The DevOps Phenomena
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ABOUT THE PROJECT

DevOps is a phrase used in the categorization of a group of concepts that, while not relatively new, has catalyzed into a global trend and is rapidly spreading throughout the technical community. DevOps is the practice of operations and development engineers participating together in the entire service lifecycle, from design through the development process to production support (The Agile Admin). In this brief and generic presentation we look at the DevOps phenomena... what it is, why is it trending and what are industry leaders saying about it...

This report was conducted under the Platform Value Now project funded by Finland's Strategic Research Council. Platform Value Now will focus on understanding the fast emerging platform ecosystems, their value creation dynamics and requirements of the supportive institutional environment. We will analyze ecosystems with systems tools and develop new methods for platform-centric ecosystems management. Data collection is based on active scanning of global technology and platform ecosystems and fast solution oriented case experiments with Finnish corporations and policy planners. The aim of the project is to operationalize the collected understanding into a Platform Profile framework that will enable more efficient method and tool development for ecosystem management.
DEVOPS

What, when and why and where?

• The pace, veracity and dynamism of change in our economy is accelerating ruthlessly
“Technological progress in the twenty-first century will be equivalent to two hundred centuries of year 2000 progress

- Ray Kurzweil
The Law of Accelerating Returns

“Software is consuming the world”

Marc Andreessen
"By 2018, one-third of the top 20 market share leaders in most industries will be significantly disrupted by competitors that use the 3rd Platform to create new services and business models.”

— Marc Andreessen —
The DevOps Impact
“There’s a new trend called "devops" that is sweeping the enterprise IT world and its become a life-or-death career situation for many IT departments...Like the manufacturers were in the 1970s and 1980s were fighting for their lives, today's IT departments are going to fight for their survival.”

- Jim Whitehurst
CEO, Red Hat

**DevOps** (development and operations) is an enterprise software development phrase used to mean a type of agile relationship between Development and IT Operations. The goal of **DevOps** is to change and improve the relationship by advocating better communication and collaboration between the two business units ([Vangie Beal](https://www.vangiebeal.com)).
What is DevOps

**Collaborative Development**
Foster productive collaboration with deeper lifecycle integrations
"No hassle" collaborative development capabilities on the cloud for continuous delivery

**Continuous Testing**
Enhanced integrations and capabilities to synchronize software testing with deployment and operations

**Continuous Release and Deployment**
Greater delivery speed and frequency for complex applications

**Continuous Monitoring**
Capabilities to improve service quality by monitoring application performance

- Agile development approach
- It spans the entire lifecycle, includes business planning and creation to delivery and feedback.
- Enable continuous delivery of software-driven processes and innovation

Why do we need a DevOps?
Top technology trends are impacting how organizations operate

<table>
<thead>
<tr>
<th>Technology trends most impacting competitiveness</th>
<th>Organizations underprepared for technology trends</th>
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</thead>
<tbody>
<tr>
<td>42% Mobile device proliferation</td>
<td>82%</td>
</tr>
<tr>
<td>42% Collaboration across the ecosystem</td>
<td>73%</td>
</tr>
<tr>
<td>40% Explosion of unstructured data</td>
<td>78%</td>
</tr>
<tr>
<td>36% Cloud platforms and solutions</td>
<td>82%</td>
</tr>
<tr>
<td>34% Intelligent-connected systems</td>
<td>79%</td>
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</tbody>
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Note: Survey respondents were allowed up to three selections.
Source: IBM Institute for Business Value.
Traditional Lifecycle development - challenges

- Costly, error prone manual and duplicative processes. They delay innovation and impact competitiveness.
- Slow deployment to development and test environments. There is no continuity. Teams tend to be waiting and unproductive.
- Risk of instability due to managing multiple configurations and versions.

Emerging technologies need a new development lifecycle

- Evolving Customer Expectations: Consumerization of tools and products drives demand for higher quality and faster delivery.
- Changing Business Environment: Increasingly volatile economic and regulatory environments drive the need to reduce risk.
- Multi-sourcing/Supply Chain: Increased outsourcing drives the need for governance.
DevOps Lifecycle delivers...

Accelerate software delivery
Reduce time to customer feedback
Balance speed, cost, quality and risk

Open Services for Lifecycle Collaboration (OSLC)

DevOps ecosystem and standards
DevOps Principles
DevOps is not based on stringent methodologies and processes: it is based on professional principles that help business units collaborate inside the enterprise and break down the traditional silos. The guiding principles of DevOps include culture, measurement, automation and sharing.
DevOps is considered to be a new approach to the more traditional application lifecycle management (ALM) process (Vangie Beal)

Want To Gain More Insights on the DevOp Phenomena?
THE ARTICLES IN THE REST OF THIS PRESENTATION WILL BE RELEVANT
From Dev to Ops: An Introduction


What is DevOPs

Read Article: http://techcrunch.com/2015/05/15/what-is-devops/
What Is This DevOps Thing, Anyway?

Read Article: http://www.jedi.be/blog/2010/02/12/what-is-this-devops-thing-anyway/

An Introduction to DevOps

Read Article: https://crowdsourcedtesting.com/resources/an-introduction-to-devops/
Part Dev, Part Ops = DevOps [INFOGRAPHIC]

Read Article: https://blog.appdynamics.com/devops/part-dev-part-ops/

Devops is Not All About Automation

Read Article: https://devcentral.f5.com/articles/devops-is-not-all-about-automation
What Is DevOps?

Read Article: https://ashleypool.co.uk/2016/what-is-devops/

Acknowledgement

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