

Informaatioteknologian tiedekunnan julkaisu
No. 32/2016

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The DevOps Phenomena



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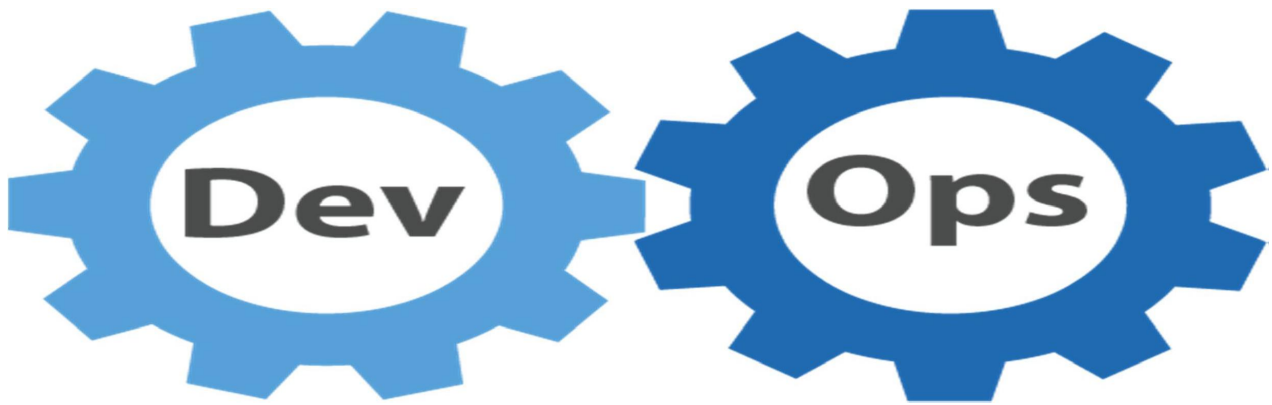
The DevOps Phenomena

Pekka Neittaanmäki, Anthony Ogbechie

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.

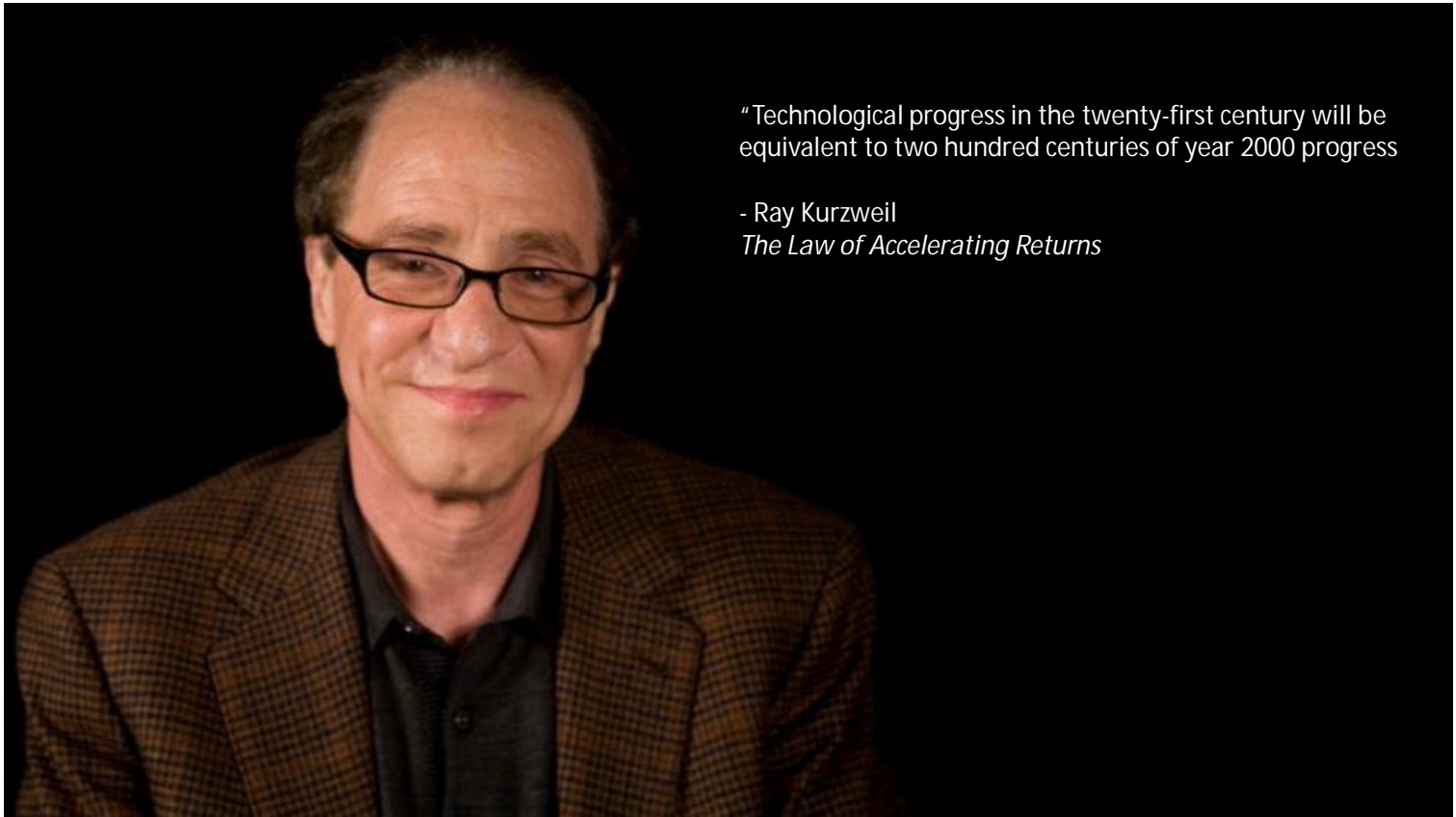


DEVOPS

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



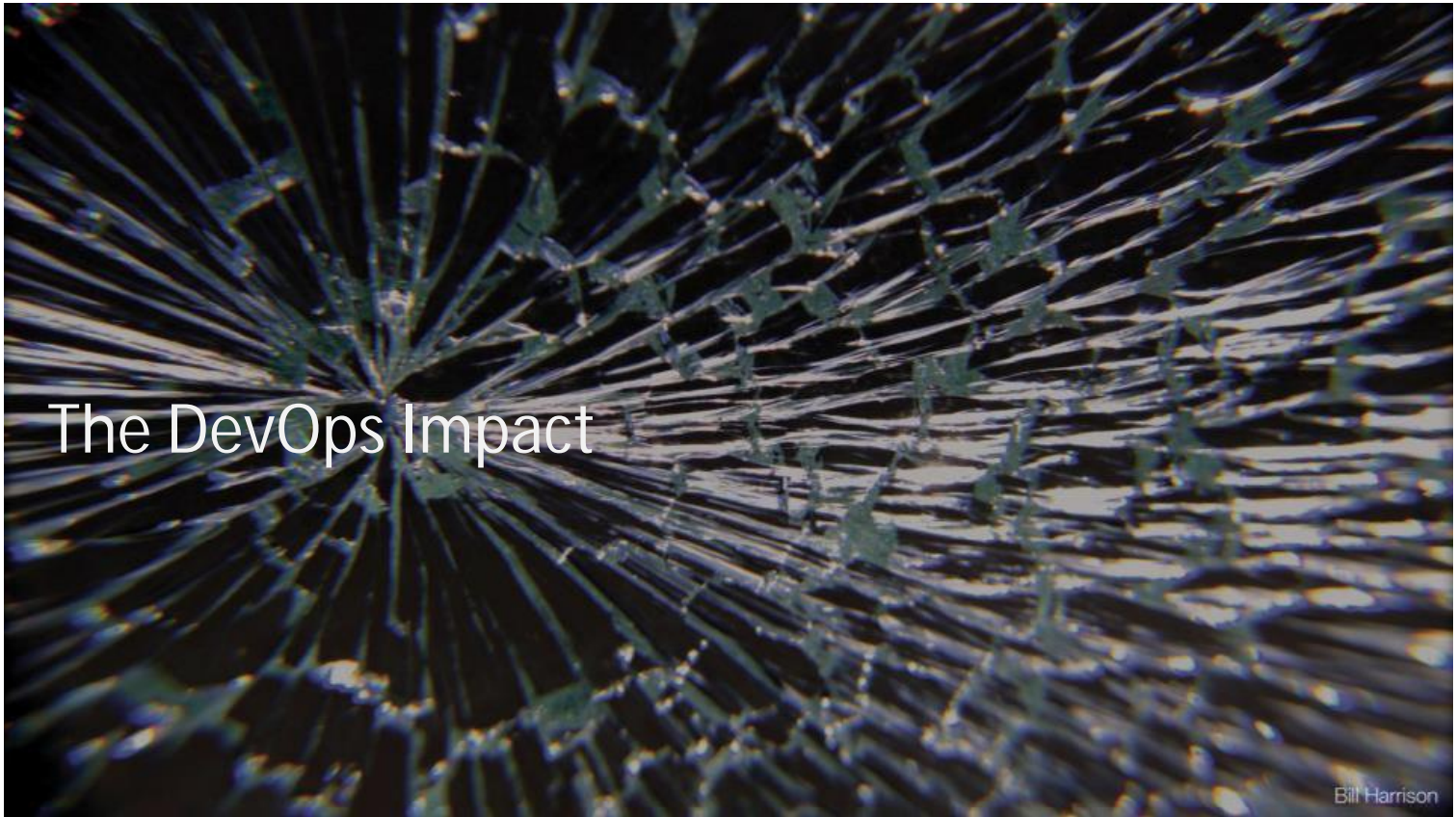
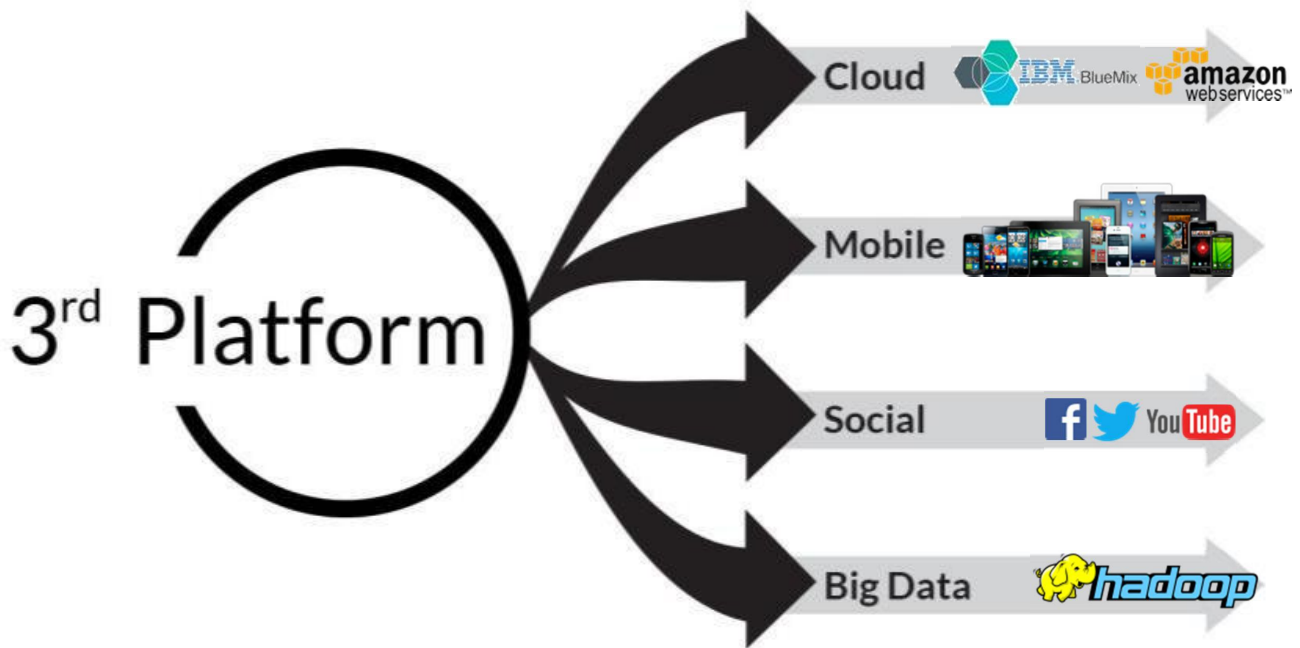
My own theory is that we are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swathes of the economy

— Marc Andreessen —

AZ QUOTES



"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."

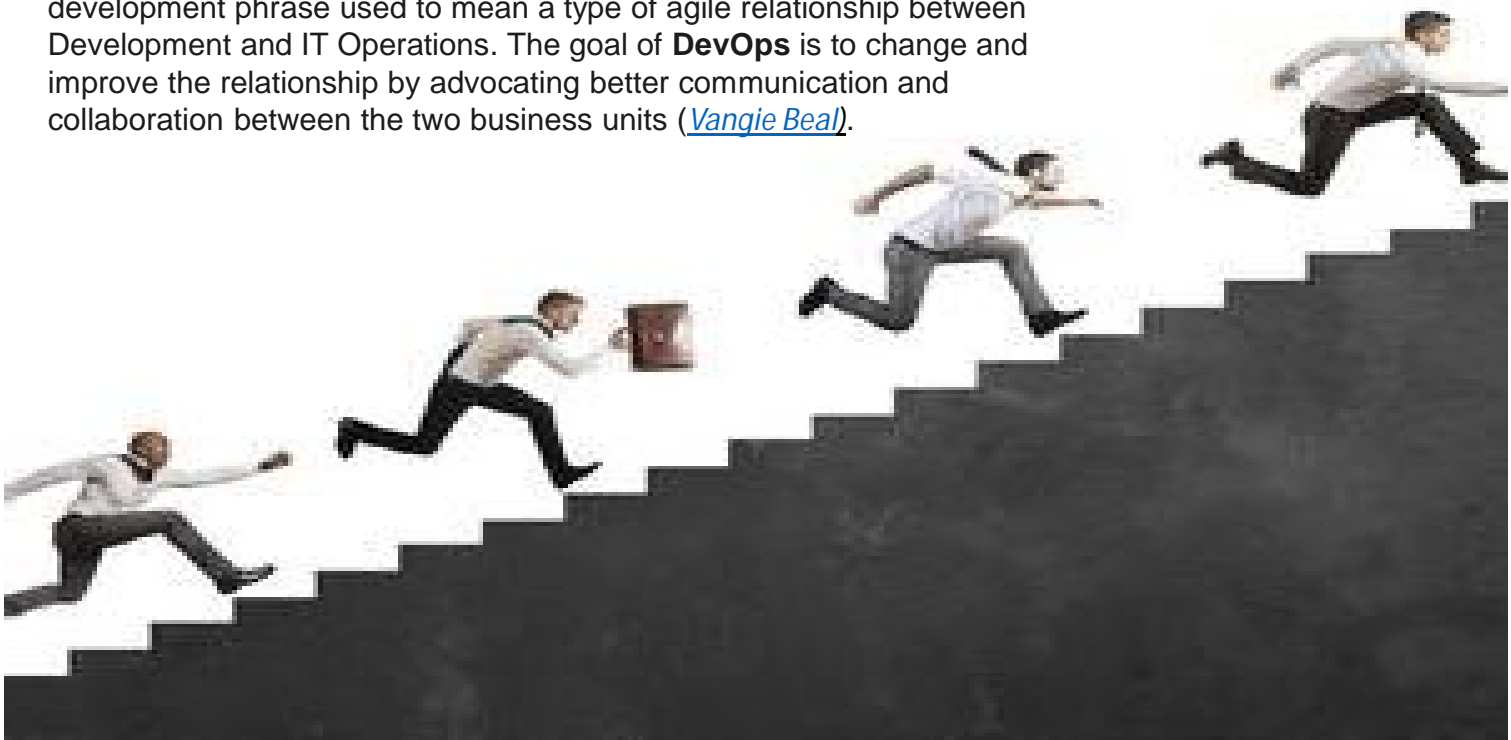




"There's a new trend called "devops" that is sweeping the enterprise IT world and its become a life-or-death career situation for many IT departments...Like the manufacturers were in the 1970s and 1980s were fighting for their lives, today's IT departments are going to fight for their survival."

- 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](#)).



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

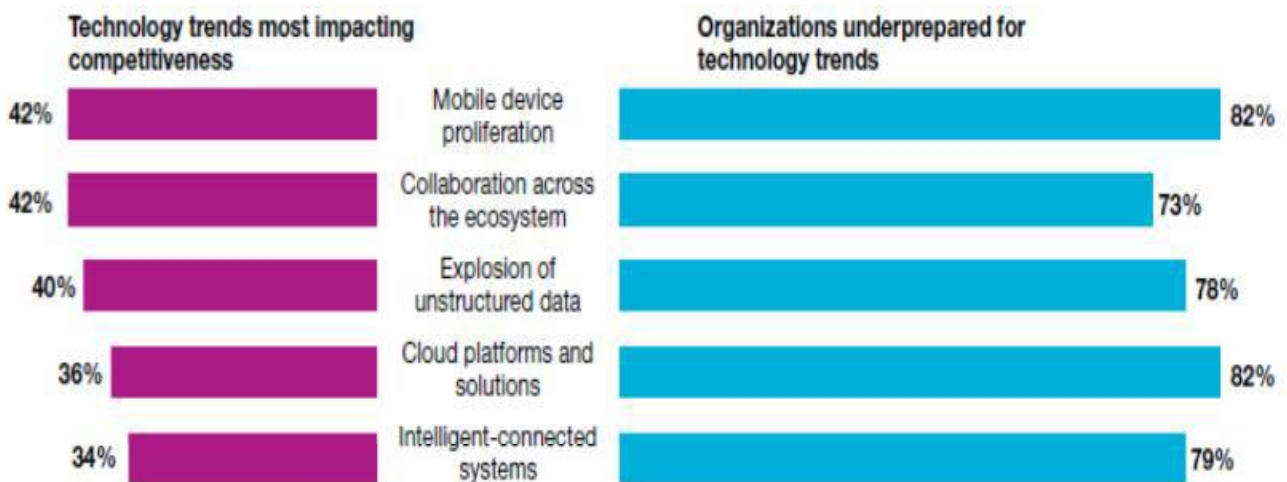
Capabilities to improve service quality by monitoring application performance



- 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

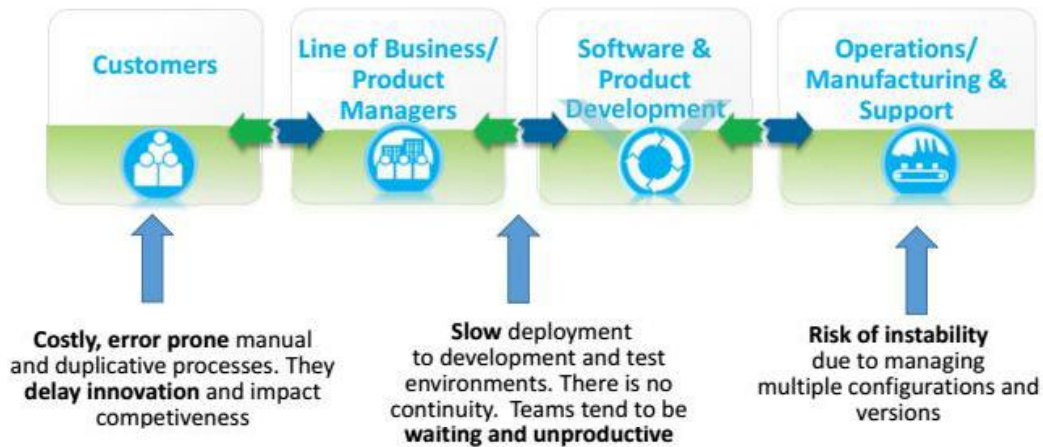
Why do we need a DevOps?

Top technology trends are impacting how organizations operate

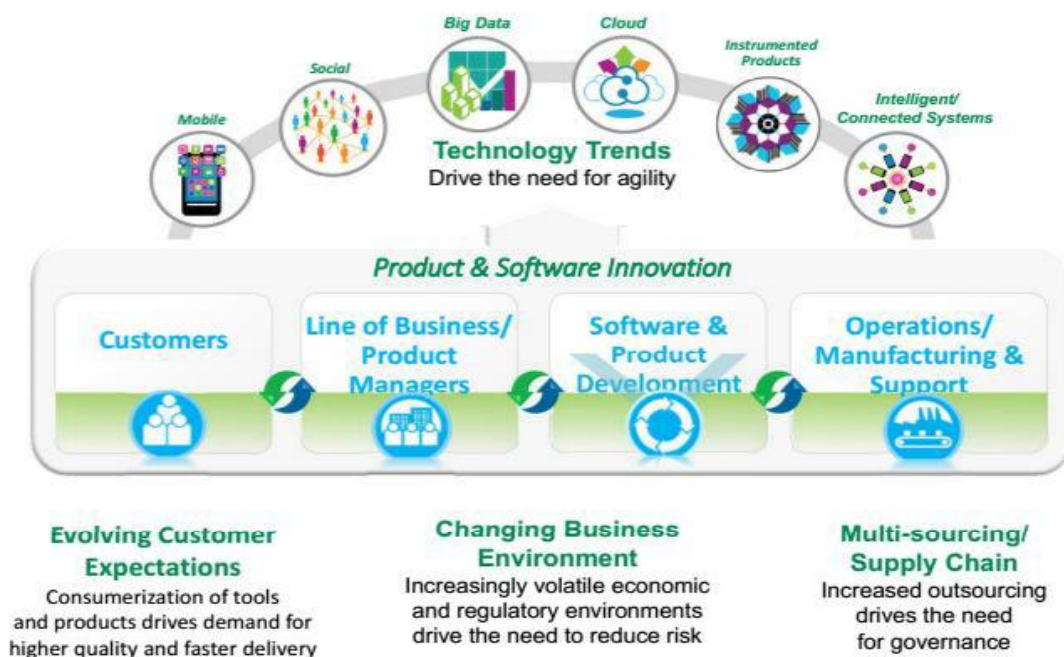


Note: Survey respondents were allowed up to three selections.
Source: IBM Institute for Business Value.

Traditional Lifecycle development - challenges



Emerging technologies need a new development lifecycle

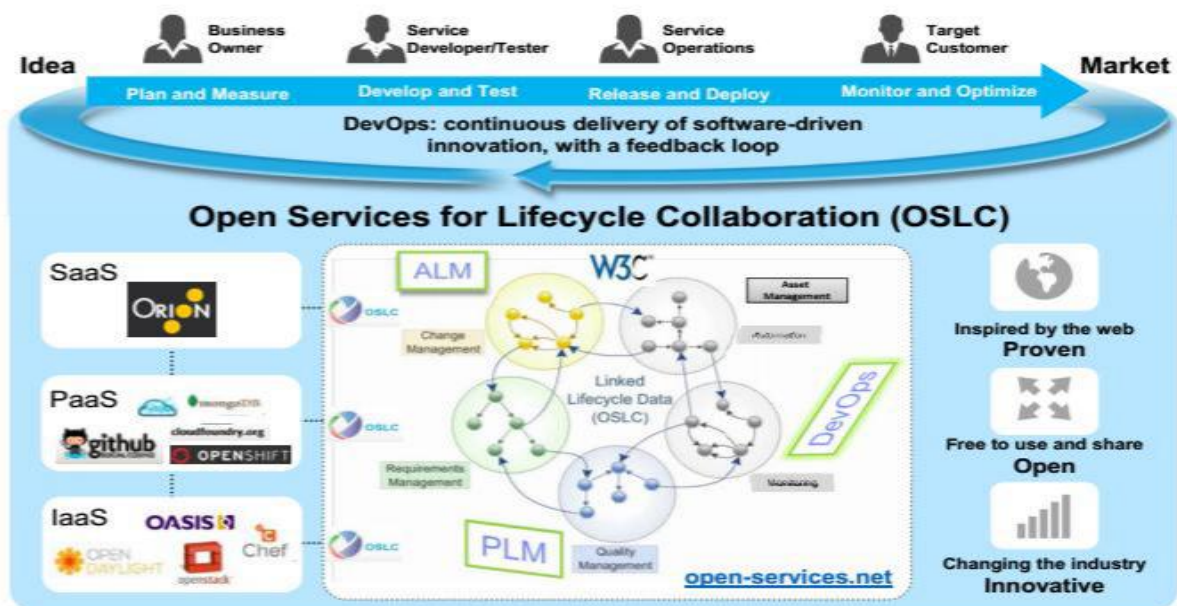


DevOps Lifecycle delivers ...

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



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

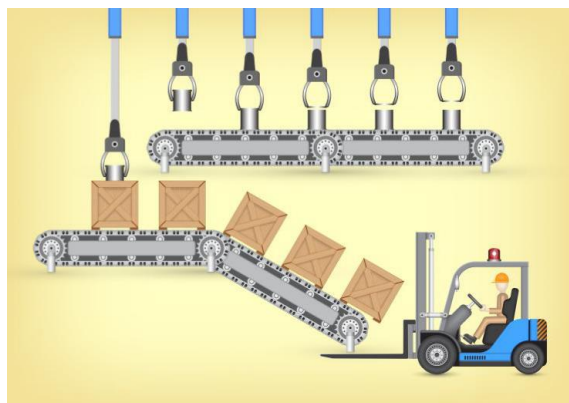


From Dev to Ops: An Introduction



Read Article: https://www.appdynamics.com/media/uploaded-files/White_Paper_-_An_Intro_to_DevOps.pdf

What is DevOps



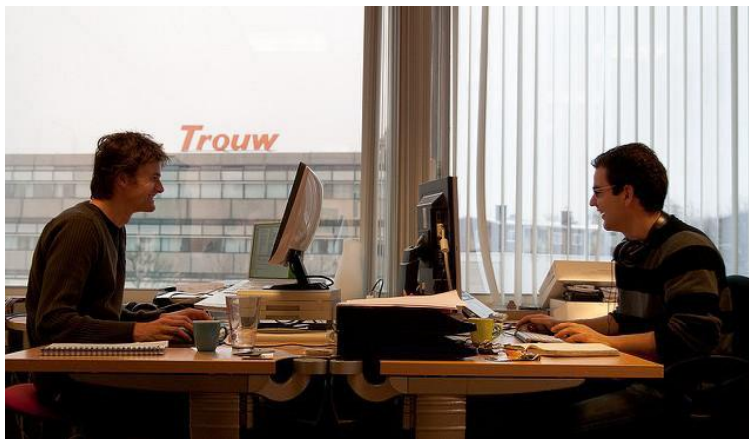
Read Article: <http://techcrunch.com/2015/05/15/what-is-devops/>

What Is This DevOps Thing, Anyway?



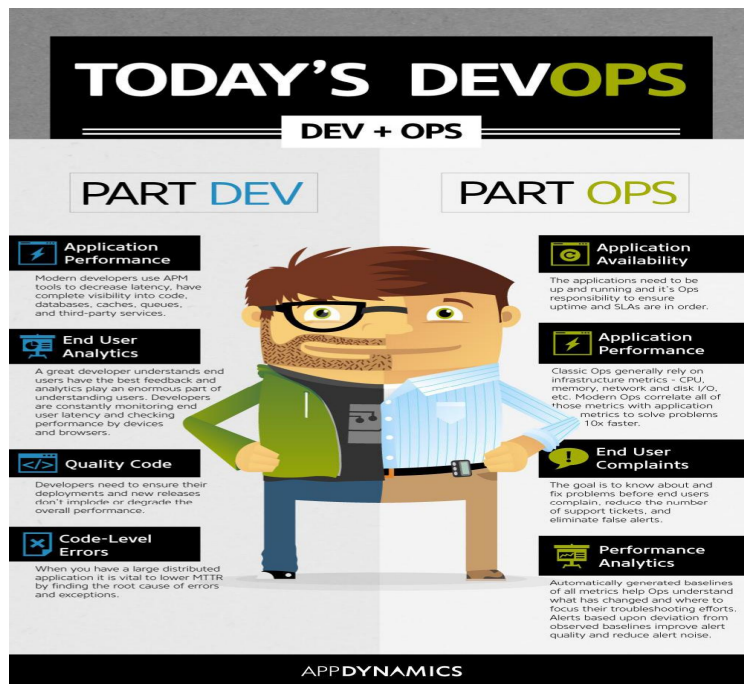
Read Article: <http://www.jedi.be/blog/2010/02/12/what-is-this-devops-thing-anyway/>

An Introduction to DevOps



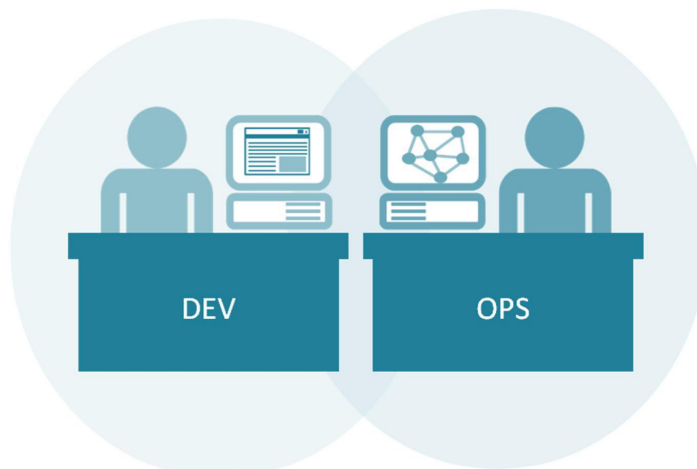
Read Article: <https://crowdsourcedtesting.com/resources/an-introduction-to-devops/>

Part Dev, Part Ops = DevOps [INFOGRAPHIC]



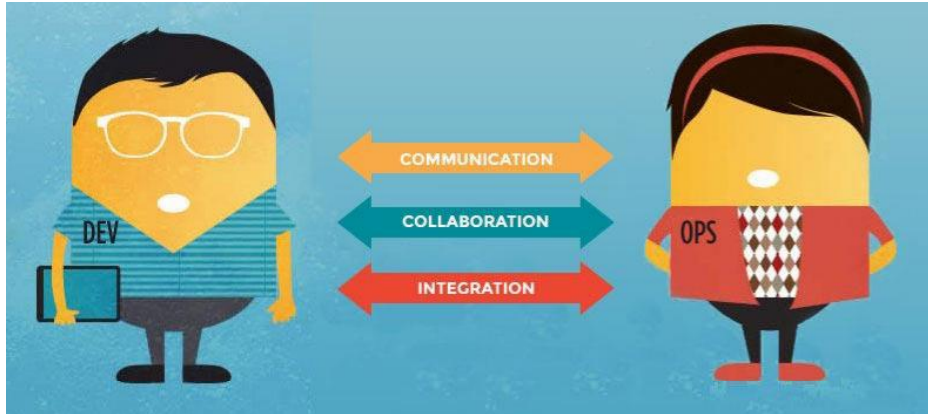
Read Article: <https://blog.appdynamics.com/devops/part-dev-part-ops/>

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://ashleypoole.co.uk/2016/what-is-devops/>

Acknowledgement

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