

RESEARCH PAPER ABSTRACT
ON
DEVOPS

Submitted To

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ABSTRACT

Organization's proficiency to deliver services and applications at high velocity requires competing effectively in the market. The practices and tools for such management processes demands the quick and reliable model. This paper discuss about DevOps, it is a combination of cultural philosophies, practices and tools that increases an organization's ability to deliver applications and services at high velocity evolving and improving products at a faster pace than organizations using traditional software development and infrastructure management processes. This speed enables organizations to better serve their customers and compete more effectively in the market.

DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality. These practices involve four main concerns:

- Quickly getting a change into production.
- Finding errors through automated testing.
- Reducing or eliminating errors that occur during deployment.
- Quickly finding and repairing faults in the system.

All these concerns have organizational, cultural, and technical aspects. For example, one practice for quickly getting a change into production is to do only automated testing. This will mean a change in the quality assurance team's role or possibly its elimination. Changing a team's role is an organizational change, adapting to differing roles is a cultural change, and developing the appropriate set of test cases is a technical change. In all these changes, the software architect is important. DevOps practices rely heavily on tool support and automation. So, the architect must work with the team to ensure there are personnel to support the tools and that the team is familiar with the tools that support production. A quick glance at the list benefits of DevOps cloud services will include application development speed to delivery to meet the needs of the business units faster, user demands that quickly fold back into the software and lower costs for development, testing, deployment and operations.

The centralized nature of cloud computing sits perfectly well with the DevOps ideology, by providing them with a standard and centralized platform for testing, deployment and production. In the past, the water fall method was employed by organizations which basically is a distributed system and it did not sit well with centralized software deployment. The latest methodology has successfully addressed this shortcoming.

Another reason for enterprises across the globe preferring cloud based DevOps is the ability of cloud computing to increase scalability. The cloud allows organizations to bypass physical hardware constraints as they are readily available at a remote place, waiting to be utilized by just a few clicks of some buttons along with an option to increase capacity at their discretion. DevOps cloud computing reduces downtime through continuous cloud based operations. Developers can build stateless applications, which increase availability and failover ability along with being a driving force behind customer satisfaction.