HOW DevOps helping during a crisis like COVID-19?

What is DevOps ?

Let's know about it that what DevOps is. It can be best explained as a team working together to build, develop and deliver the software or data by securing it. The name consists of two words Dev(meaning Development or creation of software) and second Ops(meaning operation) which includes configuring, monitoring and securing the data of the software .

DevOps main goal is to deliver the software rapidly with reduction of security risk and compliance risks.

Benefits of DevOps

The team adapting DevOps culture will definitely be ahead of others by adapting the market and by being a part of competition of top level service providers. Also they will be saving time by reducing the mean time for maintenance and recovery.

Why DevOps ?

Developers of a group don't always care about every single things regarding software , but it is a noticeable point that the services that they provide to their clients or customers may get affected just because of this. Also if users or customers demands for a new feature or service, then the developer group have to deliver the service as quick as possible to retain the customer with very less interruptions as possible. So to resolve this dilemma, DevOps has been introduced.

How DevOps helped in Crisis like Covid

COVID-19 has caused a never-before crisis since corona declared as global pandemic.Online work, social distancing and Online platforms became a major part of our life.

Everything which was used to happen offline has been shifted to online mode, and in this situation, the number of customers consuming the online content has been increased rapidly. Companies also had to shift their works in remote mode. So in order to continue and maintain the growth of the company, they needed to provide the services in online mode. Also having a large customer base in online mode, they must require a methodology to provide the services rapidly. Here the role of DevOps comes into picture. Many employers struggle to adapt the sudden change in mode of working while most of them adapted it.

DevOps has the ability to sync,organise and automate the pace of the new softwares. In order to deliver the softwares and data to large customer base, with reduced security risk and rapid transfer, one have to adapt the DevOps culture.

Many businesses which were running had shifted to online due to this pandemic due to which, there is a midway problem in service providing by the business company to their customers. To overcome this issue, many businesses had adapted DevOps. Which helped them to run their business with a good pace in such hard time also. This pandemic also ended up teaching us many good aspects of online platforms and lead us to find more reliable source to stay online for our work and business purpose. DevOps culture played an important role in leading this idea.

The major driving force for a rapid adoption of cloud computing are the economics and the simplicity of software delivery and operation. It presents considerable opportunity to increase the profit of enterprises by reducing capital costs of IT assets and transforming them into operational

costs. For these reasons, we have also discussed the economic and the cost models introduced with cloud computing.

Although cloud computing has been rapidly adopted in the industry, there are several open research challenges in areas such as management of cloud computing systems, their security, and the social and organizational issues. There is significant room for advancement of software infrastructure and models supporting Cloud computing.

THE VISION OF CLOUD COMPUTING

Cloud computing allows anyone having a credit card to provision virtual hardware, run-time environments, and services. These are used for as long as needed and no upfront commitments are required. The entire stack of a computing system is transformed into a collection of utilities, which can be provisioned and composed together to deploy systems in hours, rather than days, and with virtually no maintenance costs. This opportunity, initially met with skepticism, and how become a practice across several application domains and business sectors.

CHARACTERISTICS and BENIFITS of DevOps/Cloud computing

Cloud computing has some interesting characteristics that bring benefits to both cloud service consumers and cloud service providers. They are :
  - no upfront commitments
  - on demand access
  - nice pricing
  - simplified application acceleration and scalability
  - efficient resource allocation
  - energy efficiency
  - seamless creation and the use of third party services

The most evident benefit from the use of cloud computing systems and technologies is the increased economical return due to the reduced maintenance costs and operational costs related to IT software and infrastructure. This is mainly because IT assets, namely software and infrastructure, are turned into utility costs, which are paid for as long as they are used and not upfront. Capital costs are costs associated to assets that need to be paid in advance to start a business activity.

Before cloud computing, IT infrastructure and software generated capital costs, since they were paid upfront to afford a computing infrastructure and software enabling the business activities of an organization.

How DevOps helped in work from home

It helps in increasing the productivity regarding working on projects and development. The team working online can finish the project quickly by collaboration as compared to the one working as co-located teams. How ever there is one drawback also, the people working on co-located will have lesser bugs as compared to the remote located ones.

One more advantage of working online is that it helps us to find the talent easily, because people from any corner of the world can apply for the work and cans showcase their talent. To increase the productivity, DevOps helped in many ways, to create and deliver the software very quickly and to make ease in communication also, which was one of the major advantage during the pandemic for IT companies and many business models.