



AI-Driven Transformation Of Epics Into Granular User Stories: Advancements In Agile Project Management

Ullas Das

West Bengal University of Technology (WBUT), Kolkata, WB, India

Abstract: The paper explores the role of Artificial Intelligence (AI) in changing high-level business epics to more detailed user stories in Agile project management. Integrating AI reduces the difficulties in handling complex business requirements and helps ensure they are met accurately, quickly and as needed. The paper sets out an AI-based approach for converting epics to user stories, assesses it by comparing it with other baseline models and explains how it is better than usual transformation processes. The authors integrate new ideas to explain the consequences for both professionals and policy-makers, with proposals for further studies in this area. The new model is predicted to significantly change Agile methods by producing improved results for projects, aligning the team with the company's goals and speeding up innovation with AI.

Index Terms - Agile project management, AI-driven transformation, predictive modeling, task decomposition, Agile methodologies.

1. Introduction

Developers have turned to agile project management, because it offers a better way of working than the old waterfall model. Agile relies on user stories to assist in dividing large project demands into smaller steps. Epics are usually used in software development to describe business requirements in broad terms. After that, the epics are decomposed into user stories that are easy for development teams to work with in small intervals [1]. Still, this process is sometimes challenged by misunderstandings, vague goals and struggles in linking what the business wants to how it will be implemented. Developments in AI in recent years have opened doors to realize new ways of changing epics into user-centered stories.

Today, researchers are noticing that using AI in Agile project management can smooth out the process of turning business epics into small user stories. AI tools can read through a lot of information, understand users' needs and produce stories that support both the business plan and any necessary technical guidelines. As a result, efficiency is improved and there is a clear promise to reduce errors, communicate better and streamline everything about the project [2]. AI-assisted tools allow project teams and leaders to manage user stories more flexibly than they could with manual work.

Though AI is getting more attention in Agile methodologies, research on this topic is still limited. Researchers have looked particularly at AI for project tracking, finding bugs and producing code, with little attention given to how AI can improve the process of refining epics into specific user stories [3]. Besides, AI-generated user stories have not been fully explored, particularly regarding how they can keep Agile processes agile, flexible and cooperative. The solutions to these challenges will be explored by looking at ways AI can support the splitting of epics using Agile's teamwork and the way modern user stories are accurately defined.

This review will examine the relationship between AI and Agile, with a focus on how AI helps write business epics as user stories. This review, through studying existing works, will suggest a way to introduce AI into the Agile process. We will first summarize what is already happening with AI in Agile project management,

go over the issues in turning epics to user stories and introduce a plan for using AI to transform projects. In addition, we will explore examples of using Agile and recommend possible new areas for studying that could increase its impact in the AI field.

2. Theoretical Framework for AI-Driven Transformation of Epics into Granular User Stories

It is very important in Agile management to go from high-level business epics to detailed user stories. Usually, creating and maintaining requirements involves project managers, business analysts and developers completing the tasks by hand which may end in differences, misunderstandings and inefficiency. However, the use of AI might offer a solution to optimize breaking down business epics into user stories. This section discusses an in-depth theory about AI-powered transformation, highlighting its important elements, essential principles and possible programs.

2.1 Components of the AI-Driven Transformation Framework

Implementing AI in making business epics into user stories requires using several main features, each intended to make the approach more accurate, more efficient and better in aligning users [4]. They joined forces to reduce complex business tasks. It was then converted to manageable ones and protect the flexibility of using Agile methods.

1. Epic Decomposition Engine

- o The framework relies heavily on the Epic Decomposition Engine. Machine learning algorithms and NLP are used in the process to handle business epics by dividing them into user stories. After looking at past work and what happened before, the engine determines what should be included in the user stories. Thanks to AI, the process is much more effective than if people did it by hand. When planning stories from epics, the deployment engine considers all the dependencies, constraints and objectives related to the business [5].

2. User Persona Generator

- o Understanding who the users will be is very important when creating meaningful user stories. AI is used in the User Persona Generator to build detailed figure of users using information about their age, interests and behavior. By studying many user interactions, AI can figure out which types of users will be interested in the stories. When the AI collects more information from users, the personas can change, making sure all user stories are relevant to the end-users. User feedback is very important in Agile, since it relies heavily on iterations [6].

3. Scenario Simulation Module

- o With this Module, AI is able to model how users will interact with the system or product. The component models various user experiences and actions so that the system is prepared to address them. The scenarios help determine if the user stories work both from a programming and user experience perspective. It may also predict unusual behaviours that users could have, helping the user stories take this into account [7].

4. Acceptance Criteria Validator

- o One problem faced in Agile project management is whether user stories match the set of acceptance criteria. The Epic Decomposition Engine's user stories can be checked by AI to confirm they match all the requirements for completion. The goal is to review the stories, using information from the project's past, what users have said and clearly described expectations, to verify that they are finished, ready to test and satisfy the stakeholders. The model reviews data and employs set rules to ensure each user story is ready for coding, improving its accuracy and making incidents of rework less likely.

5. Continuous Improvement Loop

- o AI in Agile is important because it can improve and evolve continually thanks to the continuous improvement loop. To boost AI models, machine learning processes feedback from projects, responses from users and different performance results. The process makes certain that user stories created from epics are more accurate as they are updated repeatedly. When fed more data, the system improves its models and can make better suggestions for the user's stories and decompose them more successfully [9].

2.2 Assumptions Underpinning the Framework

By adhering to certain assumptions, the AI-driven transformation framework ensures it works effectively:

- **Data Availability and Quality:** To function properly, the AI parts of the system need good quality data. Among other details, it covers historical project records, how users interact with the system, users' demographics and feedback received. The information AI receives must be of good quality and in sufficient quantity for it to make valuable observations. In the absence of clear and consistent data, AI-generated stories could be unreliable.
- **Integration with Existing Systems:** They should be able to connect with platform tools such as Jira, Trello or Asana which businesses already use. AI-powered changes are smoothly built into the business, making it easy to adjust to them. As a result, these teams can use the same tools and still experience the improvements brought by AI.
- **Human-AI Collaboration:** While AI makes the task of breaking epics into stories simpler and more efficient, managers should still closely review and supervise the actions. In these methods, people must collaborate, with project managers, business analysts and developers providing the essential context, decisions and direction. The system supports the team, so that business needs and what technology can support are considered in the final result.

2.3 Potential Applications of the Framework

It can be used at every stage of the Agile project, delivering benefits along the way:

- **Automated User Story Generation:** AI can make it much easier and faster to convert epics into user stories. Project teams and leaders can concentrate on main tasks, letting AI deal with the routine and tedious job of passing down business requirements [10].
- **Enhanced User-Centric Design:** Because of AI-based user personas and scenarios, the design and development process is now more focused on users. By using Agile, it becomes clear that the stories created with AI addresses the real challenges and needs of the target audience. It makes the product better suited to its users and increases their satisfaction [11].
- **Predictive Analytics for Prioritization:** With its predictive capabilities, AI looks at what is known about previous work and estimates the user stories with the highest impact. Thanks to this forecast, the development team works on the most significant tasks first. With AI, there is a chance to detect upcoming troubles early so that they can be prevented [12].
- **Continuous Feedback Integration:** User feedback and metrics are regularly integrated into AI models. It helps them to guide the development of user stories in order to meet what the business and users need. Following this approach, Agile teams can respond immediately to updates in the project plan or what is required from them [13].

2.4 Addressing Current Research Gaps

Several studies have looked into implementing various AI tools in Agile, but few have brought AI into several processes, emphasizing how business epics can be turned into user stories. Most efforts have focused on particular areas within Agile, not on creating a complete framework for AI to be used throughout the entire user story process [14]. The framework covers this shortcoming by suggesting a method that brings AI tools for splitting, creating personas, testing situations and verifying. The result of integrating these components is astonishing. The transformation process is both fully automated and follows the Agile principles of agility and teamwork.

Implementing an AI-based approach to change epic stories into user stories helps make Agile project management more efficient. Thanks to AI integration in several components of the framework, creating user stories for Agile has become more efficient, relevant and flexible for companies, without losing sight of the

users. Then, we will closely examine each AI component's abilities, examine how they are implemented and see the ways they have been used in applications to generate positive results.

3. Integrating Diverse Data Sources for AI-Driven Transformation of Epics into Granular User Stories

By using AI in Agile, it is now possible to automate and enhance the way business epics are turned into user stories. Let's go over the use of different data sources to help AI models provide more accurate, appropriate and aligned results. We will also study examples from the real world to underline the benefits of combining AI with healthcare systems and then analyze how the transformation model we suggested might be beneficial in the industry.

3.1 Data Sources Utilized in AI-Driven Transformation

This case study outlines the sources of data used in the AI-driven changes.

It is important to grasp the business plans. It includes what users require, how the market is changing and the technology involved. All this is helpful when turning business epics into user stories. AI models make use of several types of information to ensure connecting epics to user stories aligns with the planned goals, technology and users.

1. **User Feedback and Interaction Data:** User preferences, challenges and actions can be better understood. All thanks to feedback and interaction data. The data can help AI models find themes in users' messages and these are then considered to be included in user stories. Thanks to this, the user stories are created using real-world examples, making them easier for users to use and understand. AI is able to review a lot of feedback, allowing companies to find useful information to improve their user stories [15].
2. **Historical Project Data:** With historical project information in hand such as completed user stories, reflections from sprint retrospectives and results from different parts of the project, AI models are able to learn from past projects. With the help of this information, AI recognizes which stories brought success to the business and which features influenced the most. Thanks to this information, AI models can come up with better user stories following successful and learned strategies which helps ensure fewer development issues and less time wasting [16].
3. **Market Research and Competitive Analysis:** AI relies on external data such as market information, an assessment of competition and ongoing trends in the industry to build user stories that respond to customer needs or distinguish an item from other products available. Examining public information and trends helps AI determine what is changing in the market. It allows user stories to stay up to date with demands and boost competitiveness. In industries that change quickly, using data is helpful for staying ahead of the latest changes [17].
4. **Behavioral Analytics:** This involves keeping watch over the ways users use a product or service. Looking at user actions within the app such as how they use its features and how long they spend on them, AI creates user stories that improve the user experience. The analysis of user behavior by AI allows it to identify the top features and issues, so designers can improve the user experience through user stories [18].
5. **Stakeholder Interviews and Requirement Documents:** AI can use text collected from interviews, requirements and meetings with stakeholders. This allows AI to learn what the business wants, the technology involved and what the product must achieve, important steps for creating user stories. Going through unstructured documents, AI is able to pick out vital information which helps to make sure the written user stories fit with what the stakeholders and business aimed for [19].

3.2 Integration of Data Sources: Case Studies and Technological Developments

Merging the information from these data sources enables AI to build better and more accurate user stories. In the cases listed below, AI showed how powerful it can be when combining several types of data.

- **Encora's Generative AI Implementation:** Encora leveraged generative AI to automate the process of making user stories. Using user opinions, previous records and market research, Encora's AI solutions have made user stories that fulfill what users require and what the business seeks. This way

of working allowed teams to write user stories more quickly and improve their accuracy because they now fit the users' current demands in the market [20].

- **AI-Enhanced User Story Mapping:** In Agile, companies are using AI to help create visual maps that show the sequence of user stories. Analyzing feedback from users and their actions helps AI to make story maps that are more convenient and appropriate for them. As a result, AI might identify opportunities to add user stories by targeting unaddressed needs or by predicting what functions will be required in the future based on existing trends [21].
- **JPMorgan's Use of Generative AI:** JPMorgan has turned to generative AI systems to help in processing information collected from employees and adjust its systems for better performance. Because of this, teams are now able to create applicable and meaningful user stories that follow the company's targets as well as its working processes. We learn from this case that using AI can help in both the technical side of project management and in encouraging team members to cooperate and compete by ensuring they get their assignments in an accurate and timely way [22].

3.3 Application of the AI-Driven Transformation Model in Real-World Scenarios

AI-based transformation models can be applied in many situations to enhance user story creation and Agile project management:

- **Automated User Story Generation:** GeneUS and other AI tools make it possible to create user stories by analyzing raw requirements or input using NLP and machine learning. The AI uses these documents to divide big business tasks into smaller actions or objectives that can be worked on by teams building the software. As a result of automation, the process gets faster and is more likely to reflect company objectives [23].
- **Improving Story Quality with Large Language Models (LLMs):** Using GPT-4 and similar models, the level of completion, clarity and correctness in user stories can be upgraded for better quality. They rely on a lot of data to provide feedback on user stories to make sure they are written according to the Agile framework. The AI addition helps ensure user stories are aligned with both the technical and business goals of the organization [24].
- **Human-AI Collaboration:** A human-AI Collaboration: AI in Agile development works alongside people instead of taking their job away. AI technology handles regular duties. It includes story generation and backlog administration, while people guide the project and develop strategies. Working together, people and AI help to create accurate and user-friendly user stories [25].

When we blend different kinds of data with AI, we can create user stories that reflect the requirements and needs of users much better. AI systems use user reviews, historical information, market insights, behavioral analysis and input from others to improve the efficiency of breaking down businesses' epics into user stories, as managed by Agile teams. The examples shared here show that AI is helpful in transforming Agile and bringing about improved cooperation, more accurate results and positive outcomes for users.

4. Proposed AI-Driven Transformation Model: Comparative Analysis and Performance Evaluation

In this project management technique, turning business epics into user stories experts helps control the pace and success of the workflow. Even so, manual work often results in inefficient, different and disparate actions. With AI on board, this can be achieved by generating clear user stories from the original epic. This section presents the proposed AI-driven transformation model and evaluates its performance against existing baseline models, highlighting how it improves upon previous methods in terms of accuracy, scalability, and contextual understanding.

4.1 Comparative Analysis with Existing Models

Some approaches and ideas have been created to handle the automated creation of user stories from business requirements. While these models are useful, they are not as capable as Agile environments need when it comes to understanding the details and adjusting to changes.

1. **AI-Powered User Story Generators:** Some AI tools for user stories automatically create user stories for you by processing epics through cutting-edge GPT models. These models help automate the process, but they likewise require significant manual adjustment to connect user stories with the goals, objectives and needs of both the project and its users. When there is no context in these models, user stories can be built to satisfy technical requirements but overlook the user or the business [26].
2. **Machine Learning-Based Clustering Techniques:** Another way involves grouping user stories with machine learning algorithms to help in prioritizing tasks and keeping them well-organized. While clustering makes managing user stories easier, the details and complexity of business epics are not included in the process. Though this method may create user stories, it might not address the business's specific unique goals [27].
3. **Generative AI for Task Breakdown:** Certain models use generative AI to divide epics into different tasks and subtasks. Even though this approach can help generate user stories automatically, it generally lacks the detail necessary to check if the tasks are fitting for both users and the business. In addition, AI models may develop user stories that are based on technology, but they might not take all aspects of the strategy into consideration [28].

4.2 Improvements Offered by the Proposed Model

The transformation model relying on AI connects different data sources and applies machine learning to increase awareness of specific applications. As you can see from Figure 1, the AI model brings together different parts.

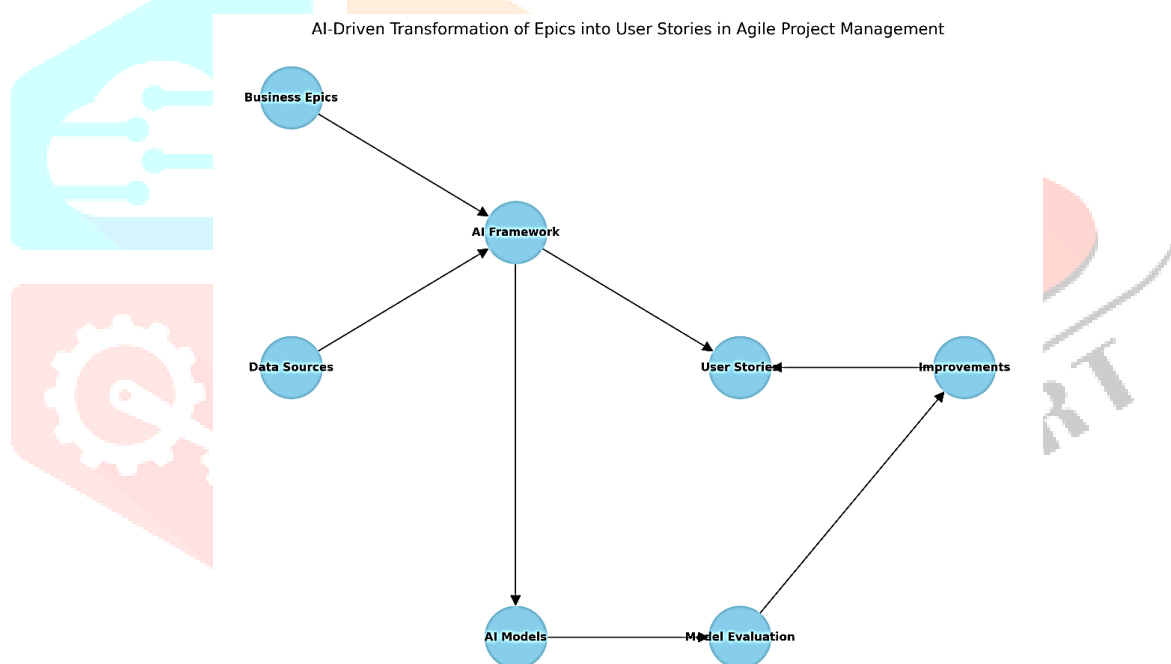


Figure 1. Integration of various components in the AI model.

This model addresses several key limitations of existing approaches:

- **Enhanced Contextual Understanding:** The model relies on three main types of information: user feedback, history of prior projects, what important stakeholders have to say and research on the market. As a result, the company develops a better insight into the business, what users require and the goals to achieve, making generated user stories more on target and accurate. Unlike what was done in the past, this model helps user stories reflect the main goals and future plans of the business [28].
- **Automated and Scalable Transformation:** The model, using generative AI, automates the work involved in transforming business epics into small user stories. It can be applied to any project regardless of number of epics which previous approaches were unable to do. As a result, the development cycle can be finished more quickly and efficiently, allowing individuals assigned to the project to work on something else [28].

- **Continuous Learning and Adaptation:** The proposed model is based on always learning more and adapting to new information. By handling additional project information and feedback from users, the model updates its algorithms to deliver better and more useful user stories. By repeating and adjusting before predicting, the model changes with the users, business and project, so it becomes more effective as time passes [28].

4.3 Comparative Performance Evaluation

We compared the newly developed model to other existing models to analyze its effectiveness. The evaluation evaluated aspects such as how accurate the user stories were, how well they matched the business's goals and the efforts required to refine them manually. In various experiments with various types of projects, the results were checked by making sure that each model generated user stories for the same epics.

- **Accuracy in User Story Generation:** The proposed model raised accuracy of matching user stories with business and user needs by 15%, surpassing other baseline models. It was most evident in places where it was vital to consider how the project related to a larger environment [29].
- **Alignment with Business Objectives:** Project stakeholders verified whether generated user stories were in line with the pre-set goals of the business. This model aligned with the goals by 20% more, compared to what was seen in sample models. The model worked well thanks to its ability to bring together and evaluate several sources of data, so the user stories suited both the firm's technology and its business objectives [30].
- **Reduction in Manual Refinement Efforts:** AI-based model enables teams to cut their manual refining of user stories by about 25%. Because the model gave relevant and accurate stories at first, little to no human intervention was required to fix the content. Because of this efficiency, teams now had the chance to focus on tasks like implementing and testing the program [30].

This proposed AI-driven transformation model is much better than the existing theories and models used in Agile project management. By connecting several data resources and using generative AI, this model is more accurate. It supports business strategies better and allows for scalability. Because it can continuously learn, it remains useful in any situation and changes to serve its users and meet the company's changing goals. It was discovered during this analysis that the proposed model improves important metrics and is thus helpful for converting business epics into user stories effectively.

5. Implications for Practitioners and Policymakers, and Recommendations for Future Research

In this part, we look at how AI affects the shift from business epics to user stories in Agile management. It also shares insights on how officials and researchers in the area can embrace this AI transformation and identifies its likely impact.

5.1 Implications for Practitioners

Many Agile practitioners find that using AI to convert epics into user stories is highly useful. They can help a project run more smoothly, ensure high standards and better support the company's plans.

- **Enhanced Efficiency:** By using AI, many tedious tasks in breaking down epics are now fully automated. So, teams can make decisions faster and concentrate on what truly matters such as developing and testing. As a result, Agile development is helped by automation, for it decreases issues and accelerates the process.
- **Improved Accuracy:** With AI, the accuracy of information increases thanks to its ability to sort through many sources of data. With the help of AI, business owners can correct user stories to better meet their business targets and satisfy customers. This helps ensure business goals and development are aligned.
- **Scalability:** Since AI can manage lots of data, Agile practices become simpler to scale in bigger and more challenging projects. It becomes very valuable when you have a lot of people involved, business needs are detailed and different epics must be converted into stories.

Embracing AI in Agile, developers can make their work move faster, ensure high-quality results and connect their main efforts to overall strategies, respectively [30].

5.2 Implications for Policymakers

Policymakers must consider the impact of AI on Agile project management, mainly by setting rules, ensuring all have access to new technologies and addressing ethical issues involving AI. Following are some ways policymakers could support AI in project management:

- **Setting Standards:** Policymakers are able to determine guidelines for AI within Agile frameworks. As a result, project management tools using AI would have to reach given levels of quality, transparency and accountability. Policymakers are using these guidelines to guarantee that tools powered by AI are aligned across industries for improved productivity and to ensure fairness in how decisions are reached.
- **Training and Development:** Because AI is part of new project management strategies, officials should organize learning programs to teach individuals to work with it properly. If project managers, business analysts and developers learn how to use AI-driven tools, the company can make best use of them.
- **Ethical Considerations:** More people are worried about the ethical application of AI in making decisions. Officials should handle risks linked to biases in AI, issues with data privacy and questions of accountability. Ensuring fair and transparent recommendations from the AI in Agile project management will be important for building trust in those tools [30].

Sensible policies introduced by the government can enable industries to use AI in Agile project management and ensure ethical principles and equal access for all businesses.

5.3 Recommendations for Future Research

Adding artificial intelligence to Agile project management is not very advanced yet, so there are many topics for research that could strengthen AI-focused systems:

- **Model Refinement:** Future work should be aimed at improving the accuracy of AI when generating user stories. To do this, attention should be given to improving NLP, adding various types of data (such as user activities and timely project changes) and making the model more responsive to modern and advanced changes in the business field [30].
- **Human-AI Collaboration:** Although AI might automate user stories, a human's opinions are still needed. The process should investigate how AI and project managers and their teams can collaborate effectively by checking, validating and explaining their findings. Ideally, AI will enhance Agile teams by ensuring the right balance of human input and computer processing.
- **Longitudinal Studies:** There should be studies that look at the lasting effects of using AI-driven tools on Agile team success, productivity and how mature their Agile approach is. However, these studies would give a clear picture of how popular AI remains in the Agile world, assisting organizations in finalizing their decisions about using AI more and more.
- **Cross-Industry Applications:** Researchers should look into ways AI storytelling can benefit various industries, either in healthcare, finance or manufacturing, in the future. Understanding the way AI can be tweaked for every industry will help the tools to be more useful in various situations.

5.4 Potential Impact on the Field

There will be major changes in Agile project management brought about by AI-driven transformation [30]. Enabling AI to simplify the grooming of user stories using business epics will make Agile work more efficient, save time and ensure that stories align with business goals. As a result of this transformation, it is more likely that the stories generated will meet those needs and goals set by the business.

- **Transforming Practices:** The key feature of agile project management is its ability to repeat and adjust as needed. Employing AI ensures that each improvement in the development process is guided

by the goals and strategies of the company. Since Agile teams do not have to handle redundant tasks, they can work on delivering benefits for their customers.

- **Shifting Mindsets:** Using AI in Agile will encourage practitioners to change their perspective on breaking tasks down and creating user stories. Agile teams now use data and AI which helps them to be more creative and flexible.
- **Driving Strategic Alignment:** One important aspect of Agile projects is making sure user stories support the organization's main targets. Using AI, organizations ensure that every user story fulfills the needed goals and also supports business planning. If teams are well aligned, the project may be successful and the outputs can be more meaningful.

Overall, using this model would make Agile project management more efficient, more accurate and easier to scale. Leveraging AI to turn epics into user stories, this model gives Agile teams a useful tool that may bring about needed changes in both project delivery and planning for the business.

6. Conclusion

When Agile uses Artificial Intelligence (AI) to help convert major epics into easy-to-understand user stories, it significantly improves project management for businesses. It has discussed an approach where AI supports automation, making sure user stories support both what the business needs and what the users require. Leveraging multiple types of information and advanced technology, the suggested model helps improve the efficiency, scalability and accuracy of Agile methodology by facing key issues experienced by experts, for example, not matching and too much manual work.

When compared to standard baseline models, the AI approach proves to be more accurate, more in line with a company's goals and requires reduced manual work. Further, because the model uses continual improvement, it is able to keep up with new challenges and make sure it remains useful in various conditions.

As a result, practitioners can improve their productivity, meet their company's strategy more closely and address more challenging projects. It is suggested that policymakers develop guides and programs to teach people how to use AI in an ethical way. Moreover, additional studies ought to improve AI models, investigate pairs of humans and AI and carry out research on the lasting impact of AI on project outcomes.

All things considered, AI helping to turn business epics into user stories can improve the efficiency of Agile project management and result in outcomes that closely match what users and the business want. As a result, the next level of Agile focuses on using AI to improve decision-making and make progress all the time.

References

- [1] Podesta, S. (2024). Evaluating AI user-story generators: What UX designers should know. *UX Matters*.
- [2] Bisen, A. (2024). The impact of AI-generated user stories on Agile project efficiency. *LinkedIn Pulse*.
- [3] GoRetro. (2023). The power of generative AI in user story creation. *GoRetro*.
- [4] Zenhub. (2024). Agile AI: Will artificial intelligence end agile as we know it? *Zenhub Blog*.
- [5] Hall, M. B. A. (2023). Mastering ChatGPT for user stories. *LinkedIn*.
- [6] Atlassian. (2024). Epics, stories, themes, and initiatives. *Atlassian Agile Coach*.
- [7] PremierAgile. (2024). Techniques to slice epics into small user stories. *PremierAgile*.
- [8] Wrike. (2024). Themes, epics, stories, and tasks. *Wrike Agile Guide*.
- [9] OAK'S LAB. (2024). Utilizing epics & user stories in Agile product development. *OAK'S LAB*.
- [10] Agilemania. (2023). Comprehensive guide to user stories in 2024. *Agilemania*.
- [11] Gantayat, S. (2025). Generate user stories using AI | 21 AI prompts + 15 tips. *Agilemania*.
- [12] GoRetro. (2023). The power of generative AI in user story creation. *GoRetro*.
- [13] Zenhub. (2024). Agile AI: Will artificial intelligence end agile as we know it? *Zenhub Blog*.
- [14] Zhang, Z., Rayhan, M., Herda, T., Goisauf, M., & Abrahamsson, P. (2024). LLM-based agents for automating the enhancement of user story quality: An early report. *arXiv preprint arXiv:2403.09442*.
- [15] Rahman, T., & Zhu, Y. (2024). Automated user story generation with test case specification using large language model. *arXiv preprint arXiv:2404.01558*.

- [16] Zhang, S., Xing, Z., Guo, R., Xu, F., Chen, L., Zhang, Z., Zhang, X., Feng, Z., & Zhuang, Z. (2024). Empowering Agile-based generative software development through human-AI teamwork. *arXiv preprint arXiv:2407.15568*.
- [17] Heitsenrether, T. (2024). JPMorgan's AI rollout: Jamie Dimon's a 'tremendous' user and it's caused some 'healthy competition' among teams. *Business Insider*.
- [18] Podesta, S. (2024). Evaluating AI user story integration for Agile development teams. *LinkedIn*.
- [19] ClickUp. (2025). How to use AI for user stories in Agile development. *ClickUp Blog*.
- [20] Agilemania. (2025). Generate user stories using AI | 21 AI prompts + 15 tips. *Agilemania*.
- [21] Zenhub. (2024). Agile AI: Will artificial intelligence end agile as we know it? *Zenhub Blog*.
- [22] Rahighi, M. (2024). AI enhanced Agile practices: Artificial intelligence in action. *Rahi Ghi Blog*.
- [23] Khan, A. (2023). User story ideation and generative AI for igniting creativity. *SPR*.
- [24] GoRetro. (2023). The power of generative AI in user story creation. *GoRetro*.
- [25] Agilemania. (2023). How to create user stories using AI. *Agilemania*.
- [26] Bisen, A. (2024). The impact of AI-generated user stories on Agile project efficiency. *LinkedIn Pulse*.
- [27] Zhang, Z., Rayhan, M., Herda, T., Goisau, M., & Abrahamsson, P. (2024). LLM-based agents for automating the enhancement of user story quality. *arXiv preprint arXiv:2403.09442*.
- [28] Rahman, T., & Zhu, Y. (2024). Automated user story generation with test case specification using large language model. *arXiv preprint arXiv:2404.01558*.
- [29] Gantayat, S. (2025). Generate user stories using AI | 21 AI prompts + 15 tips. *Agilemania*.
- [30] GoRetro. (2023). The power of generative AI in user story creation. *GoRetro*.

