

CONTINUOUS DELIVERY IN MOBILE AND WEB SERVICE QUALITY ASSURANCE

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ABSTRACT

In today's fast-paced digital landscape, **Continuous Delivery** (**CD**) is vital for ensuring high-quality software delivery while minimizing downtime and errors in both mobile and web services. This paper presents a comprehensive study on implementing **CD** pipelines for mobile and web service Quality Assurance (QA), focusing on reducing deployment times, enhancing test automation, and improving overall system performance and reliability. Through the application of automated testing frameworks, real-time monitoring, and incremental rollouts, this approach demonstrated significant improvements in key performance indicators such as response times, crash rates, and deployment efficiency. The study highlights how adopting **CD** can streamline the release process, increase service reliability, and accelerate delivery without compromising quality. The future scope includes the integration of more advanced security testing, the application of AI in test automation, and the potential for scaling through containerization and edge computing.

KEYWORDS: Continuous Delivery (CD), Mobile Services, Web Services, Quality Assurance (QA), Test Automation, Real-Time Monitoring, Incremental Rollout

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