



# Building Microsoft Cloud Solutions: A DevOps Perspective

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"It is not the strongest of the species  
that survives, nor the most intelligent,  
but the one most responsive to  
change."

*(Leon Megginson (1963): commonly misattributed to Charles Darwin.)*



# Session overview

- Positioning DevOps in
- Orchestrating our definition
- Automated Testing
- The full 360 with DevOps



# DevOps

A brief overview



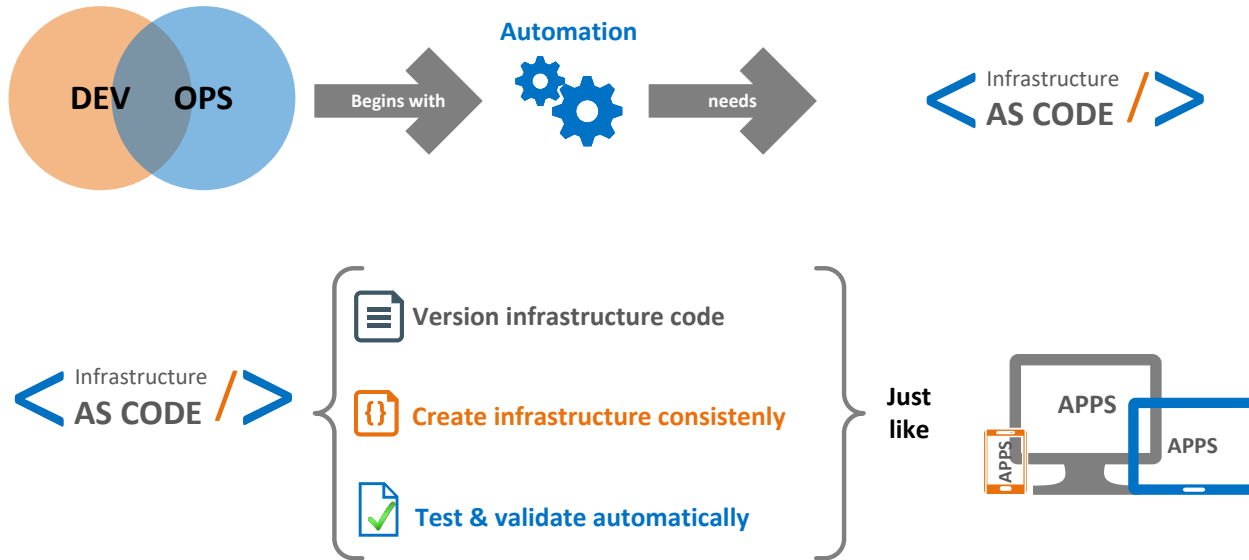
# The results of DevOps

- Improve deployment frequency
- Achieve faster time to market
- Lower failure rate of new releases
- Shorten lead time between fixes
- Improve mean time to recovery
- ....

DevOps is a way to lower the risk of change with tools and culture.



# Modernize DevOps





# DevOps

For IT Operations



Flexibility & agility is possible  
when a solution is build on  
"Guarantees".



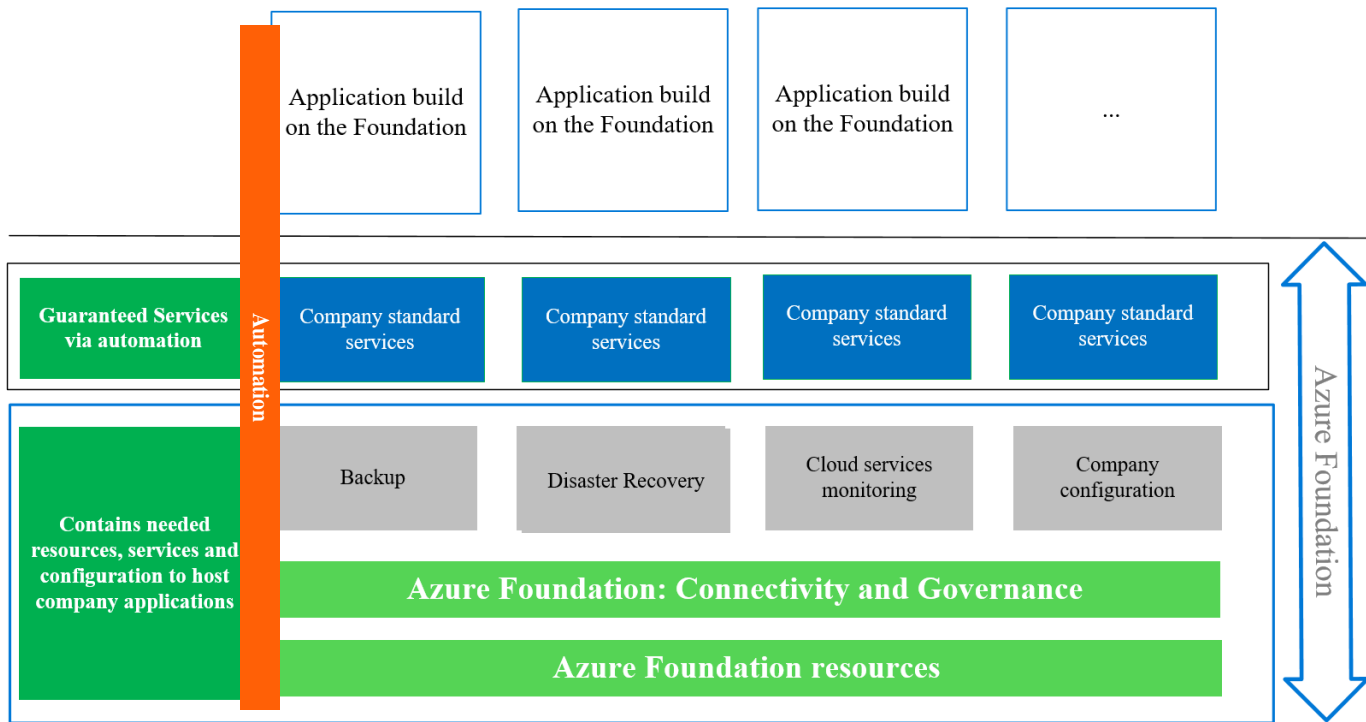


# DevOps for IT Operations

How does this translate?

- Design for the cloud.
- Applications consume building blocks
- Standard (automated)service(s)
- Secure by design, compliant by default

# DevOps in IT services





# DevOps

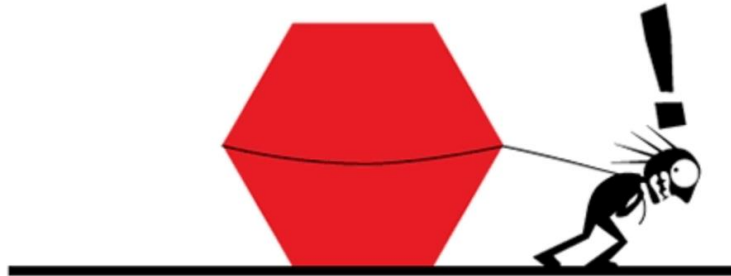
For projects



# DevOps in solution definition

No waterfall cloud projects, define your iterations!

THE WATERFALL PROCESS



*'This project has got so big,  
I'm not sure I'll be able to deliver it!'*

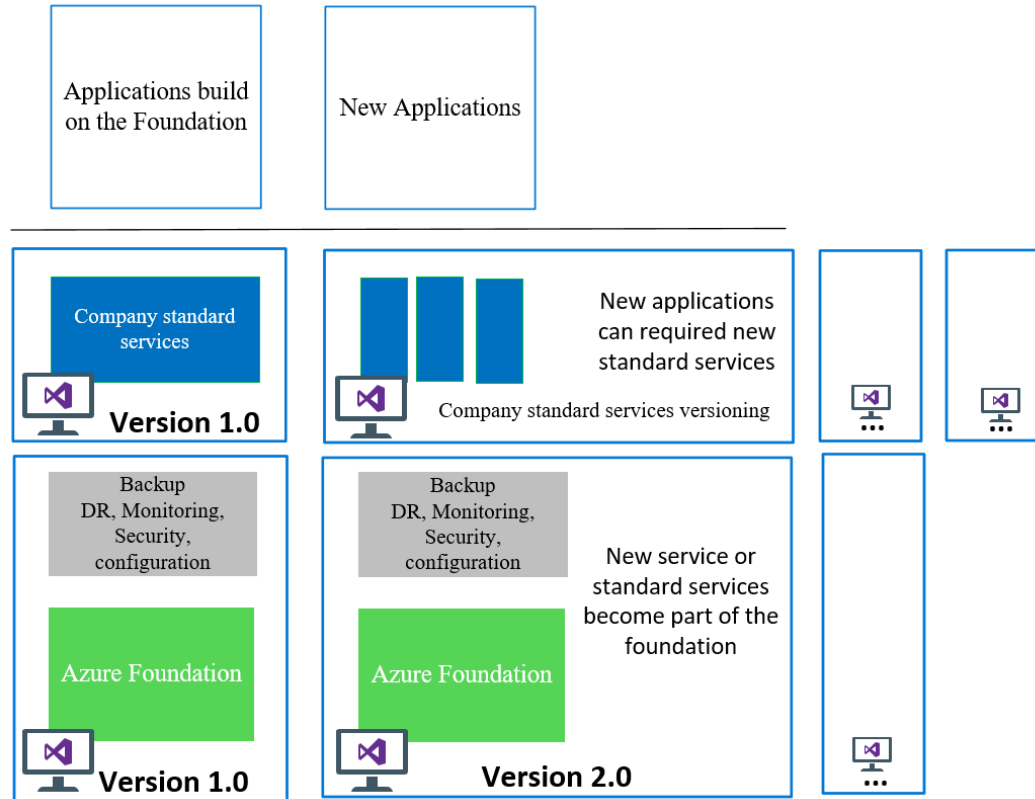
THE AGILE PROCESS



*'It's so much better delivering this  
project in bite-sized sections'*



# DevOps for projects





# DevOps for projects

## Approach

- Cut your solution in pieces to map development.
- Make work visible
- Short iterations, regular demo sessions.



# DEMO

Organize



# DevOps

In a cloud world



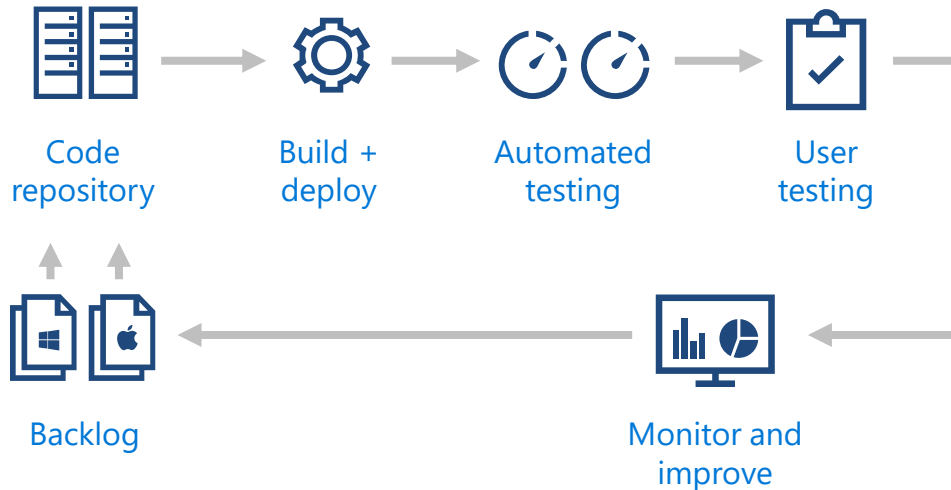


# DevOps in a cloud world

Cloud IT infrastructure = Code, releases, updates and management in an automated way.

## DevOps

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## People – Process - Tools

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**Communication**

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**Guaranteed quality**

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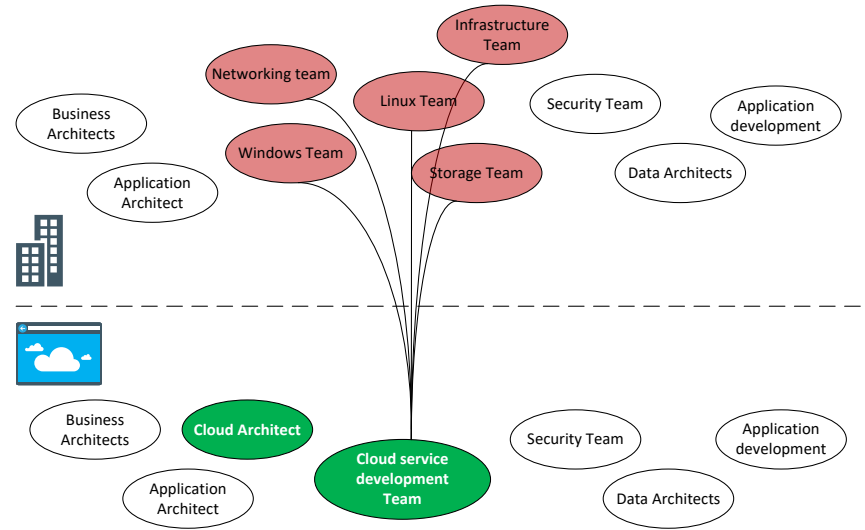
**One approach**



# DevOps in a cloud world

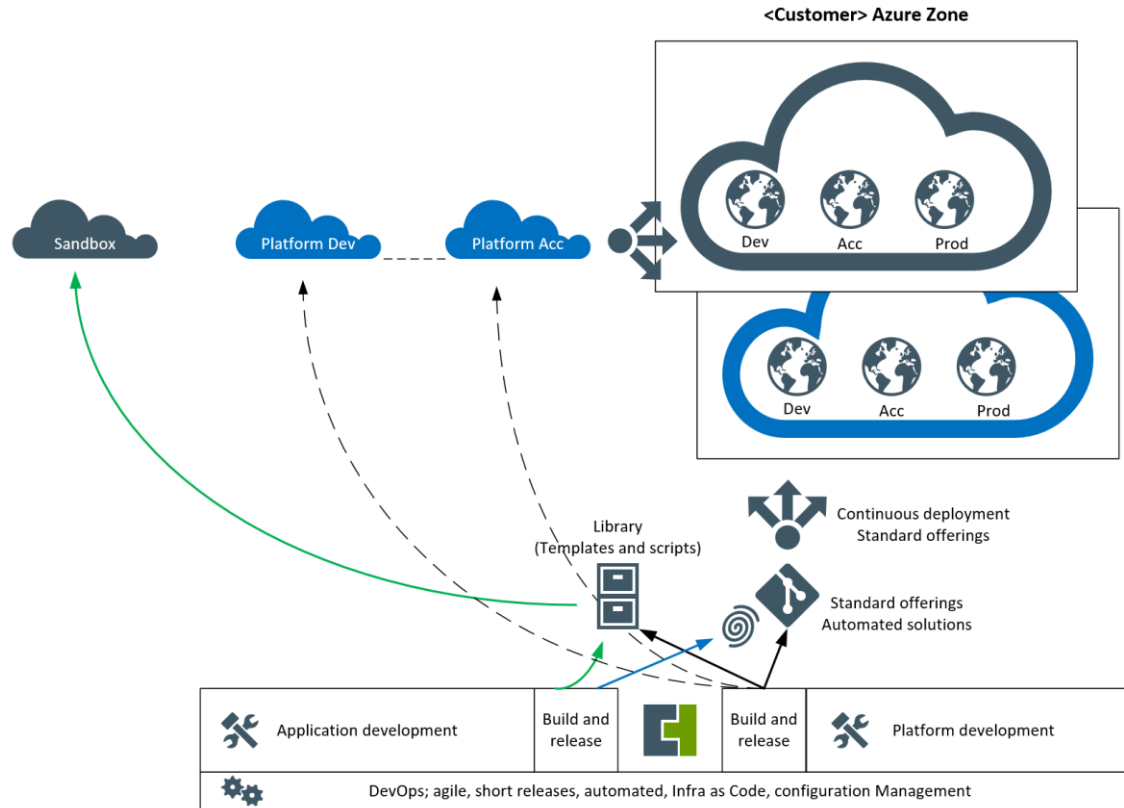
Teams are a mixture of competences

- Each develops own part of the solutions.
- Defined deliverable
- Communication to develop defined deliverable





# DevOps in approach





# DevOps in a cloud world

## Approach

- Define one common approach
- Translates you work...
- ... into a deliverable



# DEMO

Deliver



# DevOps

Orchestrate your delivery



# Release pipeline to orchestrate definition

- It all starts with the delivery
- Validation using gates
- Release



# DEMO

Orchestrate you delivery





# DevOps

Security and compliance



# Automated security

What to automate, when to automate, or even whether one really needs automation

- How to handle sensitive information?
- How to validate compliance?



# DEMO

Secure and compliant

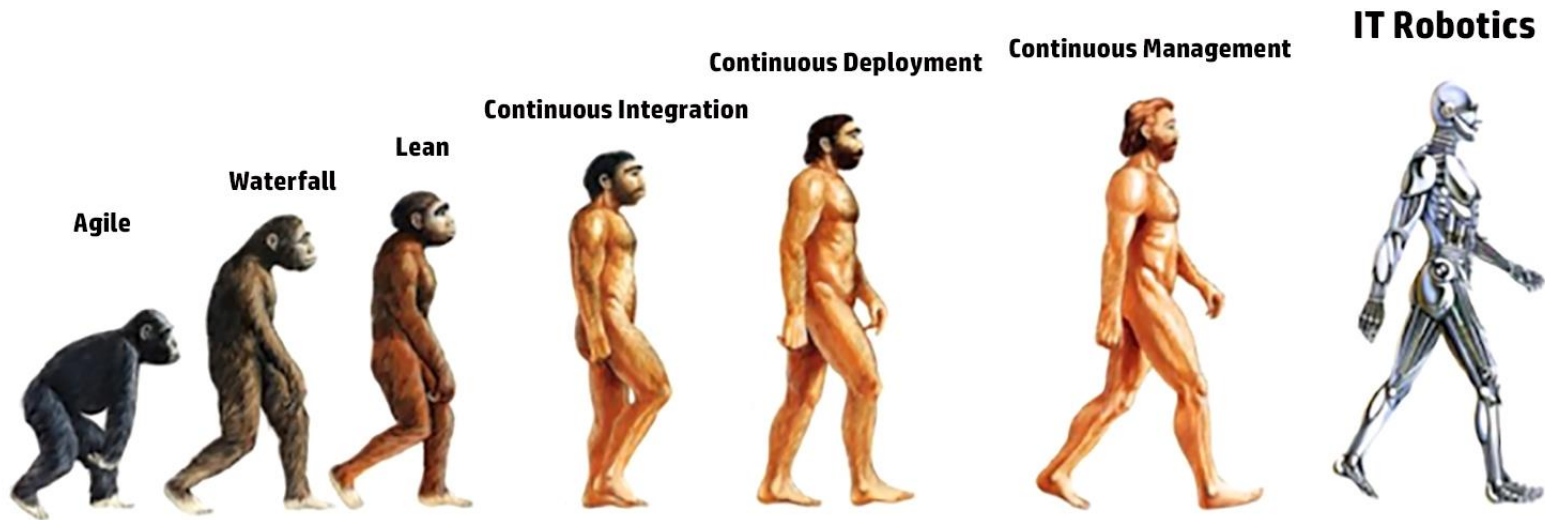


# DevOps

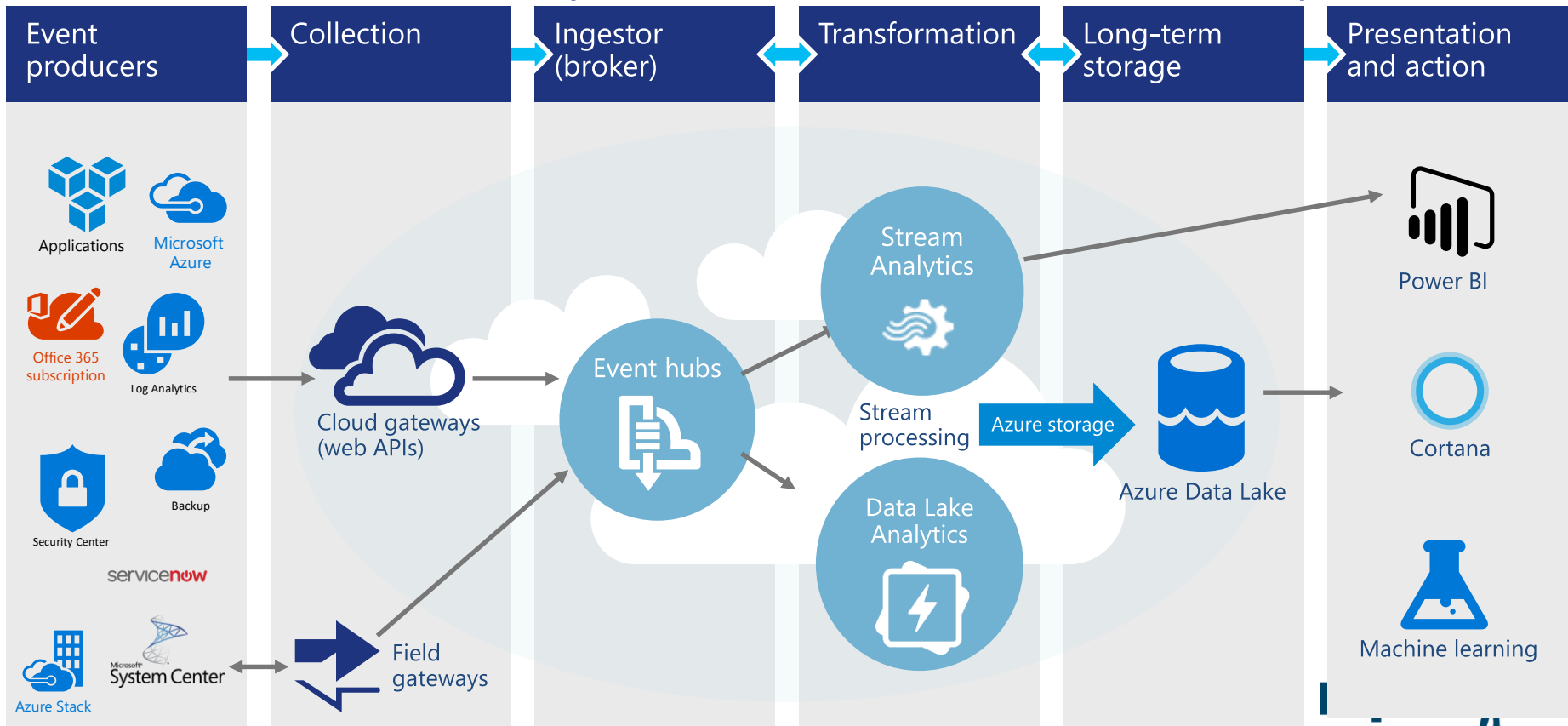
Reflect



# The full 360 is possible with DevOps



# The full 360 is possible with DevOps





# DevOps

Recap



# Recap of the session

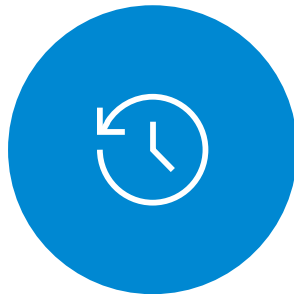


## **Shorten cycle times and deliver value faster**

Speed up development cycles  
with developer productivity tools

Automate the workflow between  
Dev and Ops and deploy faster

Continuously measure, learn and  
improve with state of the art DevOps  
tools and an agile cloud platform



## **Implement DevOps Pipelines Faster on Azure**

Easily deploy pre-integrated  
DevOps Pipelines

Integrate into Azure with  
plugins for on-demand build  
and test servers (i.e. Jenkins)

Leverage native or 3<sup>rd</sup> party  
monitoring



## **Optimize IT resources and eliminate waste**

Improve developer agility and resource  
efficiency with cloud Dev and Test  
environments

Eliminate over-provisioning, lower costs  
and automate your deployment workflow  
with cloud environments for pre-production



An abstract graphic on the left side of the slide. It features a blue silhouette of a person climbing a rope. The rope is represented by several vertical lines in shades of green, blue, and dark blue. A thick, curved blue line loops around the person, suggesting the rope they are climbing. The person's arms are outstretched, and their legs are positioned as if they are pulling themselves up.

Questions?



# links

[Visual studio online](#)

[Invoke-build](#)

[Presentation github repo](#)