DevOps Implementation in Manufacturing Sector: Meet the Culture-Driven Approach!

The ability to build a collaborative culture makes DevOps the most-sought IT practice for every industry, irrespective of size.

Alongside core technology firms, DevOps is growing in popularity among industrial processes, especially the manufacturing sector. DevOps suits the manufacturing sector more, considering the industry's busy process chain that keeps running round the clock.

Moreover, the market's run for rapid expansion, faster delivery and fueled innovation demands an all-new approach in the manufacturing chain, driving the demand for DevOps in the manufacturing sector.

How Important is DevOps in Manufacturing?

Streamlined communication and increased collaboration define **DevOps** significance in the manufacturing sector.

Success through DevOps means achieving robustness in three core areas, namely:

- Collaboration
- Automation
- Innovation

Together, these three areas result in increased communication and seamless flow among teams, thus resulting in faster delivery and reduced time-to-market.

Let's look in detail into each of the three core areas!

1) Collaboration

The most common challenge that many firms face is the 'lack of collaboration' among the internal teams. More than a process, this is a culture that many are looking for and not able to achieve with ease. This is where DevOps plays crucial by bringing together the Development and Operations teams.

Saying goodbye to the siloed approach, DevOps bridged gaps between **Dev and Ops teams**, making them aware of each other's tasks. This results in quality checks at every step coupled with necessary testing, making the product all-ready at the end of the process chain. All this is means a strong collaboration.

Useful Link: [How DevOps Automation Works?](#)

2) Automation

This is one word that's wrongly understood by many 'as a machine-based replacement to human workforce'. But it's not entirely. Automation, by definition, means applying automated solutions for time-consuming tasks. Considering the level of automation already in modern manufacturing processes, achieving robustness in this area means a lot for any manufacturer. And, DevOps can help you!

3) Innovation

Assured quality and production results naturally minimize the majority of pressure coming from the product development life cycle, thus leaving space for innovation. Innovation plays a very important in giving you a competitive edge in the market. DevOps gets you all possible ways to drive innovation. By minimizing the time taken for process execution in its way, DevOps lets the business decision-makers to think of new ideas by handing over the existing processes to internal teams.

The Benefits of DevOps in Manufacturing Sector

For the last century, the manufacturing companies have focused on perfecting the process of mass production. In the recent years, the emergence of technologies has pushed manufacturing sector to rethink their business models, systems, and services. DevOps is once such technology that enabled companies to transform their operations in everything from production efficiency to product customization, while improving speed to market, service effectiveness, and new-business model creation.

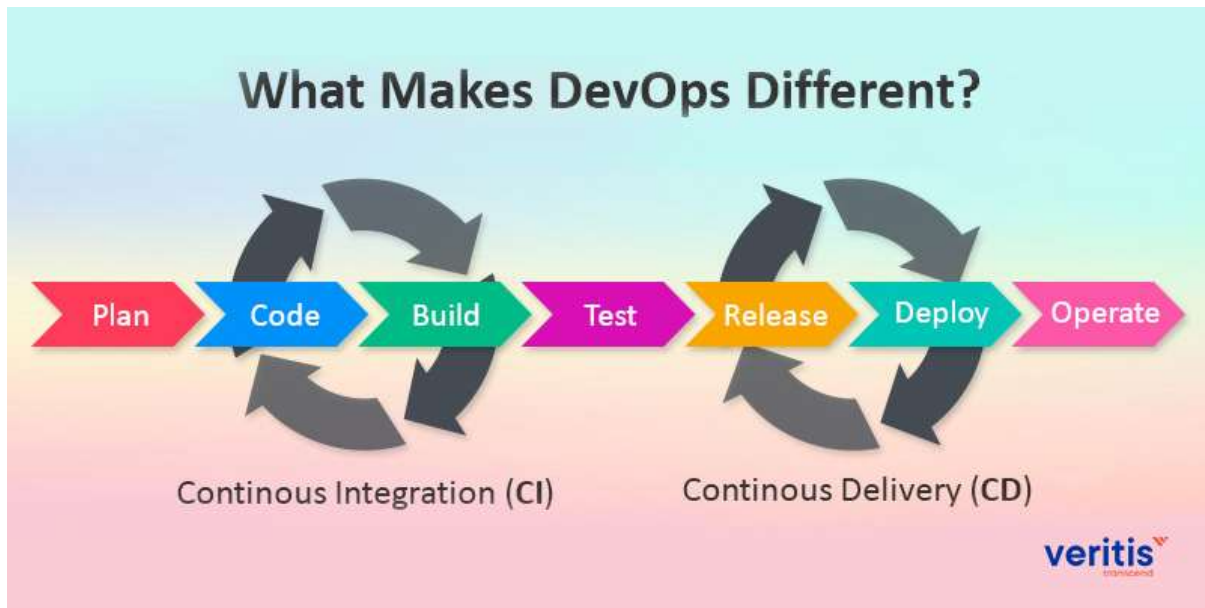DevOps brings along a host of benefits to manufacturing companies, including:

- Greater visibility into daily activities
- Transparency across the manufacturing processes
- Real-time data insights
- Quick identification and redressal of performance issues
- Empower cross-functional teams to focus on common objective
- Actionable insights on customers, product design, and supply chain
- End-to-end accountability
- Streamline and automate internal processes
- Foster shared and common goals
- Enhance collaboration
- Minimum waste, maximum efficiency, greater productivity

Useful Link: [DevOps Implementation](#)

What Makes DevOps Different?

The key difference that DevOps makes over the traditional software development model lies in its dealing with code.

DevOps approach to software lifecycle is purely based on its core concepts: [Continuous Delivery and Continuous Integration (CI/CD cycle)](#).

In the traditional approach, multiple developers work on various components of an application and finally merge the code at the end. Here, bugs in the code demand a complete rework. This naturally causes delays in bug detection and manual integration.

Whereas, DevOps makes a big difference with its CI/CD cycle by making developers deliver code updates at a faster rate and more frequently into a shared repository like GIT.

In doing so, each developer will check the code in small units followed by regular compilation. And the automated build (including testing, security, UI, etc.) checks every piece of code as and when it moved into the repository. This naturally results in early bug detection and faster recovery, thus increasing developer productivity.

Releases from the CI phase automatically fed into the release pipeline, where functions like copying files, stopping and resuming services. Deployments are taken care of leading to Continuous Delivery.

In a nutshell, CI/CD pipeline is the heart of **DevOps success**!

Useful Link: [Continuous Integration: The DevOps Approach Which Fuels Productivity](#)

Conclusion:

While many manufacturing companies have already started experimenting with DevOps, only a few are capturing its full value. Legacy systems, complex processes, and uncoordinated actions by disconnected teams are a few factors undermining even the most strategic approaches. That is why businesses across the world are seeking the help [DevOps service providers](#) like **Veritis**.

With over a decade long presence in US IT marketplace, Veritis can help you draft the right [DevOps strategy](#) that is focused squarely on business outcomes. We help you start small without the need to commit large upfront investments and adopt DevOps practices in a phase manner. Get in touch with us today and jumpstart your **DevOps journey**.

Key Takeaways:

- DevOps is gaining massive popularity across all industries, including the manufacturing sector.
- Streamlined communication and increased collaboration define DevOps significance in the manufacturing sector.
- DevOps enables manufacturing companies to transform their operations in everything from production efficiency to product customization, while improving speed to market, efficiency, and agility.
- Veritis can help you adopt DevOps in a phase manner without the need to commit large upfront investments.

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