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Aplicando Ágil y Scrum en Proyectos de Computación Cuántica

Content

Quantum computing introduces a radically different paradigm that blends advanced research with engineering, making traditional project management approaches insufficient. This article explores how Agile methodologies, particularly Scrum, can be adapted to quantum projects characterized by high uncertainty, experimental cycles, and reliance on specialized hardware. The classical Scrum framework faces significant challenges in this domain, such as unpredictable outcomes, lengthy validation times, and the multidisciplinary nature of quantum teams. To address these issues, the paper proposes redefining the "Definition of Done," using research spikes, flexible sprint durations, and prioritization based on scientific insight. Case studies from industry and research institutions demonstrate the potential of iterative development and adaptive planning in quantum contexts. Ultimately, the article argues that, when properly adapted, Agile can provide structure and responsiveness in a field where uncertainty is inherent, enabling sustainable progress and better alignment between scientific exploration and project delivery.

Summary

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