A Conceptual Framework for it Using Agile Project Management

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ABSTRACT

This study attempts to investigate how Agile Project Management approaches are used in IT businesses. The study investigates the advantages of employing agile methodology over conventional project management strategies and the difficulties IT organizations encounter while implementing Agile. A mixed-method approach is used in the study, which draws on both quantitative and qualitative information from surveys and interviews with project managers and team members from IT organizations. According to the study's findings, agile project management approaches increase team collaboration, hasten delivery times, and boost customer satisfaction, all of which contribute to the success of IT projects.

KEYWORDS: Agile, Collaboration, Communication, IT Company's

INTRODUCTION

Agile Project Management has become increasingly popular in the IT industry due to its ability to adapt to changing requirements and deliver high-quality software promptly. Many studies have been conducted on the effectiveness of Agile Project Management in IT companies. Agile methods are especially well suited for IT projects where needs and technology are continually evolving because they place a strong emphasis on iterative and incremental development, close teamwork, and quick response to change. This study attempts to investigate how agile project management approaches are used in IT businesses. The study examines the advantages and difficulties of utilizing agile methodologies in place of conventional project management techniques and pinpoints the elements that contribute to effective adoption. A mixed-method approach is used in the study, which draws on both quantitative and qualitative information from surveys and interviews with project managers and team members from IT organizations.

AGILE DEVELOPMENT CYCLE:
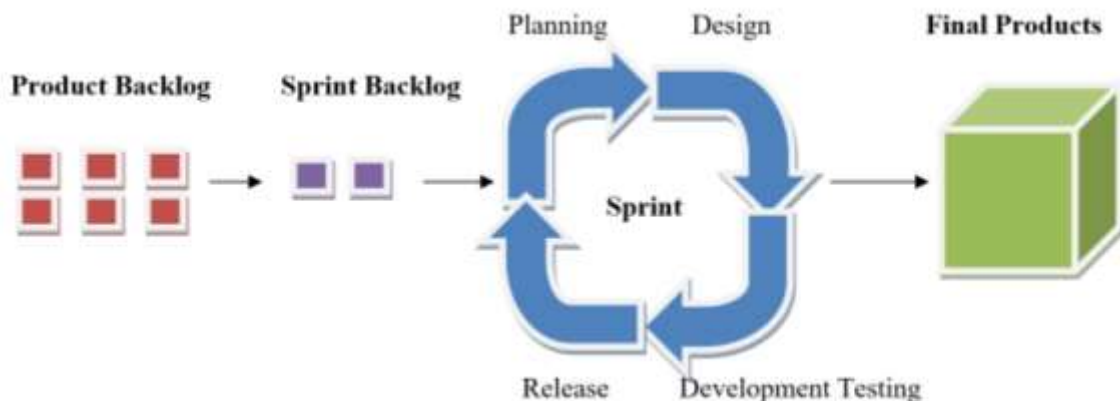
Product Backlog:

The product backlog is created and managed by the product owner, who works closely with stakeholders to identify and prioritize the features and requirements that will provide the most value to the end users. The product owner uses a variety of techniques, such as user stories, acceptance criteria, and business value, to describe the features and requirements.

Sprint Backlog:

The sprint backlog is created during the sprint planning meeting, where the team collaborates with the product owner to select the top-priority items from the product backlog that can be completed during the sprint. The development team then breaks down each selected item into smaller, more manageable tasks that can be completed in one day or less.

Sprint:

 A sprint is a short iteration of the project, typically lasting between one to four weeks. At the beginning of each sprint, the team should plan what they will deliver during that sprint. This involves selecting items from the product backlog and breaking them down into tasks

REVIEW OF LITERATURE:

Arturs Rasnacis, Solvita Berzisa,2017, Method for Adaptation and Implementation of Agile Project Management Methodology: Worldwide adoption and implementation of agile approaches is common. There are more than 20 distinct agile approaches and subtypes. The project kinds, the company, and its people all influence the technique choice and adaptation. One factor that might have a significant impact on the success of the approach implementation is the qualities, relationships, and motivation of the employees. Therefore, when adapting the methodology, these issues must also be assessed and taken into account. The suggested approach utilizes sociometric and motivational research techniques, as well as the best practices from change management. An industrial case study is used to evaluate the methodology.

Primadhika Maranda, Teguh Raharjo, Bob Hardian, Adi Prasetyo 2022, Agile project management challenge in handling scope and change: A systematic literature reviewAgile project management is said to be able to solve this issue because it takes a more adaptable and dynamic approach. Agile has been widely adopted as a realistic and adaptable approach to project management methods across a variety of industry sectors. The project's scope is one element that is thought to have a direct impact on the cost and schedule. Sadly, it appears to be. one of the most ignored areas in both Agile and traditional. Agile is renowned for both its quick progress and its openness to change. Uncontrolled change, however, has the potential to cause delays and project overruns.

Adam Alami, Oliver Krancher, Maria Paasivaara 2022, The journey to technical excellence in agile software development: This study investigates how agile practitioners interpret the concept of technical excellence brought up in Principle 9 of the Agile manifesto. Moreover, we investigate how agile practitioners put the concept into practice and what conditions facilitate putting technical excellence into practice. We conducted semi-structured interviews with twenty agile practitioners, coded the data inductively, and performed two sessions to validate the emerging findings. We find that technical excellence is first and foremost a mindset that is underpinned by continuous attention to sustainable code, continuous learning, and teamwork. Fostering technical excellence requires the adoption of design and development practices, such as continuous architecting, and is supported by continuous learning. We also identify three enabling conditions for technical excellence

Aljaz Stare, CSPM, 2014, Agile Project Management in Product Development Projects: Even though agile project management is becoming more and more popular for IT projects, it hasn't yet taken hold in other project categories (engineering, research & development, and event planning), possibly for a variety of reasons: The partial deliverables may not be marketed or utilized, the frequent adjustments are too expensive, and people take part in numerous.concurrent projects, etc. We could contend that the strategy won't be applied frequently. We cannot, however, rule out the use of some agile approaches for projects that are still managed conventionally. Consequently, we examined the product development initiatives in five manufacturing firms. First, we wanted to find out if they were already utilizing any agile practices, and then apply regression analysis

Andrei Gal, Ioan Filip, Florin Dragan,2018, A new vision over Agile Project Management in the Internet of Things era: We want to increase productivity and optimize factors including teamwork, data analysis, project managers' and stakeholders' input, resource planning, project development, and feedback speed by developing a project management solution throughout the IoT network. A significant contribution to optimizing. All of the smart devices use high computational power, high data transmission speeds, and efficient data processing, which has improved the efficiency of the software project management solution. The project management process is therefore embedded with Things and their features by the Agile project management solution that is suggested in this article.

Patricia Frankova, Martina Drahosovab,2016, Agile project management approach and its use in big data management Peter Balco: Every time the project management approach is used, several questions and suggestions are raised. One side makes the case that all projects should follow the standard methodology. The viewpoint that reflects the project management methodology that is specific to the project is preferred by another group. In our contribution, we provide a summary of project managers' actual perspectives on difficulties with big data management project management.

Yang Agita Rindri, Ridi Ferdiana, Rudy Hartanto, 2019, Developer Payroll Approaches for Startup Environment Based on Agile Project Management: The strategy for determining developer

compensation for a startup setting based on Agile Project Management is proposed in this paper, taking into account the developer's competency and performance characteristics. The criteria include factors including the length of time developers have been employed, and the nature of their function.

How many bugs are created by developers and how long it takes them to do a task? This study is anticipated to offer a different approach to developing developer payroll in a startup context.

Carina Loiro, Helio Castro, Paulo Avila, Maria Manuela Cruz-Cunha, Goran D. Putnikc, Luís Ferreira,2019, Agile Project Management: A Communicational Workflow Proposal: The AGILE team, which is the name of the team this paper suggests for dealing with Agile Project Management, is made up of a product owner, a team leader, and team members. This paper also suggests a communication workflow for the confluence of three momentums (requirements analysis, planning, and design) along the Agile Project Management.

Rodrigo Oliveira de Castro, Cesar Sanin, Andrew Levula, and Edward Szczerbicki,2022, Sustainable Knowledge Sharing Model for IT Agile Projects: In the field of projects, sustainability is a management strategy that strikes a balance between the environmental, social, economic, and political aspects of project-based work to satisfy stakeholder needs without jeopardizing or overtaxing the natural resource available for future generations. This study takes things a step further by offering a theoretical framework that in Agile IT projects, it seeks to promote sustainable development through conceptual knowledge transfer.

Tulika Chakravorty , Samyadip Chakraborty, Nasina Jigeesh ,2014, Analysis of Agile testing attributes for faster time to Market: Context of Manufacturing sector related IT projects: To accelerate the time to market for the products, this study focuses on IT projects associated with the manufacturing industry by analyzing the significance of various agile project testing attributes across each stage of the information systems development life cycle (SDLC).

CONCEPTUAL FRAMEWORK FOR AGILE PROJECT MANAGEMENT
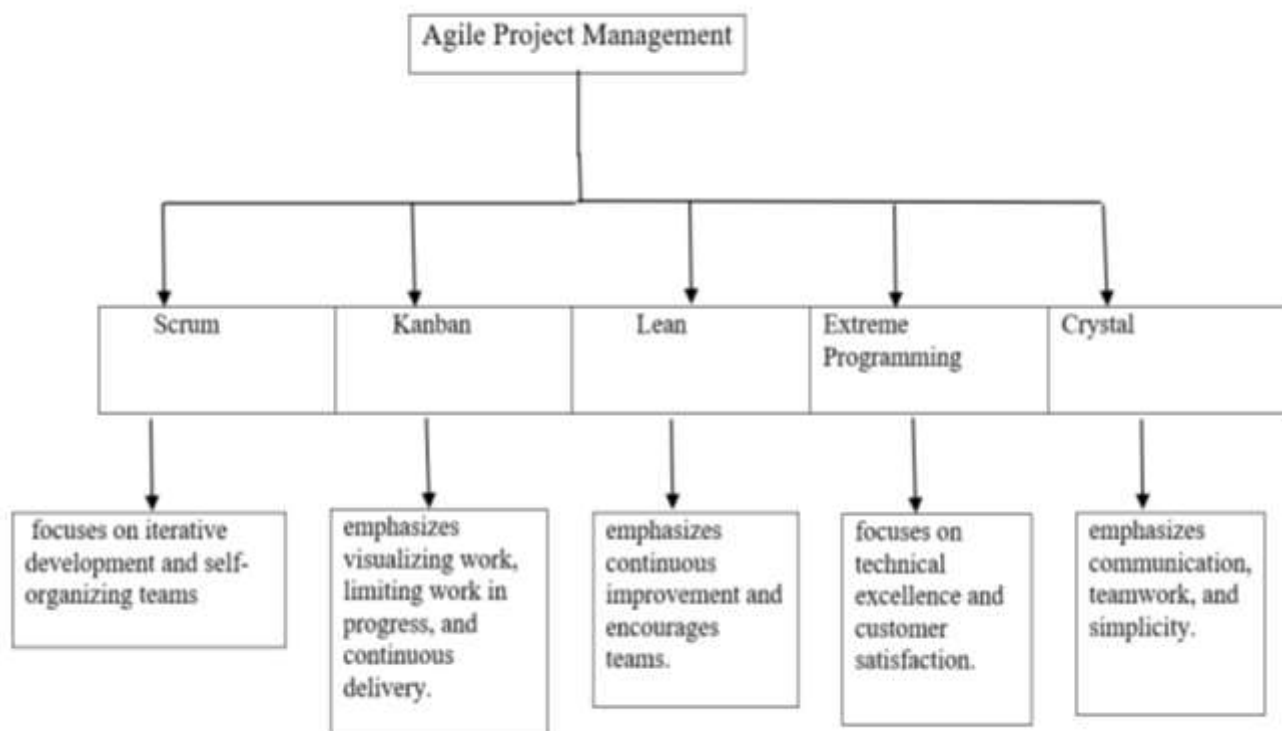
CONCLUSION:

IT companies that adopt agile project management methodologies can benefit from faster time-to-market, better quality, increased customer satisfaction, and a more engaged and motivated team. Agile project management allows IT companies to quickly respond to changing customer needs and market trends, which is particularly important in the fast-paced and rapidly changing IT industry.

REFERENCE:

1. Arturs Rasnacis, Solvita Berzisa,2017, Method for Adaptation and Implementation of Agile Project Management Methodology, Elsevier Publication.

2. Primadhika Maranda, Teguh Raharjo, Bob Hardian, Adi Prasetyo 2022, Agile project management challenge in handling scope and change, Elsevier Publication.

3. **Adam Alami, Oliver Krancher, Maria Paasivaara 2022**, The journey to technical excellence in agile software development, Elsevier Publication.

4. **Aljaz Stare, CSPM, 2014**, Agile Project Management in Product Development Projects, Elsevier Publication.

5. **Andrei Gal, Ioan Filip, Florin Dragan,2018**, A new vision over Agile Project Management in the Internet of Things era, Elsevier Publication.

6. **Patricia Frankova, Martina Drahosovab,2016**, Agile project management approach and its use in big data management Peter Balco, Elsevier Publication.

7. **Yang Agita Rindri, Ridi Ferdiana, Rudy Hartanto, 2019**, Developer Payroll Approaches for Startup Environment Based on Agile Project Management, Elsevier Publication.

8. **Carina Loiro, Helio Castro, Paulo Avila, Maria Manuela Cruz-Cunha, Goran D. Putnikc, Luís Ferreira,2019**, Agile Project Management, Elsevier Publication.

9. **Rodrigo Oliveira de Castro, Cesar Sanin, Andrew Levula, and Edward Szczerbicki,2022**, Sustainable Knowledge Sharing Model for IT Agile Projects, Elsevier Publication.

10. **Tulika Chakravorty , Samyadip Chakraborty, Nasina Jigeesh ,2014**, Analysis of Agile testing attributes for faster time to Market, Elsevier Publication.