DevOps

At Future Networks Pvt. Ltd., our goal is to provide global network resources to help make Customer Company successful. We develop fully operating servers with application specific functionality and open for scalability. We serve Comcast Pvt. Ltd. to maintain their server network infrastructure in downtown San Jose, CA. Our engineers work meticulously in developing security applications, fixing bugs in the software, and maintaining network stability.

Being part of the software development department, we specialize in writing code for new products, new features, security updates and fixing bugs. Unfortunately, it has come to our notice that developed software's needs to wait for weeks to be placed into production and deployed on the servers. Furthermore, the code developed in the development environment often fail to match the requirements of the production environment, giving our competitors an advantage to acquire market needs. To prevent these losses, I would like to take this opportunity and introduce DevOps techniques and tools in our company.

DevOps typically refers to a set of practices that emphasizes the collaboration and communication of both Developers and IT Operations, resulting in the fast flow of the planned work – high deployment rates – while simultaneously increasing the stability, reliability and the resilience of the production environment.

DevOps focusses on automation where developers can automate code testing, workflows, and infrastructures that will help the developers to write small chunks of software to be added in hours instead of large chunks in weeks or months. Moreover, they will have an identical development and production environment based on the same configuration.

Benefits of DevOps:

1) Faster time to market
    - Increase the rate of software delivery and increase company's time to market from months to weeks and from days to hours
2) Automation
    - More focus on the business and online content
    - Invest time in learning new technologies that add more value to the organization, instead of fighting with the same problems daily

Being a graduate student of Electrical Engineering and specializing in Computer networking, I have worked with DevOps tools and technologies at a coursework project level. I am quite familiar with tools such as Vagrant and Docker containers – used to configure a deployable server –, automated code testing tool as Jenkins, a source control tool like Git – used to manage, track, and document changes in application and configuration management code, and tools for distributed configuration management such as Puppet enterprise and Chef. Future networks can really benefit from using DevOps techniques and tools. Over the networking world, almost every organization is adopting DevOps techniques to deliver technology changes faster, release better software, and do it all more frequently with confidence. I believe now it's our time to spread our wings.