# **DevOps Predictions for the Future**

- ✓ Among the few powerful trends we had experienced in the recent times, one is undoubtedly the adoption of DevOps practices.
- ✓ As we are move closer to 2018, it is becoming more obvious that DevOps is becoming mainstream, with many large organizations getting on board with DevOps.

#### **DevOps Within Enterprises**

- ✓ DevOps is becoming the standard way of working for businesses.
- ✓ Adoption of DevOps within the organization is rising on a broader scale, and businesses are trending toward it.
- ✓ Enterprises of today are well-aware of the trending <u>technology services</u> in modernizing environments.
- ✓ DevOps is growing its recognition due to changes in complexities of today's software that lies more in the diverse set of operation systems and platforms.
- ✓ It is less about doing things a particular way and more about moving the business forward and turning technology into a strategic advantage.
- ✓ DevOps builds upon best practices to help drive enterprise performance in the modern digital economy.
- ✓ It offers organizations a new way to deliver value to their customers quickly.
- ✓ An increasing number of businesses are recognizing the power that DevOps can bring for operational efficiency and overall performance.

#### **DevOps Key Trends**

✓ As businesses are trending toward DevOps adoption, let's look at the changing landscape and key trends in DevOps, along with its trajectory.

Some of the DevOps trends include:

- Many organizations will challenge agile and recognize DevOps as the new <u>ALM</u> methodology.
- ✓ Many DevOps automation tools are going to roll up.
- ✓ Automation and testing would gain their prominence.

- ✓ DevOps Engineers are highest paid IT practitioners today.
- Testing and deployment are done more frequently as Ops people are getting their DevOps knowledge in production for testing and automation operations.

### **DevOps Predictions**

✓ Based on the market so far, here are my predictions for the future of DevOps.

### **Adoption of Microservices and Containers**

✓ Several software enterprises are pushing toward microservices infrastructure.

Microservices architect an enterprise solution, independently, over a set of services.

Microservices are best-suited for DevOps due to its features including:

- ✓ Isolated nature
- ✓ Improvised cycle times
- ✓ Well-defined interfaces
- ✓ Aligned architecture
  - ✓ Containerization also is growing in popularity.
  - ✓ Containers are designed to run one process at a time with minimal deployment, serving as an ideal deployment model.
  - ✓ According to one study, 50 percent of enterprises are expected to run containers in production by the end of 2018.

✓ If an enterprise has decided to leverage <u>microservices and containers</u>, it is highly essential to incorporate solutions that support microservices and containers along with traditional application model.

### **Culture, the Top Prerequisite**

- ✓ Culture is the key differentiator for DevOps. Culture and process are the principal paths for the successful DevOps journey.
- ✓ Culture breaks down the organizational silos and encourages integration across all the groups that need to work together to achieve a great business outcome.
- ✓ Implementing DevOps culture makes an organization achieve success easier.
- ✓ It even enables continuous learning environment that will see bigger benefits.

### **Notion of Shifting Left**

- ✓ DevOps tools and solutions always prefer to shift left.
- ✓ DevOps <u>orchestration</u> tools automate from end to end, making traceability easier. Activities that are performed traditionally, at the later stages of development and release process, are making a shift to the left of the pipeline.
- ✓ The ultimate goal of it is to recognize issues earlier, along with performance and
  disaster recovery testing.

#### **Downtime**

- ✓ Adopting DevOps holds a lot of benefits.
- ✓ For one, it enables enterprises to ensure uptime and enhance cadence and quality.
- ✓ High-performing IT organizations employing DevOps practices deploy 200 times
  more frequently than the low-performing enterprises.
- ✓ Similarly, they also enjoy faster recovery from failure and minimize downtime.

### Collaboration of Big Data and DevOps

- ✓ Big Data and DevOps are together taking a step forward toward the design of predictive analytics.
- ✓ DevOps has now become an expert in automating the process and automating configuration.

#### **Consolidation is Critical**

- ✓ Large and complex organizations are focusing on consolidation and standardization of DevOps processes so as to scale DevOps within the enterprise.
- ✓ A shared and self-service DevOps automation enables end-to-end pipelines.
  Eventually, consolidation allows reusability, visibility, auditability and security.

### **Supporting Hybrid**

- ✓ "Hybrid-everything" makes DevOps solutions future-ready to support any tool,
  application and process in the hyper-hybrid state.
- ✓ "Hybrid" state of existence is achieved for infrastructure, architecture, release pipelines and more.

### **DevOps Monitoring**

- ✓ Until now, the focus has been on pre-production provisioning. However, more attention is being given to the post-deploy feedback loop.
- ✓ With the application of new architectures including microservices, new monitoring technologies and pricing models are effectively introduced.

# **Expansion of DevOps Across IT**

✓ DevOps is maturing in other areas such as database management, security and testing, all with the goal of application release.

# **Business-centric Agile**

✓ The development methodology approach is becoming more critical to the continuous integration and continuous delivery process.

# **DevOps Skills**

- ✓ People with DevOps skills are in demand in the industry and expected to proliferate as businesses are witnessing great results from DevOps.
- ✓ Organizations incorporating <u>DevOps training</u> practices are extremely high-functioning.
- ✓ If you aim to build your career in DevOps, below are certain notable skills.

#### **Most common DevOps positions include:**

- Site reliability engineer
- DevOps engineer

#### The core skills of DevOps are:

- ✓ Coding skills
- ✓ Knowledge of automation tools
- ✓ Communication skills

#### Roles of a DevOps Engineer:

- ✓ Many DevOps developers find interest in deployment and network operations.
- ✓ A core set of DevOps skills includes:
- ✓ Ability to code and script using various technologies and tools.
- ✓ Close relation with Systems and IT operations.
- ✓ Strong base of automation tools and its skills.
- ✓ Incremental code testing and deployment.
- ✓ Strong focus on data management skills and business outcomes.

#### Final Words...

DevOps skills will only continue to grow and DevOps is here to stay. Dev and Ops teams are increasingly moving to rapid development and reliable, high-performance services delivery. DevOps is being adopted by more and more companies, particularly smaller enterprises. Many industries today are keen on incorporating DevOps and its key points into their respective departments. It will continue to evolve for the foreseeable future, by incorporating executives and other business units into it. Companies that utilize DevOps effectively will experience higher innovation and quality and easier adoption to other changing conditions.

Adoption of DevOps enables applications and technology solutions. It power businesses with faster and better quality. Investing in DevOps helps organizations better develop and release software.