DevOps Practices and their Role in Streamlining Information System Development

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Abstract*: This study delves into the realm of modern software development by investigating the role of DevOps practices in streamlining information system development. Employing a qualitative research approach, a blend of in-depth interviews and comprehensive surveys were conducted to capture insights from professionals in software development and operations roles. The findings reveal a prevalent adoption of DevOps practices, with 70% of interviewees and 65% of survey respondents indicating integration. Notably, Continuous Integration (CI) emerged as a cornerstone practice, fostering rapid code integration, while Automated Testing fortified software quality. Enhanced collaboration and reduced lead times signify the potency of DevOps's impact on development cycles. However, challenges in cultural transformation and effective automated testing suites underscore the journey's complexities. Ultimately, the study illuminates DevOps as a catalyst for collaborative agility and a transformative force shaping the software engineering landscape.*

Keywords: DevOps Practices, Streamlining, Information System Development

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