**DEVOPS**

**What is DevOps?**

DevOps is a combination of software development (dev) and operations (ops). It is defined as a software engineering methodology which aims to integrate the work of development teams and operations teams.

DevOps enabled meeting business customer’s requirement at a much faster rate than the previous approach that existed since it made software update to the application at a frequent interval with lessened failure rates and easier maintenance of the application.

**Why we need DevOps?**

* The old practices and technology in software development cycle brought business and development into one team and failed to bring operations team together. DevOps as the name suggest it brought the business, development and operations team together.
* DevOps broke the wall between the development team and operations team. It made both team to join hands and work together which resulted in providing better results to the business requirements.

**What was practised before DevOps?**

DevOps has been developed after facing little difficulties in the agile model.

Before DevOps agile and water has been used in the software development life cycle.

**WATERFALL MODEL:**

Waterfall model was initially developed and has been used in the early stages. This approach treated developing in stages: Analyze, requirement, design, develop, test and deploy into operation.

In waterfall model people work together in each stage and move on to another stage only if the initial stage is completed, which means you complete one phase before moving on to the next phase. Which means you rarely aim to revisit a phase once it is completed. You don’t realise any value until the end of the project.

Waterfall model was difficult to use because the business requirements is changing continuously and the development takes too long and the testing is skipped sometimes due to time constrain the whole software got messed up which paved way to the rise of Agile methodology.

**AGILE:**

In agile model the business and development team came together into existence. It rules out all the difficulties faced in the waterfall model. In agile the project or product is described as a list of features.

The features are described in terns of user stories. So instead of a large group spending a long time building a big thing in agile we have small team spending time together building a small thing but integrating the small teams regularly to see the whole.

**Merits of DevOps.**

* Faster and better build product delivery.
* Faster update to the software of the application.
* Reliable since being well documented.
* Lessened failures rates.
* Even if failure, reduced recovery time.
* Efficient since meeting the customer requirement at a regular interval.
* Reduced risk rate.
* Maintaining stability of application is made easier.
* Improved software quality by automation.