

# DEVOPS – A CULTURAL EVOLUTION FOR THE MODERN ENTERPRISE



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As a professional in the IT industry, chances are you are already aware of the DevOps movement and that it is entering the enterprise world with a higher urgency than Agile did 20 years ago. Companies who have adopted DevOps, report improved productivity across teams and faster time to market among many other benefits.

Despite being sometimes treated as a buzz or hype concept, most of the market observers have already made bold statements regarding DevOps, promising that it is here to stay.

According to [research conducted by Gartner](#), by 2016 a whopping 25% of the Global 2000 companies will be adopting DevOps in one way or another. [IDC, on the other hand, predicts](#) that “DevOps will be adopted by 80% of global 1000 organizations by 2019”.

The issue at hand is that while many agree that it is important, there is still insufficient understanding across many enterprises where to start from. This whitepaper aims to provide concise and practical tips on understanding DevOps and its meaning for the modern enterprise.

## HOW IT ALL STARTED

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The painful collaboration between development and IT operations is well-known in every enterprise. Does the following situation sound familiar? The development team makes changes in the code, operations then deploy it without knowing and something breaks down awfully and that's when the blaming game starts. Operations blame the developers and the developers blame operations and so on and so forth.

However, this is not the only source of pain in service delivery. As we live in a world of continuous improvement and continuous delivery, we cannot afford slowing down or having release outages all the time. Customers have increasingly higher expectations as they compare companies by the quality of their applications.

**This is where DevOps shifts from a 'nice-to-have' practice to a necessity and even more – to an important source of competitive advantage.**

Defined for the first time in 2009 by [Patrick Debois](#), DevOps leverages principles from other methodologies such as Agile, Lean and ITIL. Still, a common misunderstanding is that DevOps is about technology but in fact, it is also about culture change that leverages people, processes and tools to enable seamless collaboration and ultimately, improve the quality of products and solutions.

Perhaps, one of the easiest ways to explain the concept comes from the fundamental [Phoenix Project book](#) – which states that DevOps is a way to break the conflict between Development and IT Operations while “deploying features more quickly and maintaining world-class reliability, stability and security.”

In fact, the importance of high frequency in application releases and updates and the need for higher customer satisfaction have pressured many companies into exploring ways to adopt faster development cycles without harming the quality of the releases. So, an important reason for the rise of DevOps' was to introduce more agility to IT Service Delivery by eliminating obstacles in service delivery by utilizing Agile and Lean principles.

## KEEP CALM & SHARE

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DevOps is a cultural evolution in how services are delivered and how teams collaborate. Its main principles are summarized in the CALMS Acronym.

### The CALMS Principles:

- **CULTURE** – You will come across the importance of culture a lot and that is for a reason. Without the right culture and attitude, you cannot expect miracles from automation and tooling.
- **AUTOMATION** – Automation is an enabler of DevOps. It enhances flow in release management, configuration management, monitoring and control.
- **LEAN** – Besides the key Lean concepts of eliminating waste and optimizing flow, DevOps embraces continuous improvement and learning from failure.
- **MEASUREMENT** – Naturally, you cannot embrace continuous improvement without measuring people, process and technology performance.
- **SHARING** – DevOps is essentially about collaboration and this means sharing skills, knowledge, open flow of information and even sharing responsibility.

## START WITH WHY

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DevOps is arguably an organizational change that requires considerable planning and preparation. This is due to the fact that it calls for re-thinking of the corporate culture, values and ways of doing things.

For example, adopting DevOps means elimination of the organizational silos which means less of a relay race and more of a team sport such as rugby. Team members need to have broader specializations and be involved in more aspects of the service delivery which requires change across different levels of the organization. DevOps requires re-thinking of software delivery processes, technology, roles and communication across teams.

That is why, it is important to identify where in the organization to start with introducing it – what processes need to be fixed and where speed is most needed. Then, start incorporating DevOps aspects in product vision and roadmaps, so kick off on a smaller scale and then spread it.

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**Think big, start small – it is a culture evolution, after all.**

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In order to re-think processes and ways of working, it is important to understand what DevOps comprises. It isn't a brand new concept or methodology, it's a combination of existing practices that have proven to be effective. It is vendor independent.

**DevOps principles derive from other frameworks including Agile, Kanban, Lean IT and ITIL®. DevOps is full of color and established practices:**



DevOps is arguably the bridge between Agile and ITIL®. If you have already adopted Agile, introducing DevOps will be much easier because it is the logical extension of Agile.

Opposite to a common misunderstanding, DevOps does not replace ITIL® – ITSM and DevOps are a perfect match. DevOps needs ITIL® practices and fundamental processes in place such as change, configuration, release, incident and problem management. ITIL® is still considered as the best framework for IT Operations which as a matter of fact, includes capabilities necessary for the adoption of DevOps.

## MANAGERS' TRIP TO DEVOPS

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**IT no longer needs to align with business. IT is the business because every company is a digital company.**

The role of IT Management in the adoption of DevOps is crucial but not easy. The IT organization has become increasingly more complex over the past decade - more complex infrastructure, smarter applications and that together with the increasing impact of IT on customer experience and business as a whole have put a lot of pressure on IT.

IT Managers need to be digital leaders in order for their organizations to introduce business innovations. However, this means managing a change where organizations and people need to separate from custom developed and long-time used legacy systems and procedures as well as from the old ways of working. So, you might have to manage a bi-modal IT environment.

DevOps needs to be communicated across the organization – both horizontally and vertically in order to ensure the organization's success in adopting it.

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**DevOps is a team sport, just like digital transformation.**

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## Checkbox for Introducing DevOps to your team:

- ✓ Remember, it's about culture, culture, culture & mindset!
- ✓ Start by defining DevOps according to your organization's needs.
- ✓ Consider what technology is needed to support the change. Event though, we have stated multiple times so far that DevOps is a culture, not a technology, it can be empowered by tools, for example in support of workflow tools, continuous delivery, deployment, etc.
- ✓ Provide plenty of communication to cope with resistance to change. It is normal for people to fear new things.
- ✓ Increase visibility – of the wins and as well as of mistakes!
- ✓ Involve teams beyond development and IT Operations – DevOps practices can also be applied across Product Management, QA, and Security.
- ✓ Ensuring cross-functional teams means onboarding employees with more generic versus in-depth specializations.

However, do not expect extraordinary results if management's attitude and ways of working stay the same. If needed, work with an external advisor to support you in the transition. If your day is occupied with solving problems and managing operations, it is difficult to step aside and spend time on re-thinking.

**Finally, keep in mind that there is no magic recipe – it's about trying, adapting and learning just like in Agile.** All effort, however, is worth it. Teams which manage to adopt DevOps, spend less time on putting out fires and more time on developing great products and experience for both the employees and customers.

## GETTING STARTED WITH DEVOPS

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DevOps is not necessary a job title but it is essential to demonstrate understanding as increasing number of job roles will require profound DevOps ways of working knowledge.

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### **DevOps Business Simulation Game: *The Phoenix Project***

We do understand that DevOps is a fluid topic subject to enrichment and that it is not a topic that can be taught in a theoretical manner. DevOps is about people and about collaboration.

That is why, DevOps at ITCE is a practical experience and the training is combined with a simulation game which enables the participants to 'get their hands dirty' by applying the studied practices. The simulation game has been developed by our long-term partner GamingWorks and it is based on the Phoenix Project which is a fundamental DevOps knowledge source.

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ITCE is accredited by the DevOps Institute to deliver DevOps training and certification which provides evidence that the highest standards for quality of the training content are met and that the trainer is a certified professional.

Find out more here: [www.itce.com/](http://www.itce.com/)

**Or get in touch with us!**

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