

# KENNESAW STATE UNIVERSITY COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING.

**SWE 6633: SOFTWARE PROJECT PLANNING AND MANAGEMENT.** 

**SUMMER 2023** 

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### **RESEARCH PROPOSAL**

"SOFTWARE PROJECT MANAGEMENT: THE ROLE OF SCRUM MASTER'S IN SOFTWARE PROJECT PLANNING AND MANAGEMENT: ENSURING AGILE SUCCESS: RELEVANCE, LIMITATION, AND NEXT STEP"

TO

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#### **RESEARCH TOPIC**

"Software project management: the role of scrum master's in software project planning and management: ensuring agile success: relevance, limitation, and next step."

#### INTRODUCTION

Efficient project planning and management are critical for success in today's fast-paced and dynamic software development landscape. Scrum and other agile methodologies have grown in popularity due to their adaptability and iterative approach to software development. The Scrum Master, a key role responsible for facilitating effective project planning and management practices, is at the heart of Agile project management. The purpose of this paper is to investigate the relevance, limitations, and next steps in utilizing the potential of Scrum Masters in software project planning and management, with a particular emphasis on ensuring Agile success.

A Scrum master's responsibilities extend far beyond those of a project manager. The Scrum Master, on the other hand, acts as a facilitator, coach, and servant leader to the development team, product owner, and stakeholders. They serve as a guide, ensuring that Agile principles and practices are understood and followed throughout the project lifecycle, while also encouraging collaboration, transparency, and continuous improvement. The Scrum Master, by leveraging their expertise, plays a critical role in optimizing the team's performance and enabling the successful delivery of high-quality software products.

This paper aims to provide valuable insights for software project managers, Agile practitioners, and organizations seeking to optimize their software project planning and management practices by examining the relevance, limitations, and next steps in harnessing the potential of Scrum Masters. We will uncover strategies and best practices that can be used to ensure Agile success and deliver high-quality software products in a rapidly evolving technological landscape through a thorough analysis.

#### **OBJECTIVES**

The purpose of this article is to investigate the role of Scrum Masters in the planning and management of software projects within an Agile framework. We want to emphasize the importance of their contributions to Agile success and identify the specific tasks and responsibilities they carry out throughout the project lifecycle. Furthermore, we will investigate the constraints that Scrum masters face in effectively carrying out their roles and propose potential solutions to these challenges. We can gain insights into how Scrum masters can drive the successful implementation of Agile methodologies by understanding their role in project planning and management.

By achieving these goals, the discussion hopes to provide participants with a valuable and enriching experience, fostering a deeper understanding of the role of Scrum masters, and enabling them to improve their software project planning and management practices in an Agile context.

#### **METHODOLOGY**

This study will employ both qualitative and quantitative research methods. As part of the qualitative research, semi-structured interviews will be conducted with software developers and project managers who have used scrum master technology in software project management. As part of the quantitative research, a survey will be conducted to collect information from a larger sample size. We will conduct a thorough review of existing literature on Agile software development and project management to achieve the goals of this article. We will collect relevant information about the role of Scrum Masters in software project planning and management by analyzing research papers, scholarly articles, industry reports, and case studies. In addition, we will look at real-world experiences and insights shared by industry professionals who have worked as Scrum masters or closely collaborated with them. We will provide a comprehensive overview of the Scrum master's responsibilities, relevance, and limitations in the context of Agile project planning and management by synthesizing this information.

#### CONCLUSION

The Scrum Master is essential in software project planning and management, especially when using the Agile methodology. They oversee encouraging collaboration, removing roadblocks, and ensuring the team follows Agile principles and practices. Scrum masters help Agile projects succeed by promoting effective communication, continuous improvement, and adaptability through their facilitation and guidance. However, the role of the Scrum Master is not without constraints. Managing competing priorities, balancing stakeholder expectations, and scaling Agile practices across large teams or organizations are all difficult tasks. To overcome these constraints, more research and development are required to refine and improve the role of Scrum Masters. This could include specialized training, the implementation of supportive tools and frameworks, and the establishment of clearer guidelines for their responsibilities. Organizations can maximize the benefits of Agile project planning and management by addressing these limitations and empowering Scrum Masters, ultimately leading to improved software development outcomes.