What Is DevOps All About And How Can It Benefit Startups?

Yes, this product caters to my needs and solves my problems exactly the way I wanted.

Imagine hearing that from your customers or clients each time your startup launches a product or rolls out the latest version of an existing product.

The reality, however, turns out to be quite disappointing at times -

You identified a need in the market, built a great product around it, tried it in the Proof of Concept phase on 100 people, and it worked perfectly well.

So now that you're fairly satisfied with the product, you invest big money in marketing campaigns to attract your ideal audience.

But as soon as your target market starts using your product in large numbers, you start facing cloud computing concerns, latency issues, or at worst your solution crashes, and you witness the ugliest downtime ever.

While, here, I spoke about two ends of a spectrum, as a startup founder your aim must be to do everything in your power to inch towards the first scenario. And that's exactly what I'll help you with today.

The Ultimate Upscaling Solution for Startups

If a puzzle has 10 building blocks and I give you only 9 of them, you may be a master of masters at solving puzzles, but you won't be able to solve this one.

Quite similarly, suppose you're building a software product -

Your development team suggests the smallest update in the product that will make the biggest impact. And the software team develops this next version. This refined version has the potential to explode the market.

But if you don't have the right practices, systems, and tools in place -
 a. to implement it on the cloud and
 b. to eventually make the latest version of your product available to the target market at its highest performance,
 is it even worth it?

No, right?

The missing piece of the puzzle we're looking for is DevOps.

It is DevOps' responsibility to take your solution, implement it on the cloud, and ultimately make it available to your target audience. It ensures that the cloud infrastructure is designed correctly to make the product available at its best performance to the target market.

What is DevOps?

Remember, how we talked about how your product may face cloud computing concerns, latency issues, or downtime when your target audience starts using your product in large numbers? That too, *after* you've invested all the resources and big bucks in the marketing campaign?

Well, tackling such problems efficiently, and in advance, and making the latest version of your product available at its best performance to your target market is what DevOps essentially takes care of.

DevOps, at its core, is a set of philosophies, practices, and tools that enables and enhances organizations to deliver solutions and roll out the finest versions (of these solutions) at high velocity - in a manner that organizations with traditional software development and infrastructure management processes can't even dream of.

So, you see, DevOps becomes critical while upscaling as your product is now offered to a wider audience. DevOps objective is to build an accurate computing infrastructure in the cloud. Once

the solution is ready, it implements it on the cloud and makes it available to the target audience.

AWS DevOps

AWS or Amazon Web Services is the largest cloud provider that offers all the services that an in-house data center is capable of offering.

AWS DevOps is implementing the DevOps methodology using Amazon's cloud platform and associated tools.

AWS DevOps essentially enables startups to build and deliver products more rapidly and reliably. And, it does so by -
1. Easing provisioning and managing infrastructure,
2. Application code deployment,
3. Automation of software release processes,
4. And continuously monitoring your solution and infrastructure performance.

AWS DevOps lends development teams the ability to efficiently implement continuous integration and continuous delivery.

What makes DevOps a good DevOps?

A good DevOps is essentially in excellent communication with your entire development team but specifically your CTO. For your startup to succeed, your CTO must be involved in effective communication with the development leader and DevOps.

Because it is DevOps' responsibility to understand the product and build an accurate computing environment in which your solution is going to operate.

And also, after the software team has developed the product, they need to understand the end-result of how it will operate in order to make the best decisions while developing the software.

A strong DevOps along with the CTO and the Development team ensures that.

The Startup Environment and DevOps

As a startup, you have a limited runway at your disposal. That also means you have only so many iterations to try the product and prove that it's worthy for the next investment round.

To make each iteration count and make it ultra-successful with the available funds, your development team must always come up with newer and more effective versions that will make a significant impact on your startup's KPIs.

DevOps enables this process. It makes sure that your product is available to the target audience at its best performance so that each iteration is successful. DevOps, thus, has an indispensable role in the startup life cycle.

DevOps Is Not A Need, It's A Must!

Whether your iteration lasts 2 weeks or 2 months - it consumes a lot of resources. If you do not have a good DevOps practice in place and invest your time, efforts, and money, in these iterations, your product may be slow, rely on poor infrastructure, face security concerns or availability issues.

DevOps is the best way to surpass these challenges.

Along with accurate cloud implementation and effective communication with the CTO and Development leader, Devops will make sure that your product is available at its best performance to your target market.

Benefits Of DevOps

DevOps enables a company to deliver a version of the product that operates at its best. Here's how:

Investment Returns:
Investment in growth and client acquisition will yield a significantly high return if a startup has an efficient DevOps model in place.

Leverages Startups Runways:
DevOps leverages a startup's limited runway by making each iteration count.

Make Right Decisions at the right time:
The development team needs to understand how their product will operate on the cloud so that they can make the right decisions while they are in the process of developing the product. DevOps makes that possible.

High Performing Products:
Being able to implement changes regularly so that the latest version of your product is available at its highest performance is a key attribute of DevOps.

Upkeeping Quality:
Seamless applicational updates help in maintaining a positive experience for the customer. Therefore, monitoring and storing data helps you to stay in control of the product in real-time.

Scalability
Automation and consistency via DevOps will help you manage changing systems efficiently. For example, infrastructure as code helps you manage your development, testing, and production environments in a repeatable and more efficient manner.

Improved Collaboration
DevOps allows us to build more structured teams within the organization. This lays a stronger emphasis on ownership and accountability during a project. Teams work in unison, sharing resources and streamlining the workflow.

Security
DevOps allows you to integrate automation and configuration techniques into projects. This has a great benefit as you retain control despite the automation while preserving compliance.

Final words:

As we have already discussed, DevOps is an integral part of the puzzle, a mandatory team member that your startup cannot do without. You need your product to perform at its best - there's no debating that. DevOps is crucial because it helps you do that - it not only enables your product but also your team, the CTO, and the CEO to perform at their best.

We, at IamOps, are committed to making that happen for startups. Highly committed to our approach and highly responsive in our services, IamOps engages with startups as per their runway and budget to empower them with an accurate DevOps solution.