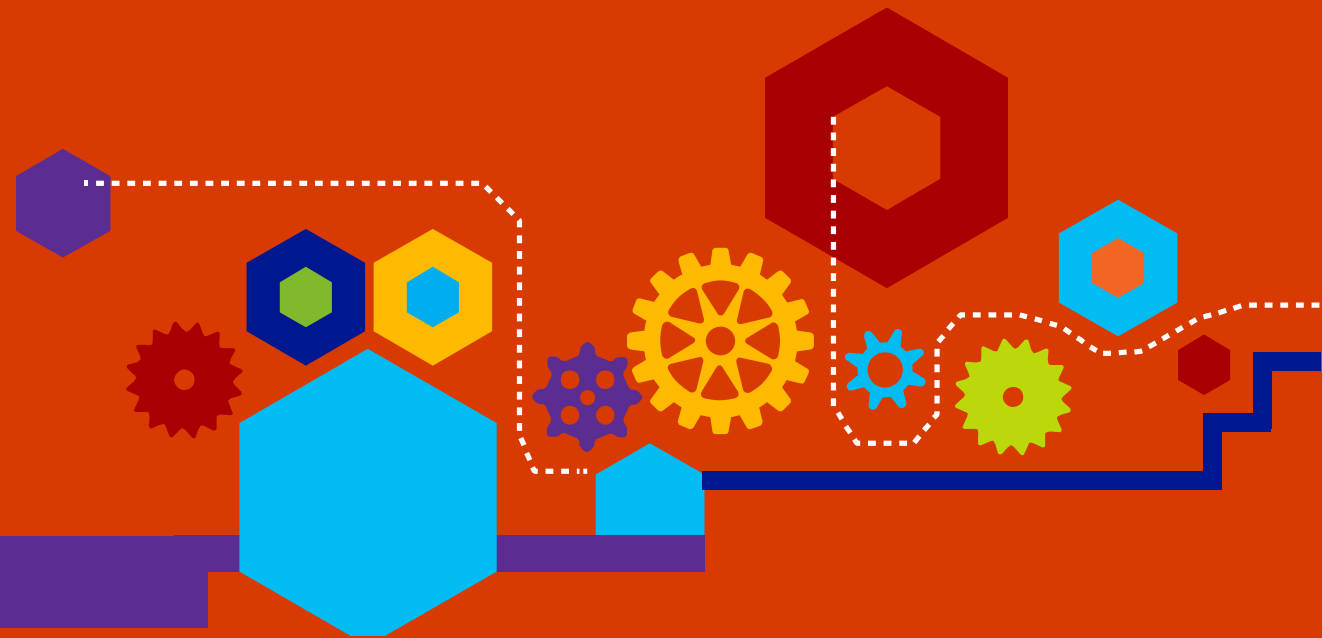


Your DevOps journey starts with ALM!

Mathieu Benoit
Agile Tour Quebec 2016



Mathieu Benoit as Code

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  "lastName": "Benoit",  
  "city": "Quebec",  
  "employee": "Microsoft",  
  "title": "CSA-P",  
  "misc": [  
    "software development",  
    "cloud + web + mobile",  
    "agile & devops enthusiast",  
    "continuous learning"  
  ]  
}
```

We love Agile Tour!



Source: <http://agiletour.org/>

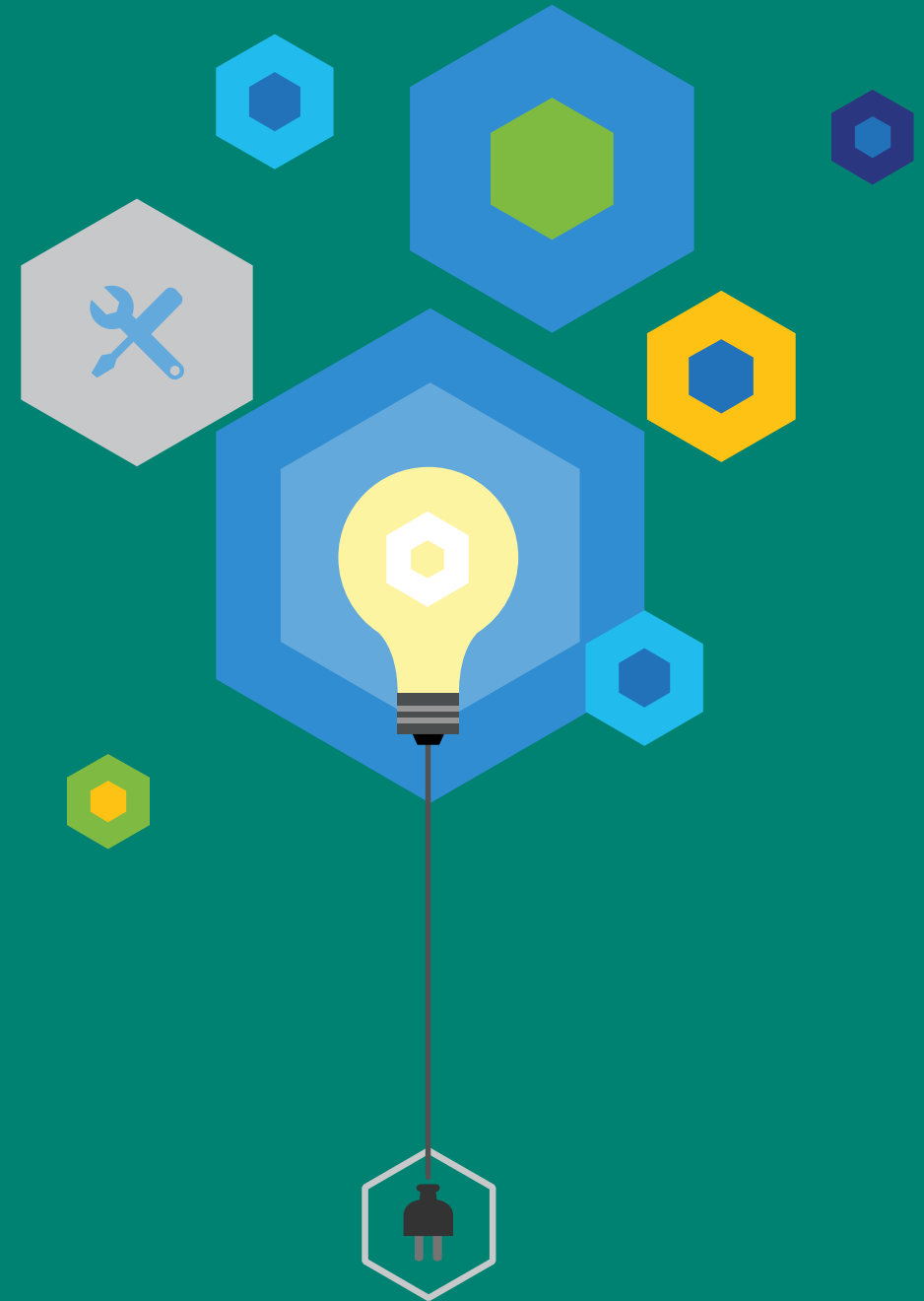
What about you?

- DevOps?
- Was here for my ATQ2015 presentation?
- Public or Private sector?
- Managers?
- Developers?
- IT?
- Business/PO?

Agenda

- ➔ Introduction
- ➔ The DevOps Toolbox
- ➔ Let's demo!
- ➔ Conclusion & References

Introduction

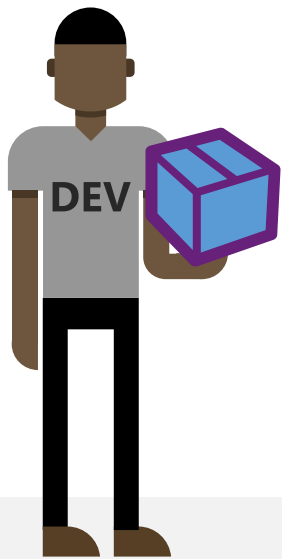


Assumptions about DevOps

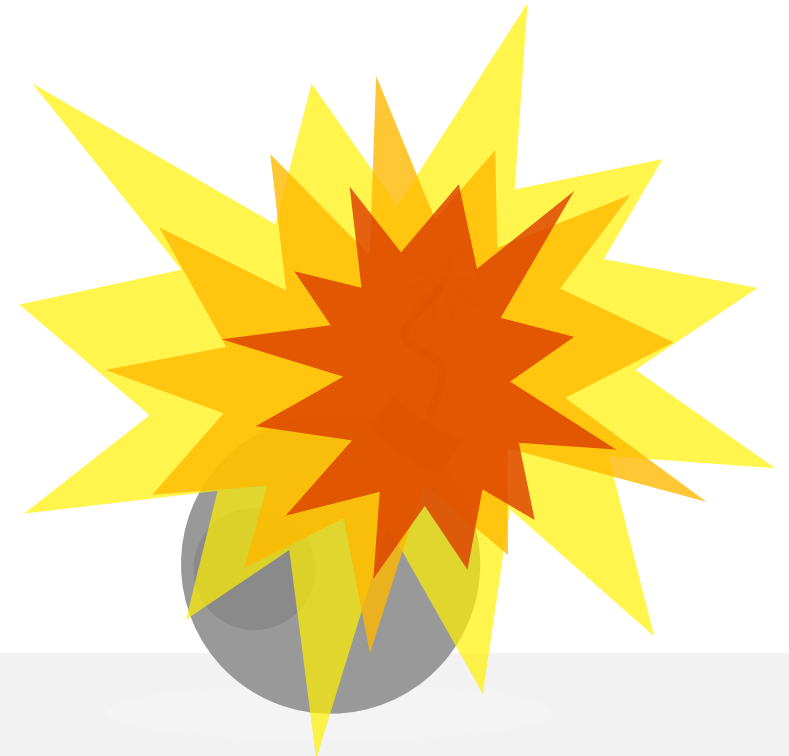
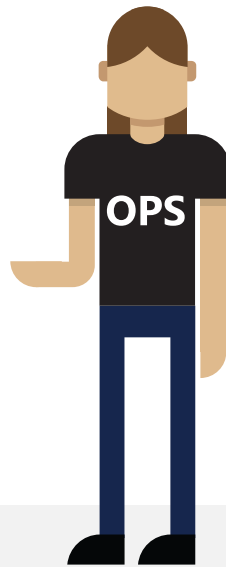
- We all do « some parts » of DevOps!
- It's not magic
- Deliver often and fast with high value for end-user
- Evolution of current and existing practices
- It's continuous learning
- It's not a methodology
- It's not only « Dev & Ops », many stakeholders!

Traditional Dev and Ops

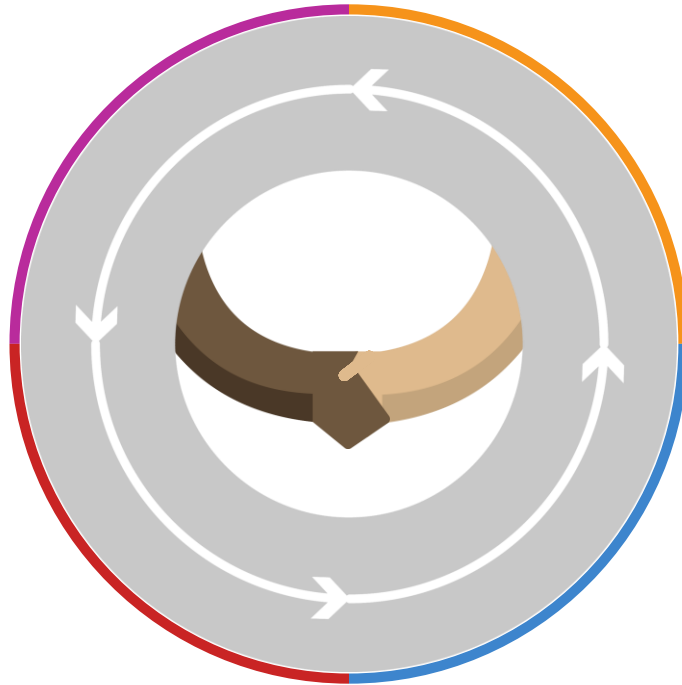
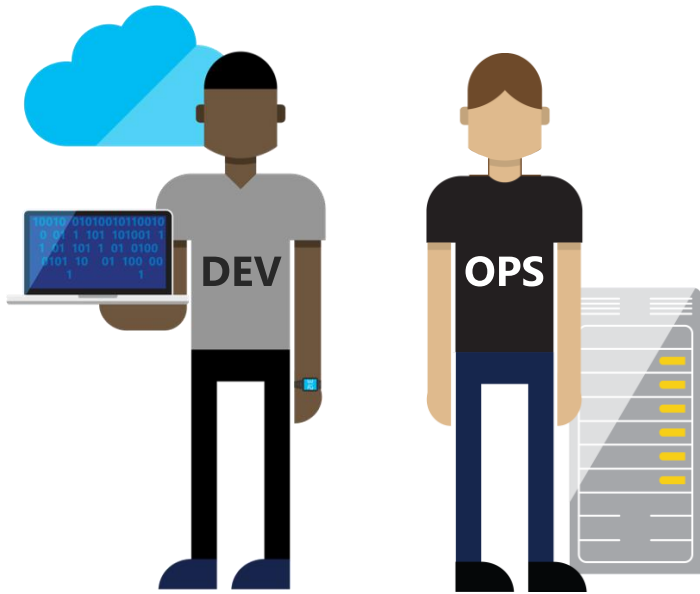
Measured for abilities
to deliver CHANGE



Measured for abilities
to deliver RELIABILITY



DevOps: the 3 stage conversation



1

People

2

Process

3

Products

5 pillars



Culture

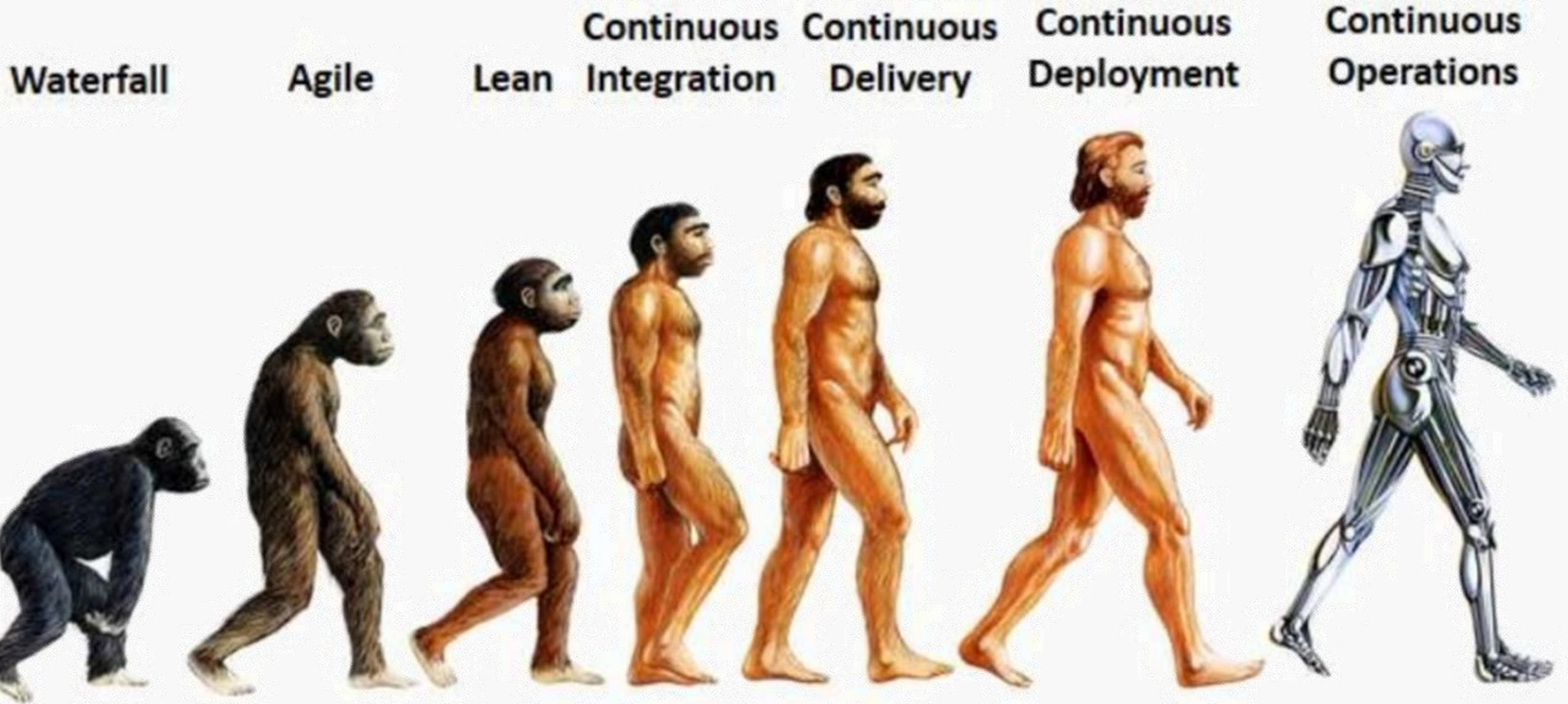
Automation

Lean

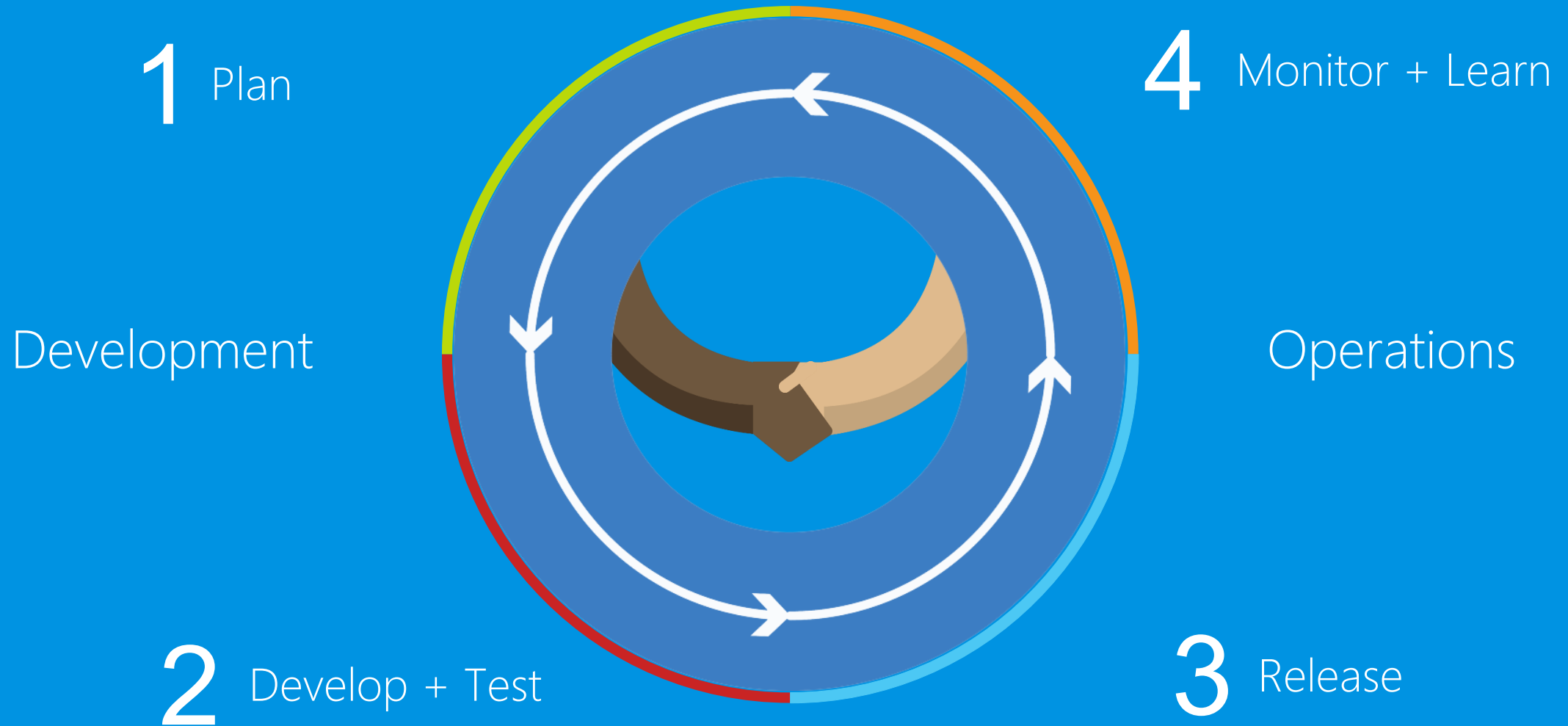
Metrics

Collaboration

DevOps Movement



DevOps lifecycle



The DevOps Toolbox



Tool 1: ALM

- Code
 - Work – Kanban
 - Build
 - Release
 - Tests
- Atlassian / Jira
 - Redmine
 - Trello
 - TFS
 - VSTS
 - ...
 - Jenkins
 - TeamCity
 - Octopus

Tool 2: Communication & collaboration

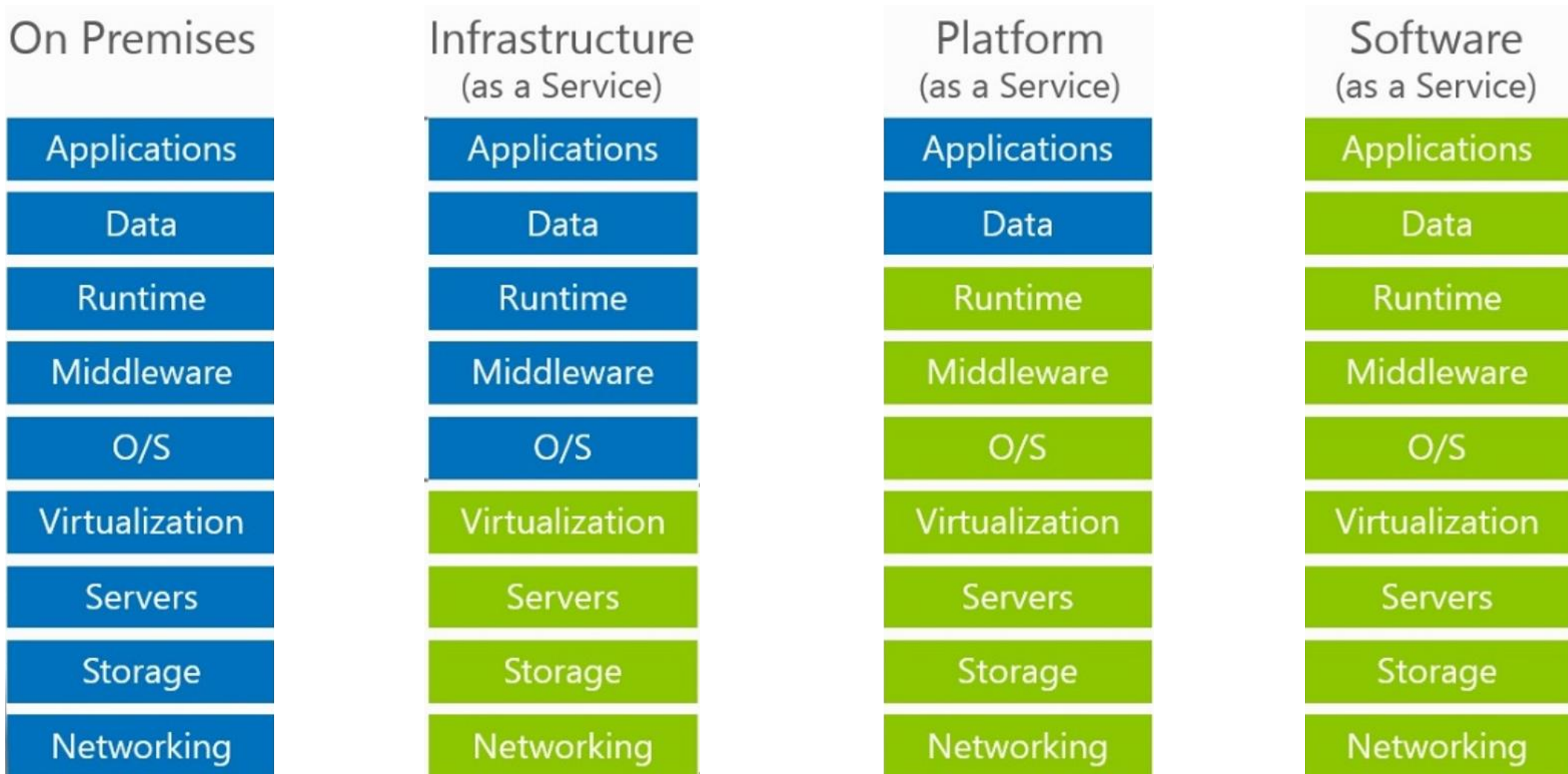
- Communication
- Documents
- Chat
- Notification

- Slack
- Microsoft Teams
- HipChat
- Skype
- Sharepoint
- Atlassian / Confluence
- Office 365
- Wiki
- Email
- Zapier
- Azure Logic App

Tool 3: Code

- Multi language / platform
 - Everywhere / Online
 - Branch / Pull Request
 - Policies / Security
 - CI link
 - Code coverage
 - Code review
 - Database / ORM
 - Code first
 - Database first
- Git
 - TFS
 - VSTS (TFS or Git)
 - GitHub
 - SVN
 - Eclipse
 - Visual Studio
 - Visual Code
 - Sublime

Tool 4: Infrastructure



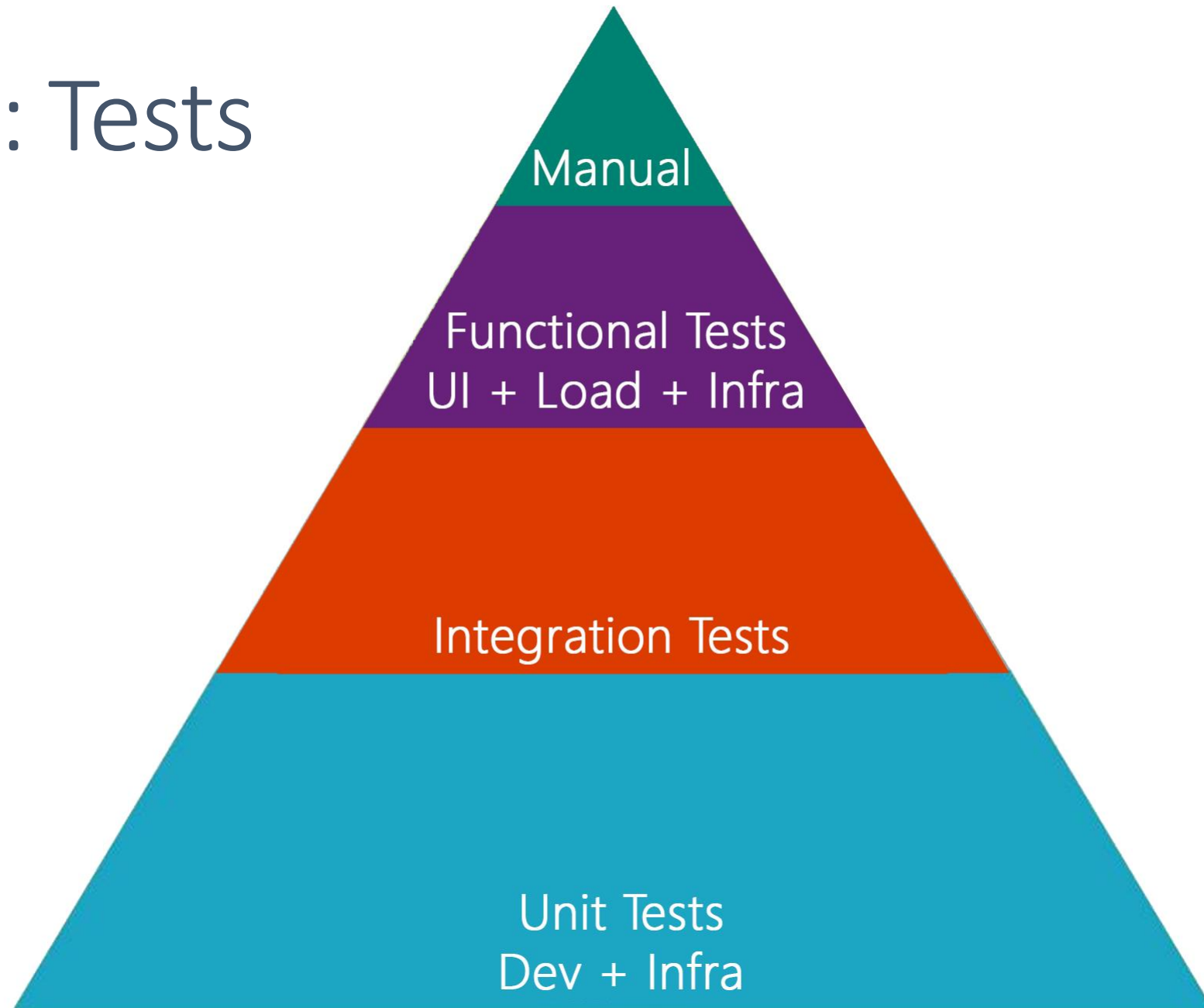
Tool 5: Infrastructure as Code

- Automation
- Script as Code
- Code as documentation
- Included in the "Definition of Done"
- Repeatable
- CMD / Bash
- Chef / Puppet
- ARM
- Powershell DSC
- Python
- Vagrant
- ...

Tool 6: Microservices approach

- Elastic
- Resilient
- Composable
- Minimal
- Complete
- Embrace failure and faults
- Modular structure
- Independent in deployment
- Polyglot programming

Tool 7: Tests



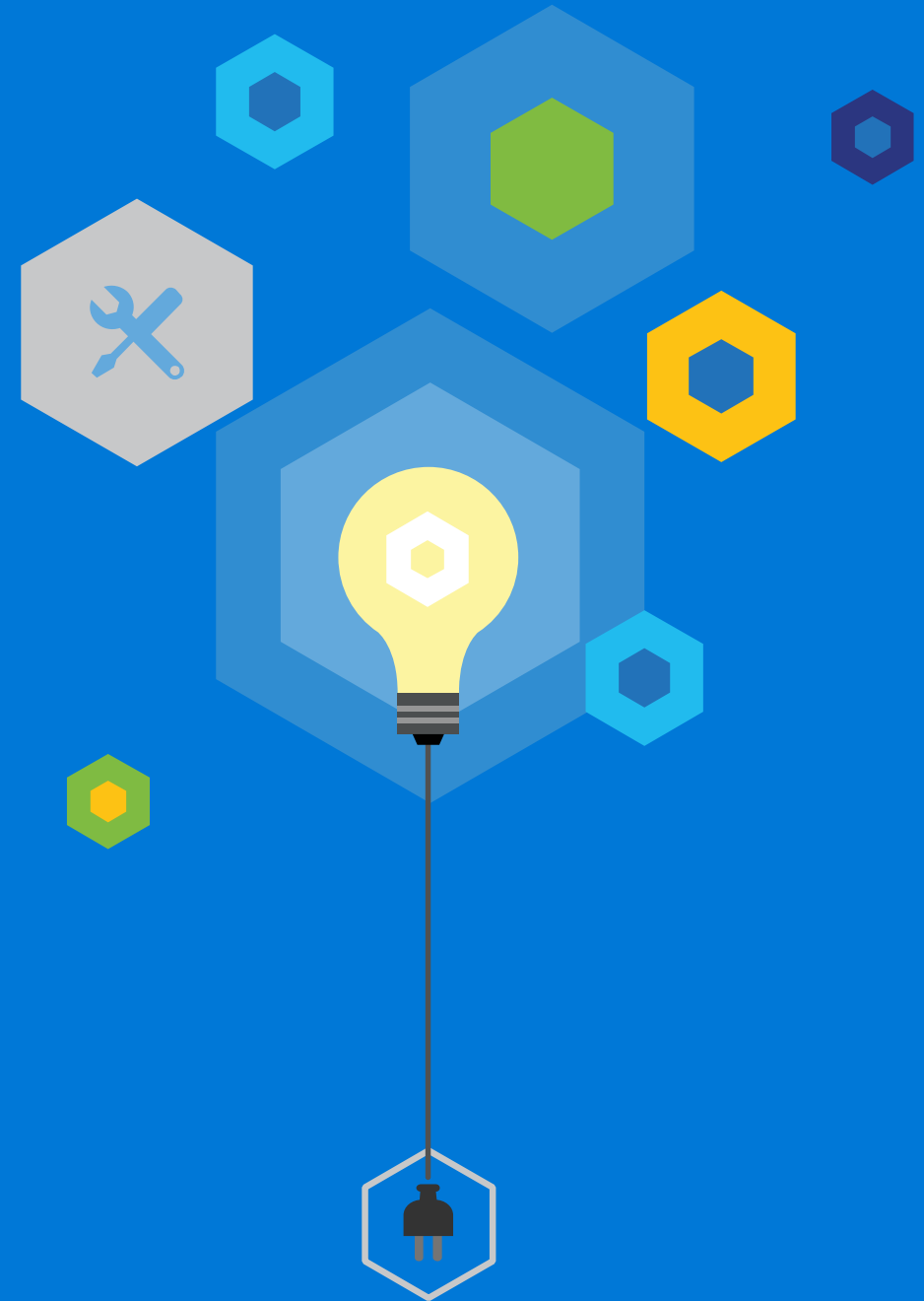
Tool 8: CI/CD

- Deliver small and fast
- Get feedback
- Make customers happy
- Some approaches:
 - Feature-flags
 - Staging
 - Tests A/B
- Google, Amazon, Netflix, Facebook, etc.
 - > 100 deployments a day

Tool 9: Monitoring

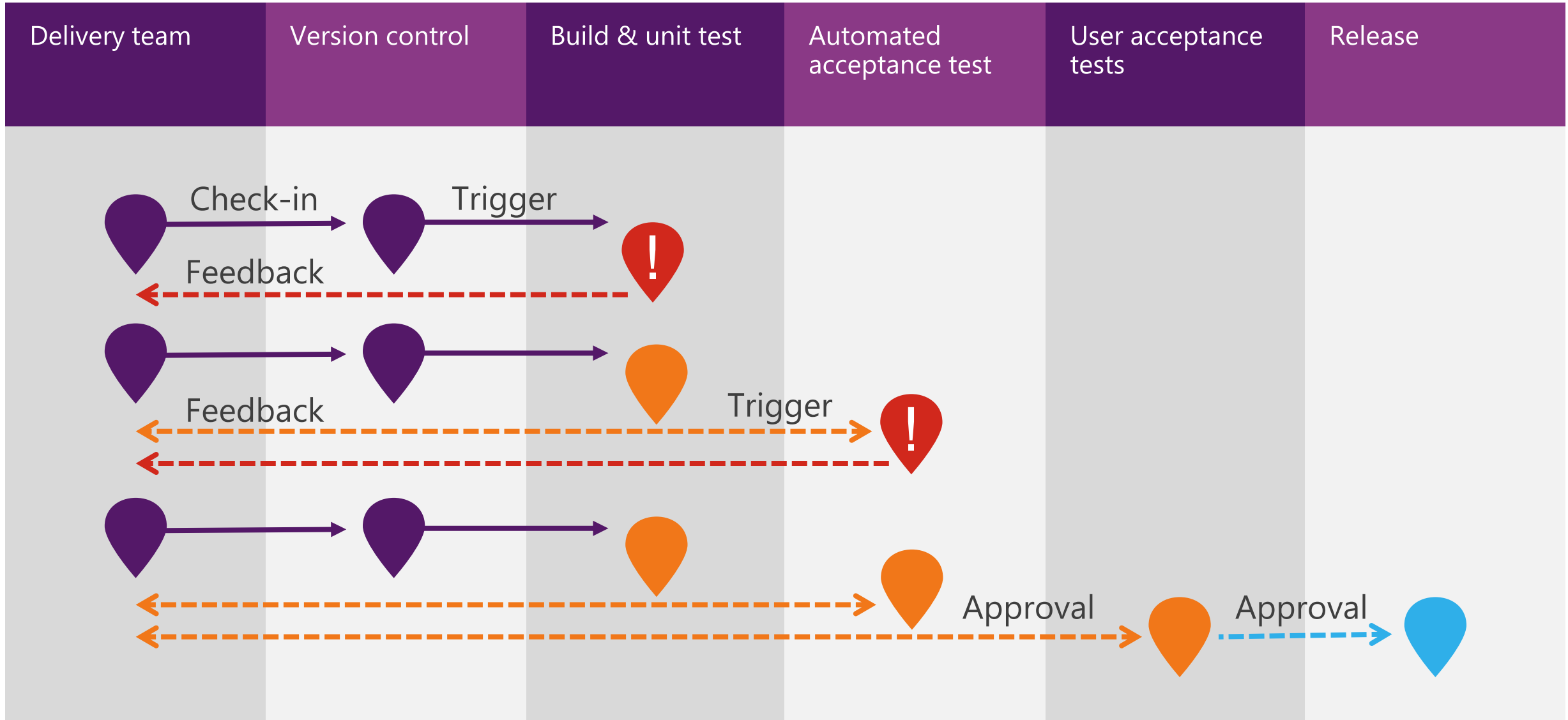
- Continuous feedback
 - Proactivity
 - Metrics
 - Analytics
 - Alerts
 - Logs
- Tableau
 - Excel / PowerBI
 - OMS
-
- Email
 - WebHook
-
- Metrics
 - MTTDiagnose
 - MTTRepair
 - MTTFailure
 - MTBetweenFailures

Let's demo!

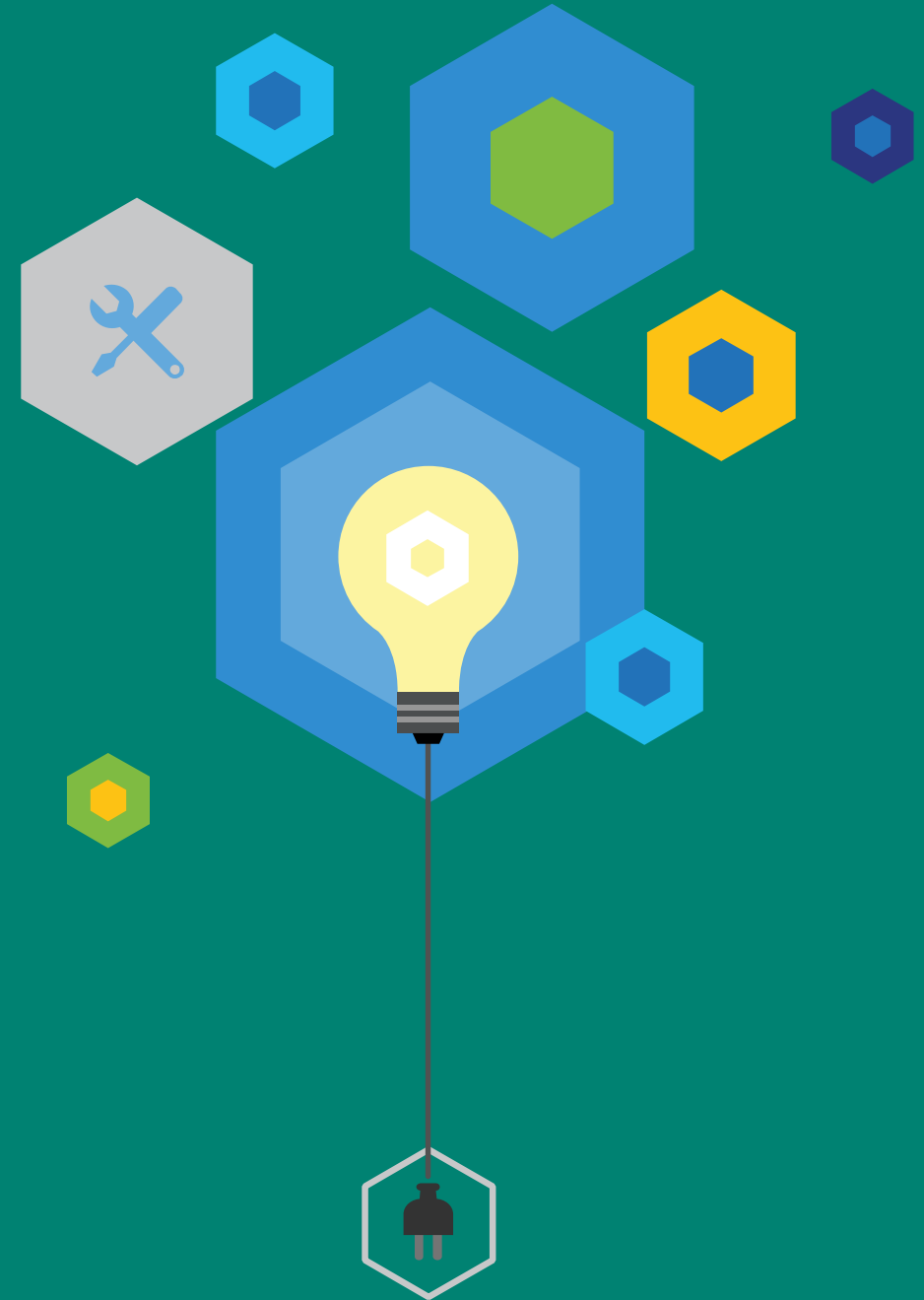




Continuous delivery process



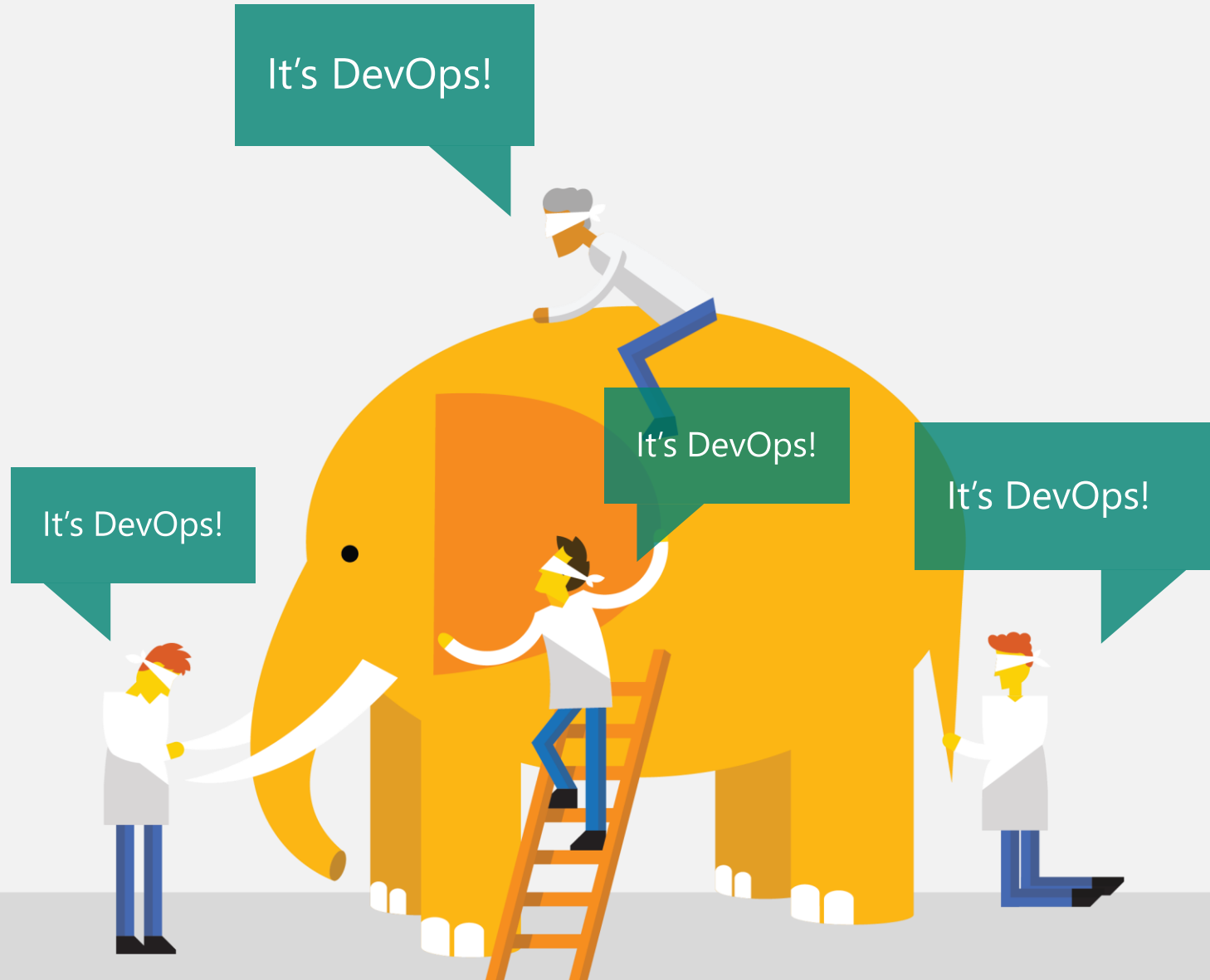
Conclusion



“DevOps is development and operations **collaboration**”

“DevOps is using **automation**”

“DevOps is **small** deployments”



“DevOps is treating your **infrastructure as code**”

“DevOps is feature **switches**”

“**Kanban** for Ops?”

It's tough out there...



Business is faster

Competition is fiercer

Time-to-market is key

Related content & Where to start?

- [GitHub content of this demo](#)
- [Get Started with Visual Studio Team Services \(VSTS\)](#)
- [Azure App Service – Learning path](#)
- [ARM Templates MVA course](#)

Some lessons

- Automate
- Start small
- Fail fast
- Solve a problem that really matters
- Don't think too much: Do & Learn - Validate & Learn.
- Stay safe. You will make errors. Things will break.
- Don't wait till you have enough time. You never will.
- Automate again

DevOps Resources

Optimize your DevOps practices and tools:

Get started on your DevOps journey: aka.ms/DevOps

DevOps Dimension Show on Channel 9

Continuous Improvement on your DevOps journey: aka.ms/DevOpsDimension

Technical resources for Practitioners:

Get access to free online training: aka.ms/DevOpsLearn

DevOps Maturity Self-Assessment

See where your organization is at across 7 areas: <http://devopsassessment.azurewebsites.net/>

Learn DevOps Practices hands-on with PartsUnlimited apps

<http://aka.ms/PartsHOL>

Thank you!

Enjoy your DevOps journey!

Mathieu Benoit
Agile Tour Quebec 2016

