# **The Impact of DevOps on Software Architecture: Evolving Practices and Team Collaboration**

## **Introduction**

With the increasing complexity of software intensive systems, the goal of software architecture as a means of managing large scale software systems has become far more necessary. Development and Operations (DevOps) is an up-and-coming software industry movement aiming to bridge the gap between development and operations teams. DevOps practices necessitates an extensive use of infrastructure automation techniques, which can reduce the complexity of development and operations to a very large extent.

Traditionally, the software development team and software operation team were separated from each-other, separating these two teams can hinder communication and collaboration. It is argued that one of the most pressing challenges that an organization can encounter is how software applications can be re-architected to support DevOps practices like continuous integration (CI), continuous delivery (CDE) and continuous development. A good architecture helps to ensure a desired standard of quality features and can enable short feedback cycle time including instant feedback from operations. Although DevOps has had little research on what it’s implications can be on architecture. I assert that there a necessary need for research to gain a deeper understanding of how DevOps can influence the architecting process and the results in an organization. Therefore, this article seeks architectural patterns, elements and practices that support DevOps and the effects it has had on architectural practices and its effect on the collaboration between teams.