strategies to enhance the speed and operational tasks. It can guide them to handle all tasks and specifications that can give beneficial outcomes and handle all success factors of a project. Thus, project managers can easily provide effective resources including time, automated devices and cost to execute their project tasks according to plan.

2. Comprehensive theoretical basis

Role of AI in project management

AI plays an impactful role in enhancing speed of project performance rate and controlling all valid expectations regarding decision making processes and idea generation within a project assignment. Through the assistance of AI in project assignment, project members can take accountability in handling all tasks and requirements that can lead to success for a project. Automated devices create opportunities in developing the sequence of project tasks that can be helpful for project members to rearrange their task management processes accordingly [1]. It

would control the balance between procurement and progression rate that can reduce complexities and improve quality management processes accordingly.

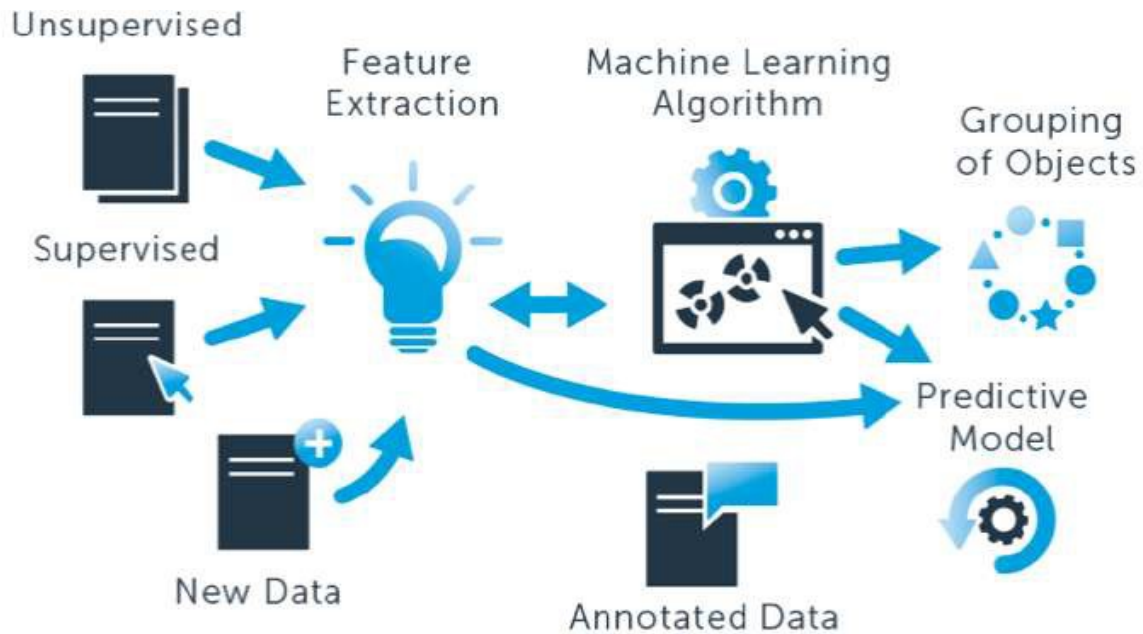


Figure 1: AI in project management

On the other hand, AI also guides project members to incorporate project methodologies to create beneficial outcomes and arrange proper structure in performance management. Through AI technologies, project managers can gain machine learning to rearrange task management processes according to specified needs. Through AI and machine learning, project managers can use different types of algorithms that can be helpful for different projects in executing project triple constraint processes [2]. It would allow project operators to make their own decisions and perform their tasks depending on requirements and specifications. It can control the positive environment within project procurement processes and task management processes.

Functional and non-functional requirements of AI in executing project tasks

Functional requirements

Functional requirements of AI boost the performance of different task and procedural operations in project management. Through the assistance of functional requirements, project managers can make decisions in controlling the structure of project management. Functional requirements are automated devices, automatic blueprint designer machines and statistical algorithms. These requirements are helpful for project managers to incorporate strategic changes and develop performance speed in controlling the structure of project operations. Through functional requirements, employees of a project can easily make changes in timeline and cost

structure according to requirements [3]. It would be helpful in synchronising all systematic processes and controlling the procedure of executing all tasks and requirements that can lead to success for a project. It can also avoid complications related to task management processes and develop the criteria of executing performance structure according to requirements. In this way, quality and innovation can be organised with the help of AI within project management operations.

Non-functional requirements

Non-functional requirements improve idea and knowledge development processes of project performance and procurement activities in the context of AI. Non-functional requirements are effective knowledge, good analytical skills, flexible programming languages and learning new machine learning programs. Through these requirements, project members can develop their skills and knowledge for flexible programming languages due to which project performance can be developed according to requirements. Through the assistance of these requirements, project members can easily develop their position in executing all tasks and requirements due to which effectiveness and quality management processes can be developed accordingly [4]. It would maintain the structure of project performance structure and avoid complications in the context of project performance. Project performance can also create opportunities in managing the progression processes and improve procurement activities according to requirements. Through these operations, idea and knowledge progression processes can be developed and control the procedure of achieving all targets and goals.

Key challenges of AI in project management

In the context of project management, Artificial Intelligence gives opportunities in handling automated processes of project management activities by increasing speed of execution. However, project members and managers have faced several challenges related to data security, data sourcing and limited data availability. Due to these challenges, most of the external attackers can attack the database of AI within a project assignment to gather specific knowledge and information [5]. It can affect the security and reduce data management processes according to requirements within a project assignment. This issue can create complexities for project assignment by not managing all tasks and specifications according to requirements.

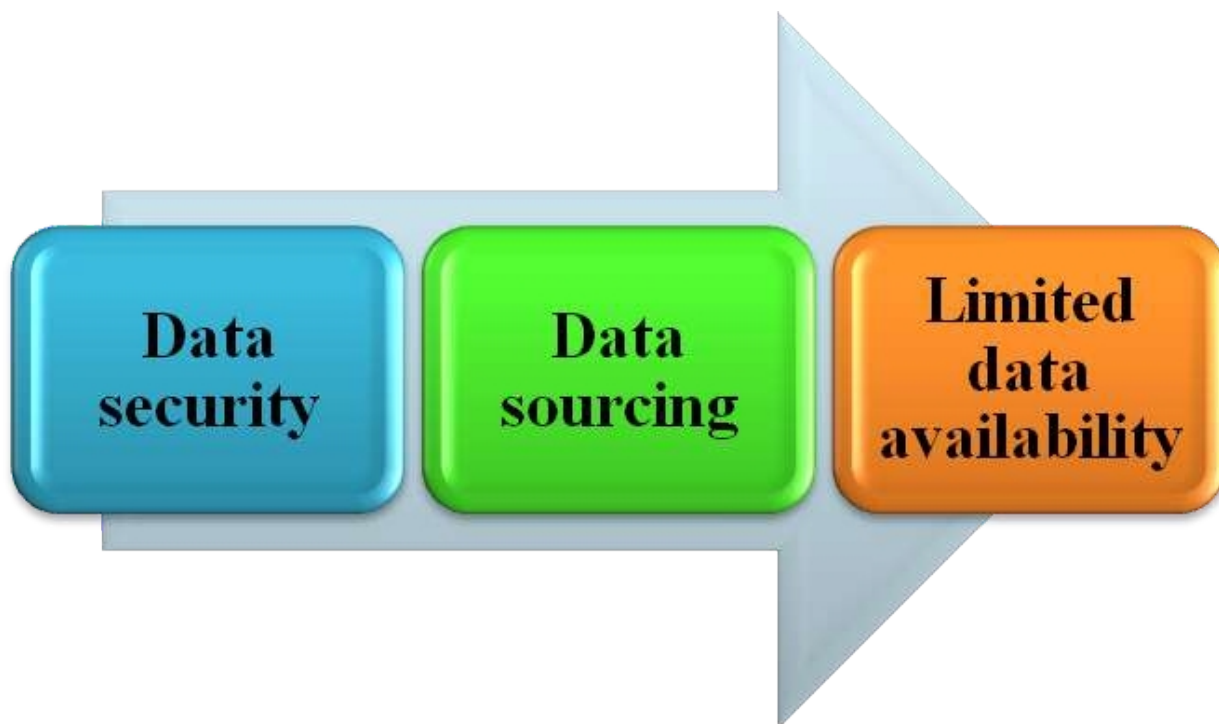


Figure 2: Challenges of AI in project management

Due to limited data availability issues, project members have failed to organise systematic processes and reduce the quality in data collection activities. It would directly affect the condition of creating new opportunities through project management operations. These issues can decline effectiveness and slow the process of performance structure by not arranging systematic processes of project activities. It would directly affect the progression processes and create complications in performance structure and hinder the strategic operation according to specifications and requirements. Project managers are expected to take accountability in following these challenges and improve the performance structure of project management to manage all tasks and requirements.

Strategic changes required for project management in the context of AI

Strategic changes develop the position of all tasks within project management that can create beneficial outcomes for members. It can guide them to analyse all specified requirements and members can easily maintain a structure and balance to handle all developed positions in project assignment. Improvement in data security improves the position of handling the sequence of executing all tasks and enhances the quality of performance structure [6]. It can guide employees to manage the position of creating different task management processes through which structured innovation and performance results can be organised properly. Through the assistance

of strategic changes, project operators can easily synchronise all specifications that can create systematic processes depending on needs.

On the other hand, using strategic decisions and improved quality innovation, project members develop their ideas and knowledge to create opportunities in managing all types of operational activities to achieve targets without any issues. Improved decision making and big data implementation, project operators can easily store huge amounts of data according to requirements. It would control the balance between procurement and progression rate due to which quality innovation can be developed according to expectations without any issues.

3. Research method

Research method helps in defining methods or techniques that can create a way of gathering results of research questions. Through the result, accuracy and validation level can be organised successfully that can create opportunities in dealing with different types of operational tasks. In the context of AI in project management, ontology research philosophy has been selected to present all specified requirements for executing AI operations in project management. Through the assistance of this philosophy, adequate requirements of identifying specific methods that can help in understanding the current situation of project operations. This philosophy helps in finding the situation of before and after AI usage in project management to compare the both situations and incorporate specific results [7]. It can create a proper sequence in providing adequate measures in handling all tasks and requirements due to which quality innovation can be developed according to requirements. In this way, quality and structure can be developed depending on specifications that can create beneficial outcomes for a project within this project assignment.

Conclusive research design helped in analysing specific information about the requirements of AI technologies in project assignment. Through this information, project managers can take accountability in providing a secure way of handling all tasks and specifications that can manage progression rate. Secondary data collection method has been used to analyse theoretical perspectives of different authors regarding AI usage in project management to increase synchronisation among project tasks. It can also develop the position of leading to success for a project within a project assignment within this current situation.

Through the assistance of these methods, operational tasks and other requirements for project assignment can be identified properly that can be helpful for project authorities to make their decisions regarding AI. It can allow them to introduce new and effective requirements to develop the position of creating different schedule management operations and provide that

information to others [8]. In this way, quality and innovation can be developed that can maintain the structured events due to which possible requirements can be rearranged properly. Specific research methods can guide employees to create a proper plan to avoid complications and maintain the following requirements according to specifications. Through the assistance of specific methods and requirements, employees can recognise their abilities and develop knowledge regarding AI to achieve their targets. Improvement strategies can help project members to organise all tasks and develop the position in avoiding complications.

Using specific research methods, project members can develop their knowledge abilities regarding AI and synchronise all processes of performance structure within this business according to project performance. Project members can also develop the procedure of controlling all tasks and requirements that can control the structure of development. It would also create a plan to handle all types of operational changes by handling all types of specifications that can avoid complications in performance structure [9]. Project activity list and resource management processes can create a plan to avoid complexities and maintain the structure depending on requirements that can lead to developing performance according to requirements. It can guide project managers to incorporate strategic changes and avoid complexities that can be helpful in managing systematic approaches. Research methods can also be helpful in identifying all results regarding research questions to improve the quality of research functions.

4. Results and discussion

From this study, it has been discussed that AI is one of the crucial and effective technologies that help in introducing new project ideas and develop performance through project innovation. For this study, secondary thematic analysis has been selected by creating different themes and improving the quality of research study. Through these themes, specifications and importance of AI in project management can be identified that can be helpful for project members and managers. AI technologies can control the sequence and manage the structure of different task management processes through which accuracy and development can be controlled effectively without any challenges.

Automated project management in digital age

AI algorithms and concepts can be helpful for project management that can guide project members to implement cognitive assistant systems to help each other within a project. Through the aid of AI, project authorities can rearrange their task specification processes and incorporate inherent unique steps to develop AI operations. It can help in creating new applications for new

projects that can improve the quality and efficiency of project performance and evaluation processes [10]. It can also improve the procedure of executing different patterns of execution that can reduce time complexities and develop automation tasks within a project assignment. Through project management and machine learning, employees can easily predict the revolution and manage automation service operations. Through the assistance of expert systems, employees can easily maintain the digital age and increase effectiveness in scheduling and monitoring activities. Resources and costs can create opportunities in dealing with different kinds of requirements that can improve automation service operations.

Effective AI-powered agile project management

AI helps in transforming project management practises to create socio-technical elements of human aspects that can create high volume tasks within project assignment. Decision making processes of project assignment can develop the procedure of different task management processes that can reduce complications in accelerating productivity and manage the potentiality in handling all tasks [11]. It can develop the position of uncertainties through which transformation and quality changes can create beneficial outcomes through which product development can be organised properly. It can help in creating a proper plan in ensuring added and removing backlog items due to which quality innovation can be organised successfully. Through the specification of project operations, multiple iterations can be developed according to requirements that can lead to success for agile project assignment. In this way, quality innovation and structured development can be maintained according to the requirements of different choices in the context of project assignment.

5. Conclusion

From the above study, it has been analysed that AI techniques transform the project management operations and guide project operators to deal with any kind of situations. Through AI involvement, project managers can take proper and significant decisions that can enhance computational powers. Project planning and marketing events can manage the analytical processes and improve performance driven programs in the context of adaptive nature. It can also develop the procedure of managing the sequence and control the growth opportunities by synchronising all systematic approaches within project assignment. Through the innovation and creation of multiple sections in project performance, project operators can develop the procedure of synchronising all systematic processes. It can generate the opportunity in incorporating sprint planning and

improving learning representation operations without any issues. It can develop the way of controlling all tasks and requirements that can manage business values without any issues.

AI powered learning engines can help in managing the connection between labelled and structured data set within project assignment. It can help in developing the position in controlling all tasks and requirements. It would also maintain the opportunity in gaining new ideas and concepts that can give benefits to project assignment. Through the synchronisation in procurement and production processes in project assignment, employees can develop the way of handling all tasks and requirements that would enhance transformation speed. Through specific methods, issues and strategies regarding AI technologies in project management can be recognised properly. It can also create opportunities in executing all different tasks that can maintain the position of executing different task management processes. In this way, quality innovation and structured development can allow project operations to avoid changes or challenges that can manage quality management processes. In this way, creativity and structure can allow project managers to achieve their targets according to requirements.

Reference List

- [1] Lingam, Y.K., (2018). The role of Artificial Intelligence (AI) in making accurate stock decisions in E-commerce industry. *Int. J. Adv. Res. Ideas Innov. Technol*, 4, pp.2281-2286.
- [2] Zhu, L., Xu, X., Lu, Q., Governatori, G. and Whittle, J., (2022). AI and Ethics—Operationalizing Responsible AI. In *Humanity Driven AI* (pp. 15-33). Springer, Cham.
- [3] Rostova, O., Shirokova, S. and Sokolitsyna, N., (2019, March). Management of project for automation of investment control at industrial enterprise. In *IOP Conference Series: Materials Science and Engineering* (Vol. 497, No. 1, p. 012017). IOP Publishing.
- [4] Habibullah, K.M. and Horkoff, J., (2021, September). Non-functional Requirements for Machine Learning: Understanding Current Use and Challenges in Industry. In *2021 IEEE 29th International Requirements Engineering Conference (RE)* (pp. 13-23). IEEE.
- [5] Raji, I.D., Smart, A., White, R.N., Mitchell, M., Gebru, T., Hutchinson, B., Smith-Loud, J., Theron, D. and Barnes, P., (2020, January). Closing the AI accountability gap: Defining an end-to-end framework for internal algorithmic auditing. In *Proceedings of the 2020 conference on fairness, accountability, and transparency* (pp. 33-44).
- [6] Davenport, T.H., (2018). *The AI advantage: How to put the artificial intelligence revolution to work*. MIT Press.
- [7] Stublely, E.V., (2021). Philosophy as a Method of Inquiry. *Visions of Research in Music Education*, 16(1), p.91.
- [8] Mourtzis, D., (2020). Simulation in the design and operation of manufacturing systems: state of the art and new trends. *International Journal of Production Research*, 58(7), pp.1927-1949.
- [9] Karthik Trichur Sundaram(2020, October). Realizing the Benefits of Portfolio Management with Idea Management: Aspects to Consider, *IJMIE* 10 (10), P35-38
- [10] Lu, Q., Xie, X., Parlikad, A.K. and Schooling, J.M., (2020). Digital twin-enabled anomaly detection for built asset monitoring in operation and maintenance. *Automation in Construction*, 118, p.103277.

[11] Auth, G., JokischPavel, O. and Dürk, C., (2019). Revisiting automated project management in the digital age—a survey of AI approaches. *Online Journal of Applied Knowledge Management (OJAKM)*, 7(1), pp.27-39.

[12] Dam, H.K., Tran, T., Grundy, J., Ghose, A. and Kamei, Y., (2019, May). Towards effective AI-powered agile project management. In *2019 IEEE/ACM 41st International Conference on Software Engineering: New Ideas and Emerging Results (ICSE-NIER)* (pp. 41-44). IEEE.