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Optimizing Credential and User Management Migration: A Fintech Case Study

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Abstract

The rapid growth of the fintech industry poses significant challenges in efficiently managing technology services to enhance performance and reduce operational costs. One major issue is operational inefficiency. Service migration is one potential solution. This research aims to improve operational efficiency through the application of Agile Project Management (APM) in the migration of user and credential management services. A case study was conducted at PT AMF using Design Science Research Methodology (DSRM). The approach integrates Lean principles and combines Scrum and Kanban, selected through comparative analysis. The result is a project management model that combines the principles of APM, Lean, Kanban, and Scrum; offering a structured approach to service migration. This research is expected to contribute to the academic community and practitioners in the field of project management, especially in the context of service migration from an application perspective in fintech companies.

A. Introduction

Financial technology (fintech) is an innovation in the financial services industry, including p2p lending, digital wallet, cryptocurrency, and insurTech. As fintech develops, technology service migration becomes an urgent need to increase operational efficiency and performance from the previous legacy systems [1]. The migration process offers benefits such as more efficient operations, reduced costs, and improved service performance. Inefficient operational processes and complex integration are the reasons for service migration [1]. These inefficiencies stem from the high volume of manual interventions, frequent service updates, and system limitations in supporting critical features. This results in high operational costs, wasted time, and the risk of user error.

These issues are exemplified by the challenges faced by PT AMF, a fintech company in Indonesia. According to the PT AMF website, PT AMF is a financial technology company that focuses on providing microfinance and financial services to micro and small businesses (UMKM) in rural Indonesia. One of PT AMF wants to achieve is improving its operational process. Since PT AMF serves rural micro-businesses, efficient operational processes and secure user management are critical for maintaining service quality, operational process, and trust in the field. PT AMF has a major problem in managing user services and login credentials. The development team must handle many services related to user management and login credentials, such as the creation of 517 new accounts from March 2024 to June 2024. This maintenance becomes very complex and time-consuming. High data patching activity for promotions, demotions, and mutations (1036 cases in 2023) has a significant impact on operations, indicating that current services need more extensive manual intervention and ongoing fixes. Moreover, the current user management and login credentials service does not support several important features in the new system such as mutation, demotion, suspension, unsuspension, and account creation for internal wallet; thereby hindering operational efficiency.

As a result, operational costs have increased, time is wasted, and the risk of user errors remains high. If it's not addressed promptly, the case study faces the risk of more frequent operational disruptions. It is projected that the high patching activity will exceed 1000 cases per year. Additionally, around 30–40% of new features, including upcoming features, cannot be integrated with the current system. Consequently, this hinders operational efficiency and service development, reducing competitiveness against rivals.

This raises a research question about how the implementation of technology service migration can improve operational efficiency at PT AMF. To ensure this migration success, the migration project uses Agile Project Management (APM) and Lean approach, along with a software development methodology selected through comparative analysis: Kanban and Scrum. Kanban was selected for its ability to visualize, maintain consistency, and simplify task monitoring. Scrum and its interactive approach can maximize feedback and handle complex problems adaptively.

This study aims to explore how the adaptation of Agile Project Management (APM) is applied in the migration of user and credential management services. Software Development Life Cycle (SDLC) is a fundamental framework for designing,

developing, and delivering software products. Various SDLC models exist, including structured approaches, Rapid Application Development (RAD), and Agile [2]. Agile has gained prominence due to its iterative development, customer collaboration, and ability to accommodate continuous feedback and changes[3]. In project management, APM applies Agile principles to support incremental progress and continuous adaptation to change [4][5]. APM excels in adapting to evolving business needs while allowing for flexible prioritization [6]. According to several research, APM has been implemented across industries, enhancing productivity while minimizing failure risks [4,7,8]. However the previous study lacks empirical data and focuses on literature reviews and surveys [7-8].

APM has been successfully applied in various domains, including Enterprise Resource Planning (ERP) implementation. It increases efficiency and mitigates risks through iterative adjustments [7]. Based on previous study, APM can be adopted to develop web based applications/systems. Integrated with Scrum and its iterative process, the resulting products were well-received by users and met their needs [9-10]. It enables the delivery of results that meet user expectations [11-12]. According to research by Monica et al (2023), APM and Jira-based Scrum have been used in the food processing industry. It improves productivity and profitability, although empirical data on its effectiveness remains limited [8].

APM aligns with Lean principles, which enhances resource utilization by reducing unnecessary costs and maximizing resource efficiency. So it enhances the overall production chain [13]. Developed by Toyota, Lean emphasizes eliminating waste throughout production and administrative processes [14]. In project management, Lean can be integrated with other approaches. A research by Fitriani et al (2021) proved that Lean combined with Kanban could improve efficiency [4].

One of the Agile-based approaches influenced by Lean is Kanban. Kanban is originally a just-in-time production method. It has been widely adopted in software development to visualize tasks, limit Work in Progress (WIP), and enhance efficiency [15-17]. Kanban focuses on minimizing work in progress and has proven particularly useful for certain types of projects, such as those with uncertain outcomes [13,18]. Combined with Lean and design science research methodology (DSRM), research has shown its successful application in IT infrastructure projects, where it simplifies monitoring and ensures consistency [4].

Scrum is a widely used Agile framework. Scrum is a flexible framework in software development that facilitates effective project management [25][19]. Unlike rigid methods or techniques, Scrum allows teams to adapt methods and techniques based on project needs. Key components include the Scrum Team (Scrum Master, Product Owner, Development Team). It also has several important artifacts to support project management, namely Product Backlog, Sprint Backlog, and Product Increment [26][20]. The Scrum cycle involves backlog refinement, sprint execution, and retrospective reviews to ensure continuous improvement [25][19]. According to Lee (2016) exploratory study and previous studies, the scrum activities allow the team to focus on completing tasks gradually [21-23].

In the context of service migration, Jonas Fritzsch et al. proposed a three-phase migration framework: system understanding, planning, and implementation. These phases provide structured activities and deliverables that guide migration

execution [24]. These phases were adopted by the authors as the initial steps in system migration.

The novelty of this research lies in the implementation of Agile Project Management (APM) combined with a modified software development methodology (Lean, Scrum, and Kanban) to support the migration process in a fintech company. Previous studies have primarily applied APM combined with only one or two methodologies [4, 8, 9,10]. Few studies have examined the application of Agile methodologies specifically for service migration projects, existing research has mainly discussed their implementation in web based applications/systems development [9-10], IT infrastructure project [4], and food industry [8]. This research addresses that gap by demonstrating how Agile practices can be systematically adapted to service migration projects, particularly in the fintech sector.

The research method used is the design science research methodology (DSRM) with six stages so that the service migration process runs optimally. This study provides significant contributions to the case study in successfully migrating its system. In addition, this research findings can also be a reference for other fintech companies facing similar challenges in designing more effective and sustainable technology migration strategies.

B. Research Method

This section presents the research methodology used in this paper such as design science research (DSR), in-depth interview, direct observation, and secondary data analysis.

Based on the research questions, this study adopts the Design Science Research (DSR) approach to implement and evaluate the user and credential management service migration project. DSR combines the principles, practices, and procedures [25] required through 6 stages [26]: (1) identifying the problem and solution, (2) establishing measurable solution objectives and organizational values, (3) designing and developing an Agile Project Management (APM) model using Lean, Scrum, and Kanban; and designing a proof of concept (POC) for service migration, (4) executing the service migration project with the selected method, (5) performing periodic evaluations of the project with the internal team, and (6) communicating the project results to all IT project members and stakeholders.

The use of DSR ensures that the service migration process runs optimally and systematically. This study provides significant contributions to the case study in successfully migrating its system. In addition, this research findings can also be a reference for other fintech companies facing similar challenges in designing more effective and sustainable technology migration strategies. The DSR flow can be seen in the diagram below (Fig 1).

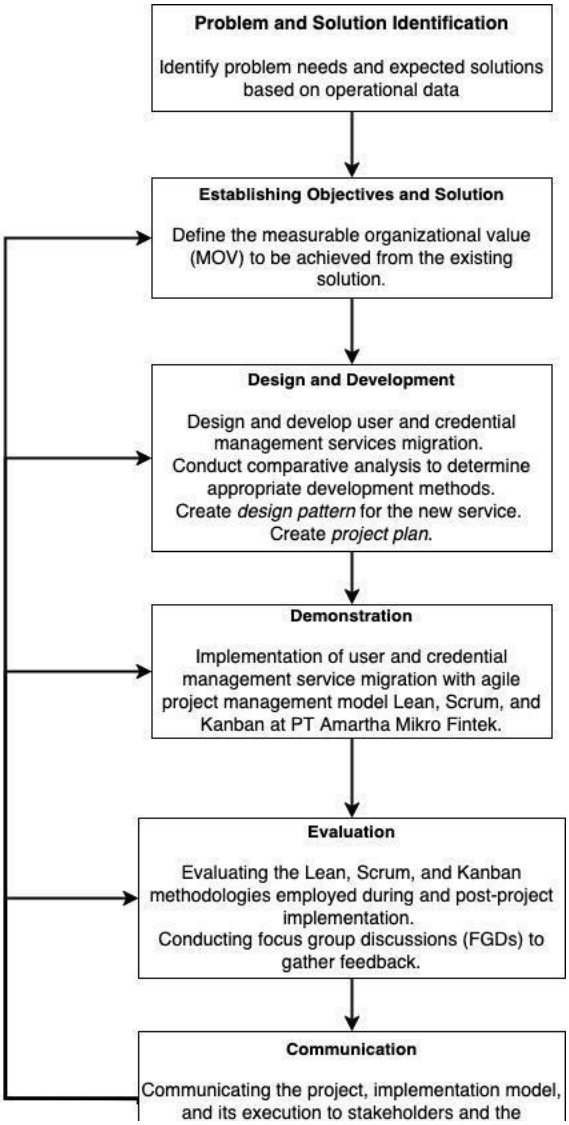

Figure1. Design Science Research (DSR)

To support the DSR process, in-depth interviews were conducted to dig deeper into the migration of user and credential management services. This study involved collecting information and data from the developer team through semi-structured interviews. A total of five respondents from PT AMF were interviewed, selected based on their direct involvement in the migration project. The author interviewed sources through 10 open-ended questions. For confidentiality reasons, the names of the respondents have been anonymized in this study.

Table 1. List of Source

No	Name	*Role*	*Division*
1	FH	Senior Product Manager	Product Team
2	HH	Technical Lead	Technology Team
3	EMM	Technical Product Manager	Technology Team
4	NAD	Product Manager	Product Team
5	IH	Technical Lead	Technology Team

First information collected from interviews are problem identification, business needs, and operational issues. From here, motivations based on business needs and operational issues were obtained. Then it was further deepened with questions related to the desired outcomes. Furthermore, the author identified strategies, indicators of success, and steps to be taken.

Direct observation was conducted as part of this research, where the author actively contributed to the migration project of the user and credential management system as the case study. The observation was carried out over six months, covering both the planning and execution phases. This involvement allowed the author to participate in sprint/project planning, sprint reviews, sprint retrospectives, and project retrospectives with the development team. Discussions involved technical leads, developers, product managers, and senior managers. The discussion is focusing on defining the sprint backlog, evaluating completed sprints, and refining the software development approach.

Through this observation, the author gained firsthand insight into the decision-making process for selecting development methodologies, team interactions, and challenges faced during implementation. This observation supports an in-depth analysis of the effectiveness of the methods used and the application of Lean, Scrum, and Kanban principles in the project.

In addition, the research used secondary data sources to support and validate findings. This study utilizes three secondary data sources related to the migration of the user and credential management system: (1) internal company documents, (2) technical documents, and (3) meeting notes. These documents were selected based on their relevance to internal user migration. These documents were analyzed to support the interview results, validate findings, and provide a deeper understanding of migration challenges.

The internal company documents contain background and business impact on service migration. The technical documents describe the current system architecture, migration steps, and technical constraints. The meeting notes capture discussions, decisions, current evaluations, and obstacles encountered during the migration project. By analyzing these documents qualitatively, this study ensures a comprehensive perspective on the migration process.

C. Result and Discussion

This section presents the research methodology and a discussion of the research findings. The study follows the Design Science Research Methodology (DSRM) to ensure a systematic approach to service migration. The results are structured DSRM stages: Problem Identification and Solution, Define Objectives and Solutions, Design and Development, Demonstration, Evaluation, Communication, and Discussion. Each stage is explained in detail. It covers the data collected and the corresponding analysis.

1. Result

The first stage is Problem Identification and Solution. Through interviews and analysis of internal company documents, the author got problems, needs and proposed solutions. These discussion results were approved by the involved stakeholders. The primary issues identified were the complexity of managing user and credential services and the high level of operational activities.

The development team was tasked to handle many services related to user/agent management and login credentials from the software side. The high frequency of data patching for user management indicated that the current services required significant manual intervention and continuous maintenance. Additionally, the existing system lacked support for critical features in the new system. As a result, the decision made from the discussion is to migrate to a new system. After identifying the problems and proposing potential solutions, the next step is to define measurable objectives that ensure alignment with organizational goals

The second stage is Define Objectives and Solutions. At this stage, the author defines the Measurable Organizational Value (MOV) to be achieved after understanding the problem and the proposed solution. The desired MOVs are presented in the table below. After defining objectives and solutions, the next step is designing and developing the migration.

Table 2. MOV of This Project

Potential Area	***Objectives***
Financial	• **Decreased service maintenance costs by 25%** by streamlining service procedures.
Operational	• **Achieved 100% integration** of user and credential management services with the new system. • **Boosted operational productivity** by 20% by completely eliminating the need for data patching.
Customer	• **Increased reliability and improved user experience by 25%** through seamless integration with the new system.

The third stage is Design and Development. At this stage, the author designed the migration of user and credential management services, starting with a comparative analysis to select the most suitable development methodology. It started with a comparative analysis to select the most suitable development

methodology. Comparative analysis compares various development methods such as Scrum, Kanban, and Waterfall based on project criteria, such as scope, time, technology, and personnel [27]. This process was conducted through discussion with technical leads, product managers, and development teams.

For each criterion, a method received an "OK" rating if it fulfilled the project's needs effectively. a method received a "NO" rating if it did not. The assessment was qualitative based on group consensus during discussions. The methodology with the highest number of "OK" ratings across all criteria was selected as the most suitable approach for the service migration project.

Table 3. Comparative Analysis Result

Criterion	Scrum	Waterfall	Kanban
Scope	OK	NO	OK
Time	OK	OK	OK
Application/ Technology	OK	NO	OK
Personnel	OK	OK	OK

From the analysis results, Scrum and Kanban were chosen as development methods. Because of their flexibility in handling projects with short iterations and their ability to visualize work [15-17].

After selecting the methodology, the author developed a design pattern for the new user and credential management system. This design pattern was tailored to the specific requirements and services of the system. The results of this stage are design patterns and project plans.

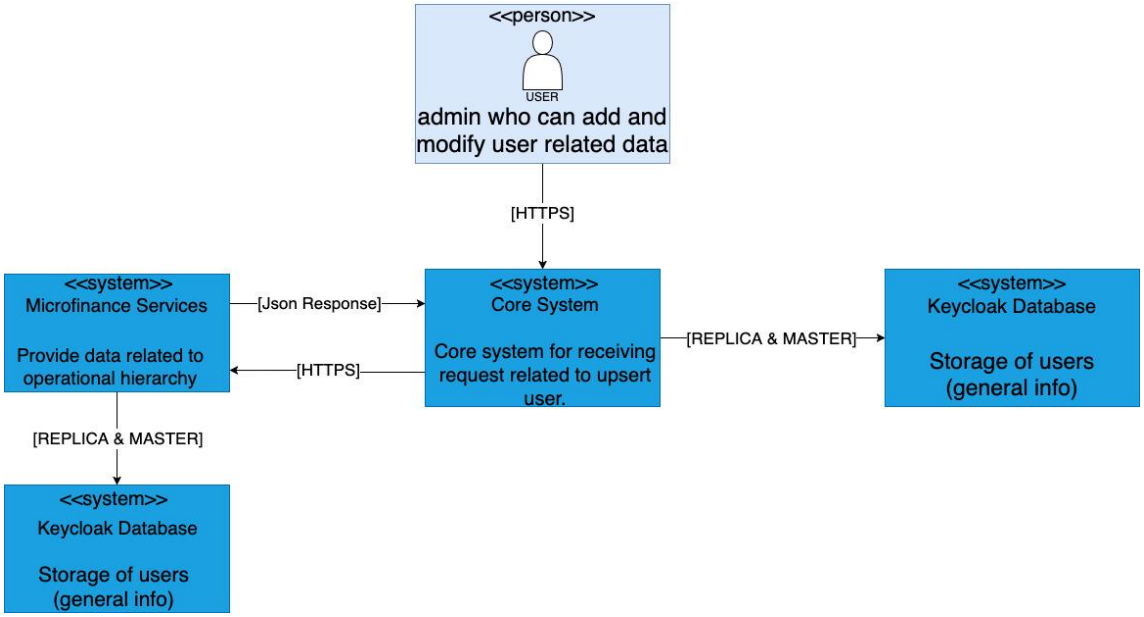

Figure 2. Latest Service Design Pattern Concept

The design pattern for this system is a new user and credential management system that integrates with Keycloak, an open-source identity and access management software. User data is connected to the core service, which is the newly

developed user and credential management service. This core service also connects to the microfinance service and the keycloak database service. The microfinance service is responsible for storing data in an internal database.

The fourth stage is Demonstration. The migration of user and credential management services is carried out using Lean, Scrum, and Kanban methods, with Jira as the Kanban board. The Kanban board is instrumental in monitoring all processes from start to finish. During implementation, the Kanban board aids in tracking work types such as frontend development, mobile service, mobile app, backend development, code review, data migration, code testing, and post-deployment maintenance. Tasks were monitored through statuses like to-do, in progress, code review, in QA, and done. It ensured the team to identify and resolve obstacles and optimize processes effectively.

In addition, the Kanban, Scrum, and Lean adoption models for service migration projects are implemented in PT AMF. This stage allows for Agile inspection and adaptation, accelerating feedback from all development teams and stakeholders involved..

The fifth stage is Evaluation. At this stage, an evaluation of the Lean, Scrum, and Kanban methods used was carried out at the end of the project. Additionally, evaluations were conducted every two weeks during the sprint review. The evaluation aims to identify completed tasks, their impact on the business, and necessary changes to the ongoing project. This evaluation process also aims to improve ineffective aspects and plans corrective actions to ensure a smooth project execution. The evaluation was conducted by monitoring the status of the sprint backlog, blockers in the sprint backlog, sprint burndown chart, and the results of the deployment.

This phase produced several inputs, issues, and appreciations. Issues encountered during the project included communication and user education, the application rollout plan, and technical challenges related to user experience. In terms of communication and education, the main problem was the high number of reports related to password resets, primarily due to users' lack of understanding of new features resulting from insufficient socialization. In addition, users were also confused by the two available login mechanisms. User experience issues hindered effective use of the application. As a solution, it is recommended to gradually phase out the old login mechanism, conduct post-release socialization along with video tutorials to improve the learning curve, and re-evaluate the developed user experience. In addition to issues and inputs, the project evaluation produced important points from the application of agile principles: The project is still running according to the timeline; team cooperation, collaboration, and responsiveness; and intensive planning and discussion.

The sixth stage is Communication. At this stage, communication is conducted to ensure the project's smooth execution. This communication includes recording track records related to what happened during the project, inspection reports, and necessary corrective actions. The outcome is an updated project progress report, which is shared to the entire project team and stakeholders upon completion. The author communicates the service migration model's implementation to the

development team and stakeholders. The objective is to ensure that all involved parties understand and support the ongoing process.

2. Discussion

The last stage is Discussion. At this stage, this research has resulted in an Agile adoption model specifically tailored for application service migration projects, particularly for user and credential management services. This Agile adoption model aligns with the current project needs.

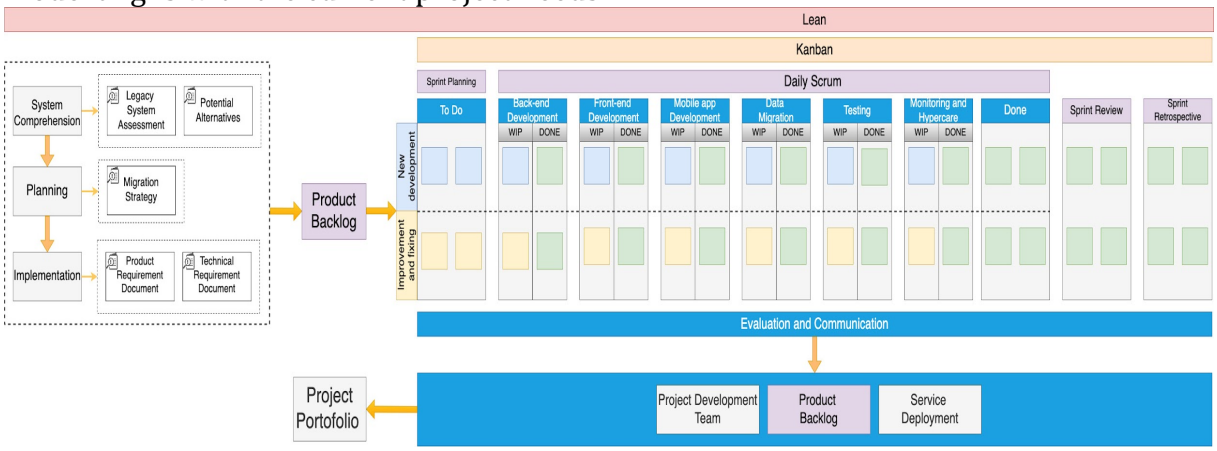

Figure 3. Agile adoption Model Lean, Scrum, dan Kanban

The image above illustrates the adoption of Agile using Lean, Kanban, and Scrum models. The initial phase of this process is the migration process. This process is divided into three sub-phases: system comprehension, planning, and implementation. The system comprehension phase assesses the legacy system and identifies alternatives. The planning phase produces a migration strategy. In the final implementation phase, two crucial documents are generated: the Technical Requirement Document (TRD) and the Product Requirement Document (PRD). These documents are used as references in creating a product backlog and flow for the latest system.

Project execution is monitored using Kanban, categorizing tasks into a product backlog based on the status (new development, improvement, fixing) and type (backend, frontend, mobile app, data migration, testing, post-deployment maintenance). Each task is marked with progress, indicating whether the work is 'in progress' (WIP) or 'done'.

The evaluation and communication within this project aim to ensure that necessary changes and tasks can be adjusted quickly. Evaluations are conducted by the entire team and encompass project development, product backlog, and service deployment. The results are documented in the project portfolio. Based on the results, discussions, and evaluations; there are advantages in adopting agile project management (APM) with kanban, scrum, and agile models.

First, Kanban boards facilitate task monitoring [4], thereby accelerating feedback from development teams and stakeholders. Additionally, this approach minimizes project duration, ensuring projects stay on schedule [13,18]. Another key

benefit is enhanced team collaboration, teamwork, and responsiveness. Lastly, continuous planning and intensive discussions help maintain project stays on track.

The project demonstrated good performance, achieving 90% on-time project completion by utilizing Lean, Kanban, and Scrum. The product backlog was effectively monitored using a Kanban board [4].

A piloting approach was adopted for this data migration to mitigate risks. This approach was chosen to reduce risk, considering that a full migration could potentially cause problems if all branches are not fully ready. Additionally, data recovery is simplified due to the smaller data volumes involved in each pilot.

The initial data migration phase achieved only 6.44% completion due to the piloting approach. In the next phase, the data migration process was increased to 10% and then 25% after resolving backend bugs. Piloting continued until 50% migration process completion. The final migration to 100% was completed by the end of September. This project significantly improved system integration to 95% and reduced data patching activities by 80%.

D. Conclusion

This study highlights the effectiveness of Agile Project Management (APM) in supporting the migration of user and credential services. By integrating Lean, Kanban, and Scrum methodologies; the project was able to achieve improved efficiency, enhanced team collaboration, and more adaptive execution strategies. The successful implementation demonstrates that APM can be a practical and scalable approach for managing service migration in dynamic environments.

The key implication of this research is the development of an Agile-based migration framework tailored for service-oriented systems. This framework offers a reference for fintech companies seeking to streamline their migration efforts while maintaining responsiveness to change. Thus it supports the overall success of the project.

However, this study is limited to the adoption of Agile, Lean, Scrum, and Kanban within the context of service migration. Future research can explore the application of these methodologies to broader areas such as infrastructure, change management, cross-functional integration, and application development. Since this case study focuses on a fintech company, further research can use the adaptability of this approach in different industries with varying business models.

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F. References

[1] Mustyala, A. (2023). Migrating Legacy Systems to Cloud-Native Architectures for Enhanced Fraud Detection in Fintech. EPH-International Journal of Science And Engineering, 9(1). https://doi.org/https://doi.org/10.53555/ephijse.v9i1.236

[2] Dennis, A., Wixom, B. H., & Tegarden, D. P. (2021). Systems Analysis & Design: An object-oriented approach with UML. John Wiley & Sons, Inc.

[3] Pargaonkar, S. (2023). A Comprehensive Research Analysis of Software Development Life Cycle (SDLC) Agile & Waterfall Model Advantages, Disadvantages, and Application Suitability in Software Quality Engineering. International Journal of Scientific and Research Publications, 13(8), 120–124. https://doi.org/10.29322/IJSRP.13.08.2023.p14015

[4] Fitriani, A. N., Raharjo, T., Hardian, B., & Prasetyo, A. (2021, April 21). IT infrastructure agile adoption for SD-WAN project implementation in pharmaceutical industry: Case study of an Indonesian Company. 2021 IEEE International IOT, Electronics and Mechatronics Conference, IEMTRONICS 2021 - Proceedings. https://doi.org/10.1109/IEMTRONICS52119.2021.9422650

[5] Hidalgo, E. S. (2019). Adapting the scrum framework for agile project management in science: case study of a distributed research initiative. Heliyon, 5(3), e01447. https://doi.org/10.1016/j.heliyon.2019.e01447

[6] Kraft, C. (2018). Agile project management on government finance projects. The Journal of Government Financial Management. The Journal of Government Financial Management, 67(1), 12-18.

[7] Wijaya, S. F., Prabowo, H., Kosala, R. R., & Meyliana. (2019). An agile implementation model for ERP. 2019 International Conference on Information Management and Technology (ICIMTech), 513–518. https://doi.org/10.1109/icimtech.2019.8843724

[8] Monica, M. D., Coroian, A., Mastan, O.-A., Longodor, A.-L., Zoltan, K., Silaghi, M. A., & Liliana, M. (2023). Agile project management using jira in processing of food industry. 2023 17th International Conference on Engineering of Modern Electric Systems (EMES), 1–4. https://doi.org/10.1109/emes58375.2023.10171760

[9] Sudarsono, B. G. (2020). Adopting SCRUM Framework in a Software Development of Payroll Information System. International Journal of Advanced Trends in Computer Science and Engineering, 9(3), 2604–2611. https://doi.org/10.30534/ijatcse/2020/17932020

[10] Firdaus, M. B., Patulak, I. M., Tejawati, A., Bryantama, A., Putra, G. M., & Pakpahan, H. S. (2019). Agile-Scrum Software Development Monitoring System. 2019 International Conference on Electrical, Electronics and Information Engineering (ICEEIE), 288–293. https://doi.org/10.1109/iceeie47180.2019.8981471

[11] Ciric, D., Lalic, B., Gracanin, D., Palcic, I., & Zivlak, N. (2018). Agile Project Management in new product development and innovation processes: Challenges and benefits beyond software domain. 2018 IEEE International Symposium on Innovation and Entrepreneurship (TEMS-ISIE), 1–9. https://doi.org/10.1109/tems-isie.2018.8478461

[12] Sohi, A. J., Hertogh, M., Bosch-Rekveldt, M., & Blom, R. (2016). Does Lean & Agile Project Management Help Coping with project complexity? Procedia - Social and Behavioral Sciences, 226, 252–259. https://doi.org/10.1016/j.sbspro.2016.06.186

[13] Saltz, J., & Heckman, R. (2020). Exploring Which Agile Principles Students Internalize When Using a Kanban Process Methodology . Journal of Information Systems Education (JISE), 31(1).

[14] Gbadegeshin, S. (2018). Lean commercialization: A new framework for Commercializing High Technologies. Technology Innovation Management Review, 8(9), 50–63. https://doi.org/10.22215/timreview/1186

[15] Al-Baik, O., & Miller, J. (2014). The Kanban Approach, between Agility and Leanness: A systematic review. Empirical Software Engineering, 20(6), 1861–1897. https://doi.org/10.1007/s10664-014-9340-x

[16] Haidabrus, B., Grabis, J., Ivanov, V., Druzhinin, E., & Psarov, O. (2023). Improving Agile Teams Effectiveness Through the Metrics. 2023 IEEE 64th International Scientific Conference on Information Technology and Management Science of Riga Technical University (ITMS), 1–5. https://doi.org/10.1109/ITMS59786.2023.10317789

[17] Monica, M. D., Coroian, A., Mastan, O.-A., Longodor, A.-L., Zoltan, K., Silaghi, M. A., & Liliana, M. (2023). Agile project management using jira in processing of food industry. 2023 17th International Conference on Engineering of Modern Electric Systems (EMES), 1–4. https://doi.org/10.1109/emes58375.2023.10171760

[18] Anderson, D. J. (2010b). Kanban: Successful evolutionary change in your technology business. Blue Hole Press.

[19] Khosravi, A., Javdani Gandomani, T., & Fahimian, H. (2017). Introduction of scrum in an elite team: A case study. Journal of Software, 12(4), 173–179. https://doi.org/10.17706/jsw.12.3.173-179

[20] Sudarsono, B. G., Fransiscus, Hartono, H., Bernanda, D. Y., & Andry, J. F. (2020). Adopting scrum framework in a software development of Payroll Information System. International Journal of Advanced Trends in Computer Science and Engineering, 9(3), 2604–2611. https://doi.org/10.30534/ijatcse/2020/17932020

[21] Lee, M. (2016). Exploratory study: Project management in scrum IT project. Doctoral Dissertation, Dublin Business School.

[22] Gandomani, T. J., Tavakoli, Z., Nafchi, M. Z., & Najafi Sarpiri, M. (2019). Adapting scrum process with 7C Knowledge Management Model. 2019 5th Conference on Knowledge Based Engineering and Innovation (KBEI), 056–059. https://doi.org/10.1109/kbei.2019.8735008

[23] Castillo-Barrera, F. E., Amador-Garcia, M., Perez-Gonzalez, H. G., Martinez-Perez, F. E., & Torres-Reyes, F. J. (2018). Adapting Bloom's Taxonomy for an Agile Classification of the Complexity of the User Stories in SCRUM. 2018 6th International Conference in Software Engineering Research and Innovation (CONISOFT), 139–145. https://doi.org/10.1109/CONISOFT.2018.8645899

[24] Fritzsch, J., Bogner, J., Haug, M., Wagner, S., & Zimmermann, A. (2022, June). Towards an architecture-centric methodology for migrating to microservices. In International Conference on Agile Software Development (pp. 39-47). Cham: Springer Nature Switzerland.

[25] R. Almeida, J. M. Teixeira, M. Mira, and P. Faroleiro, “A conceptual model for enterprise risk management management,” vol. 32, no. 5, pp. 843– 868, 2019, doi: 10.1108/JEIM-05-2018-0097

[26] Fritzsch, J., Bogner, J., Wagner, S., & Zimmermann, A. (2019). Microservices migration in industry: Intentions, strategies, and challenges. 2019 IEEE International Conference on Software Maintenance and Evolution (ICSME), 481–490. https://doi.org/10.1109/icsme.2019.00081

[27] Alaydrus, F., Raharjo, T., Hardian, B., & Prasetyo, A. (2021a). Approaches in determining software development methods for organizations: A systematic literature review. 2021 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), 1–6. https://doi.org/10.1109/iemtronics52119.2021.9422662