

Factors Influencing the Adoption of Agile Project Management Methodologies by Engineering Teams in the Telecommunications Industry

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Published in - 2024 International Research Conference on Smart Computing and Systems Engineering (SCSE)

Electronic ISBN:979-8-3503-7568-8

Print on Demand(PoD) ISBN:979-8-3503-7569-5

Date of Conference: 04-04 April 2024

Date Added to IEEE Xplore: 11 June 2024

Abstract

This study explores the dynamic landscape of Sri Lanka's telecommunications industry, specifically examining the correlation between engineering teams and the adoption of agile project management methodologies. With the industry's shift towards virtual content, cloud computing, and software-driven systems, it is essential to examine the factors that impact the adoption of agile practices. Through a comprehensive literature analysis, this study identifies and analyzes ten key factors that significantly influence the integration of agile methodologies within engineering teams. Afterwards by obtaining the expert opinions, research conducts a comprehensive data analysis by identifying four key factors: organizational culture, adaptability, communication, problem-solving, and employee engagement. The study surveyed 145 telecommunication engineering teams, incorporating vital demographic characteristics to enhance the validity of its findings. Key insights reveal the critical role of organizational culture in driving agile implementation, with effective problem-solving practices contributing positively. Surprisingly, superior communication exhibits limited direct impact. Interestingly, the moderation effect of employee engagement on the relationship between organizational culture and agile adoption is negative. In contrast, employee engagement significantly influences the relationship between effective problem-solving practices and agile adoption. The study concludes with practical recommendations for creating an agile-friendly environment, investing in adaptability

training, enhancing communication tools, and cultivating effective problem-solving practices. These insights aim to guide the telecommunications industry in Sri Lanka towards agile practices, fostering increased productivity, improved quality, and accelerated time-to-market.

Citation

T. Dilhara, S. Jayasinghe and I. Fernando, "Factors Influencing the Adoption of Agile Project Management Methodologies by Engineering Teams in the Telecommunications Industry," 2024 International Research Conference on Smart Computing and Systems Engineering (SCSE), Colombo, Sri Lanka, 2024, pp. 1-7, doi: 10.1109/SCSE61872.2024.10550785.

Publisher

IEEE