Enterprise DevOps with Microsoft

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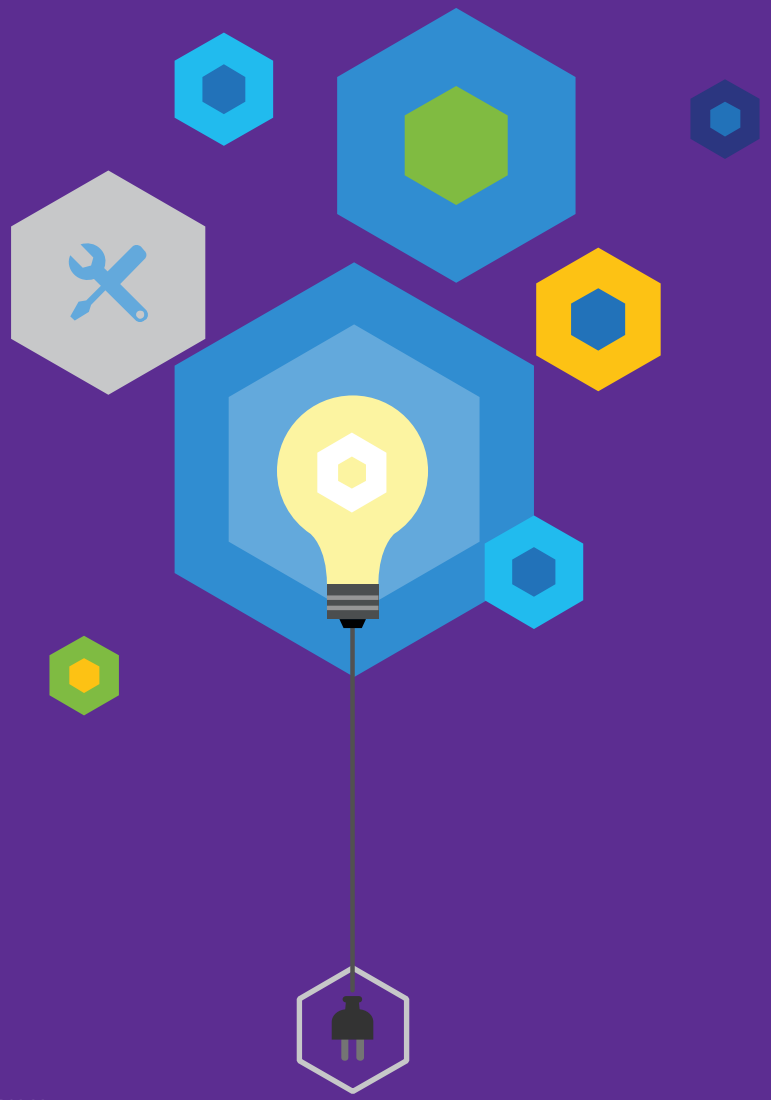
Microsoft Corporation

Microsoft

What is DevOps



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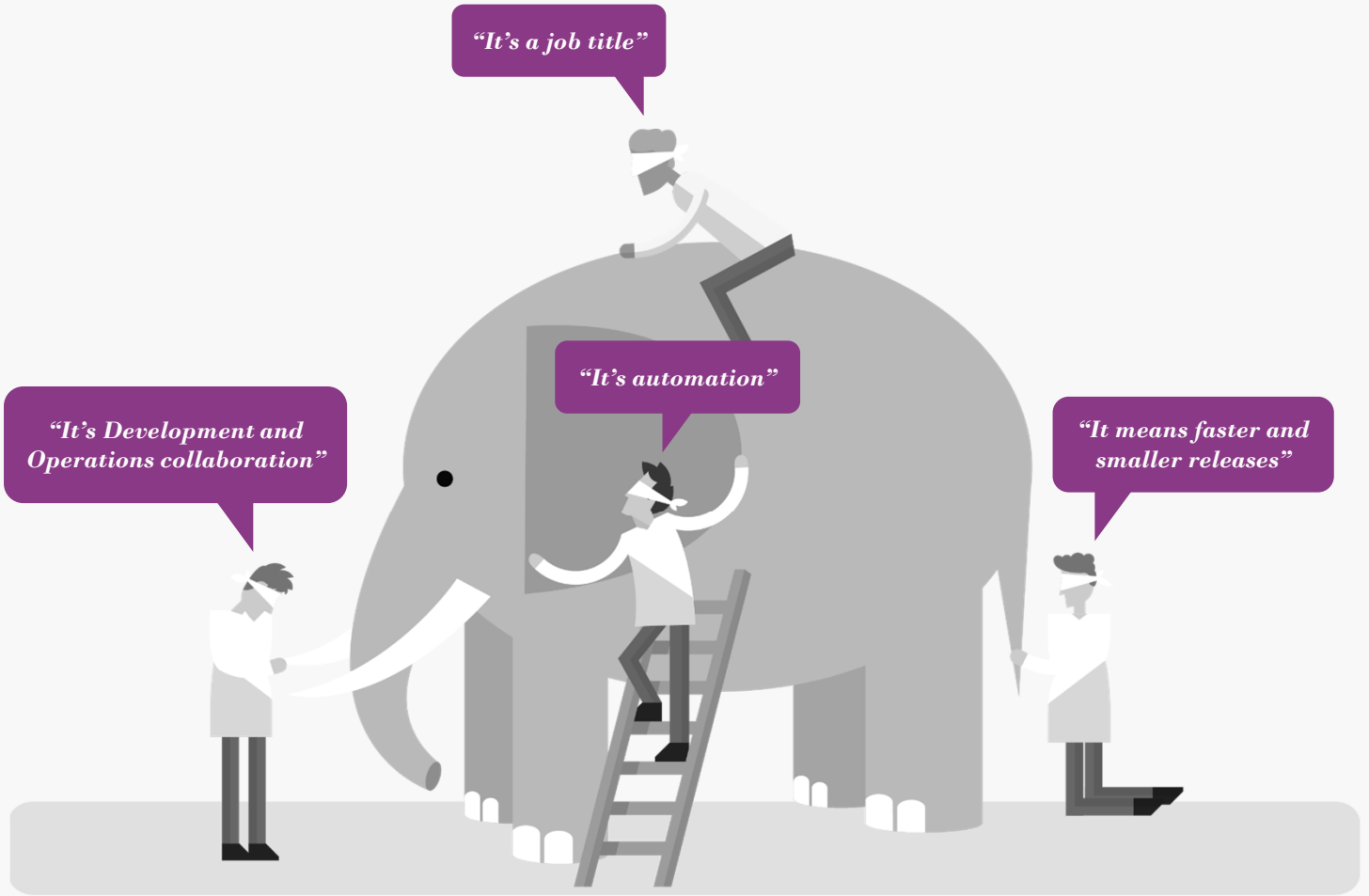
WHAT IS DEVOPS?



DEVOPS BENEFITS

STRONG IT PERFORMANCE IS A COMPETITIVE ADVANTAGE

Firms with high-performing IT organizations were 2x as likely to exceed their profitability, market share, and productivity goals

DEVOPS PRACTICES IMPROVE IT PERFORMANCE

DEPLOY CODE 30X FASTER

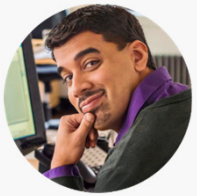
... and with 200x shorter lead time when compared to their lower-performing peers

HAVE 60X FEWER FAILURES

... and recover from failure 168X faster when compared to their lower-performing peers

THE MICROSOFT DEVOPS STORY

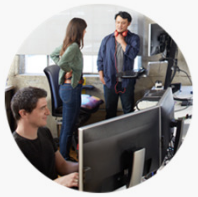
THE DEVOPS CONVERSATION



PEOPLE

COLLABORATE MORE
SHARE COMMON GOALS
FOCUS ON IMPROVEMENT

BRINGING PEOPLE TOGETHER



PROCESS

ELIMINATE WASTE
INCREASE EFFICIENCY
STREAMLINE FEEDBACK

DELIVERING VALUE FASTER

TOOLS

SUPPORT PROCESSES
ENABLE COLLABORATION
FACILITATE EXPERIMENTATION

EXECUTING THE DEVOPS STRATEGY

OUR 7 HABITS FOR DEVOPS SUCCESS

*Based on our experiences from our own transformation to a DevOps culture, we have identified **DevOps habits** and related **DevOps practices** that will lead to a true shift to DevOps in organizations of any size.*

DEVOPS PRACTICES

PRACTICES:
Automated Testing
Continuous Integration
Continuous Deployment
Release Management

FLOW OF CUSTOMER VALUE

TEAM AUTONOMY and ENTERPRISE ALIGNMENT

PRACTICES:
Automated Testing
Continuous Integration
Continuous Deployment
Release Management

PRACTICES:
Usage Monitoring
Telemetry Collection
Testing in Production
Stakeholder Feedback

BACKLOG groomed with LEARNING

EVIDENCE gathered in PRODUCTION

PRACTICES:
Testing in Production
Usage Monitoring
User Telemetry
Stakeholder feedback
Feature flags

PRACTICES:
Code Reviews
Automated Testing
Continuous Measurement

MANAGING TECHNICAL DEBT

PRODUCTION FIRST MINDSET

PRACTICES:
Application Performance Management
Infrastructure as Code
Continuous Delivery
Release Management
Configuration Management
Automated Recovery

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Infrastructure as Code
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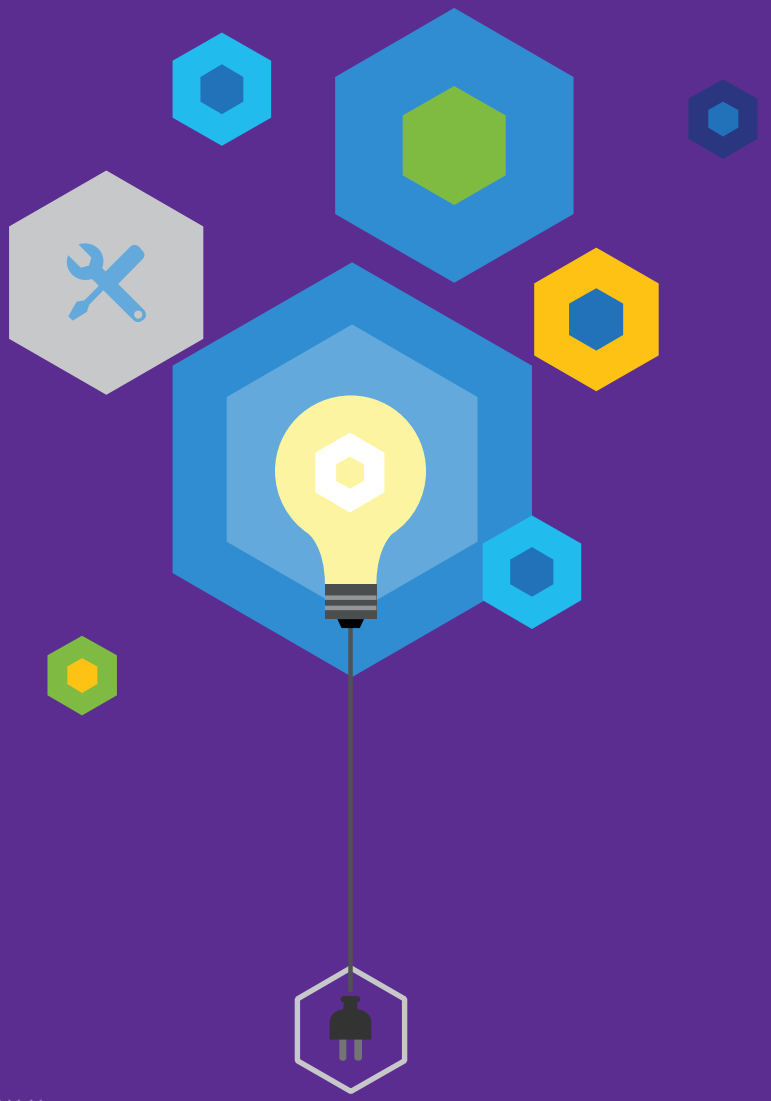
INFRA-STRUCTURE as a FLEXIBLE RESOURCE

DevOps and Customer needs



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DevOps

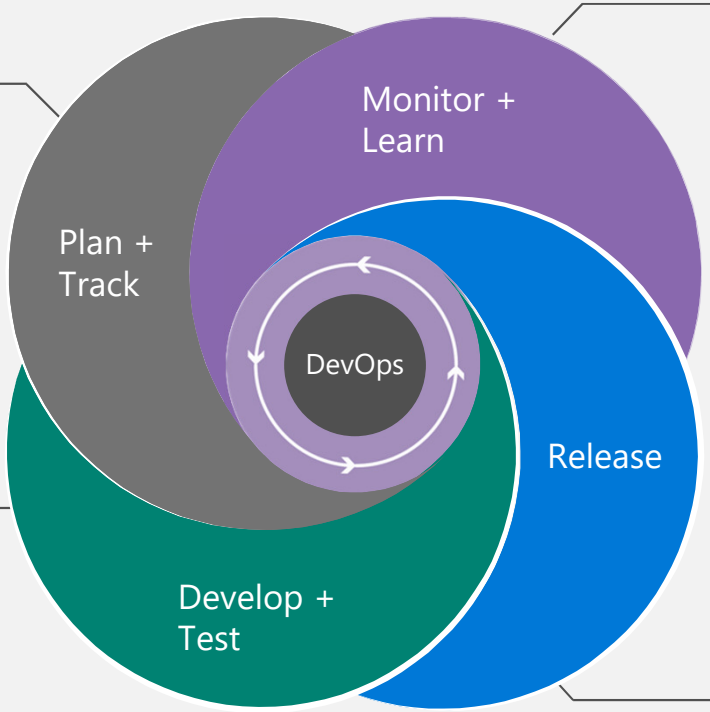
Enterprise-grade, trusted & scalable

Agile Planning

Delivery plans
Dashboards
Kanban boards

Build and Test

Git source control
Continuous integration
Security scanning
Open source compliance
Cloud-based device testing



Monitor and Learn

Application analytics
Logging & operations analytics
Mobile crash reporting

Release

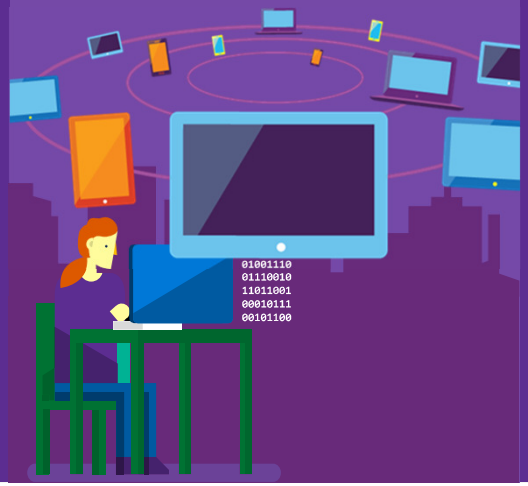
Continuous delivery
Functional testing
Release management

Company needs

A development platform for modern software development teams

Any developer, any language, any platform

Secure, yet flexible



Agile for the Enterprise

Quality at the Center

ANY PLATFORM
ANY DEVELOPER

WINDOWS

LINUX

iOS

ANDROID

.NET C++ JAVASCRIPT PHP

PYTHON NODE.JS R CORDOVA UNITY

Secure, yet flexible

Global, trusted, hybrid: Azure is the cloud on your terms.

External access

Self-provisioning

Centralized access management

Agile for the Enterprise

VSTS and TFS provide unparalleled flexibility and traceability.

All your code is linked directly to the story, bug, or task driving the work.

Flexible version control

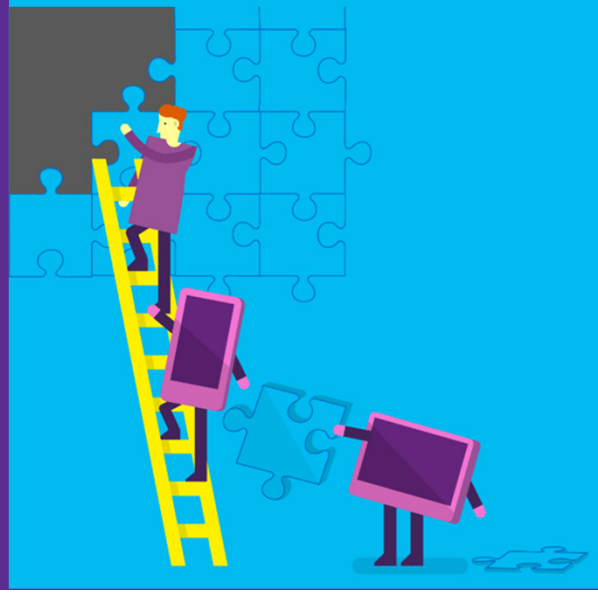
Transparency and traceability

Any IDE, any code

Quality at the center

Streamline and automate the workflow between development and IT Ops and deliver higher quality software more frequently with less risk.

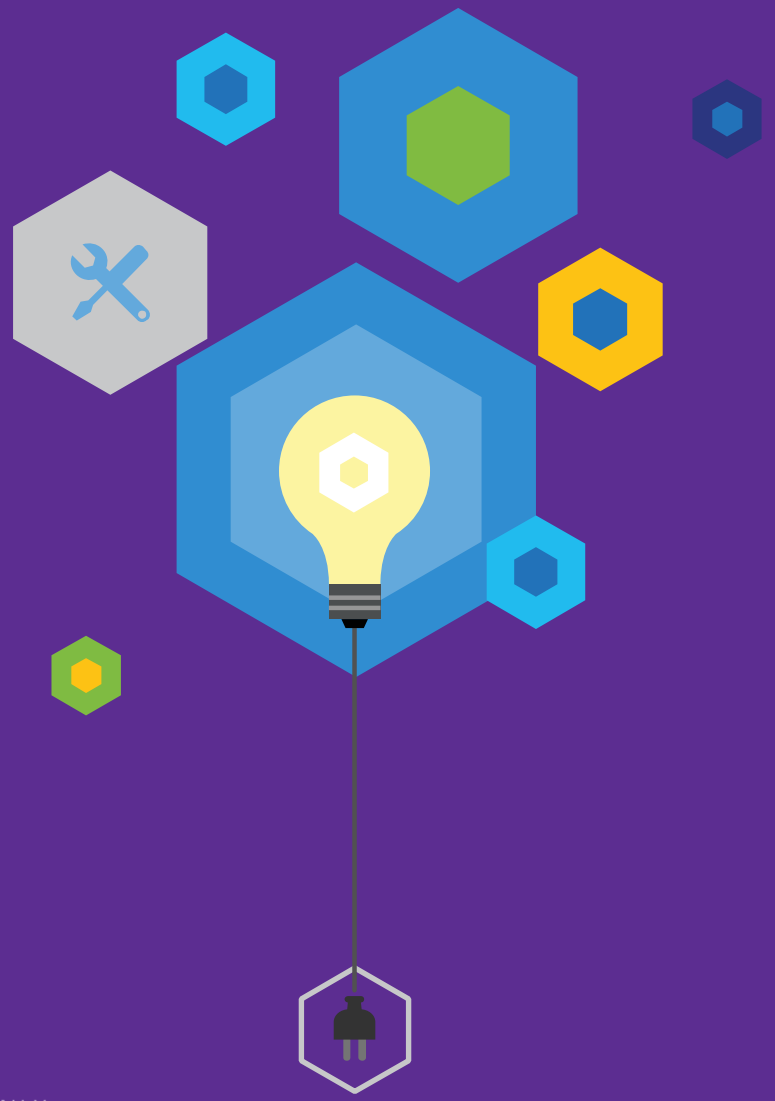
Continuous Integration



Release Management

Continuous Quality

Microsoft DevOps Solution



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Microsoft DevOps Solution

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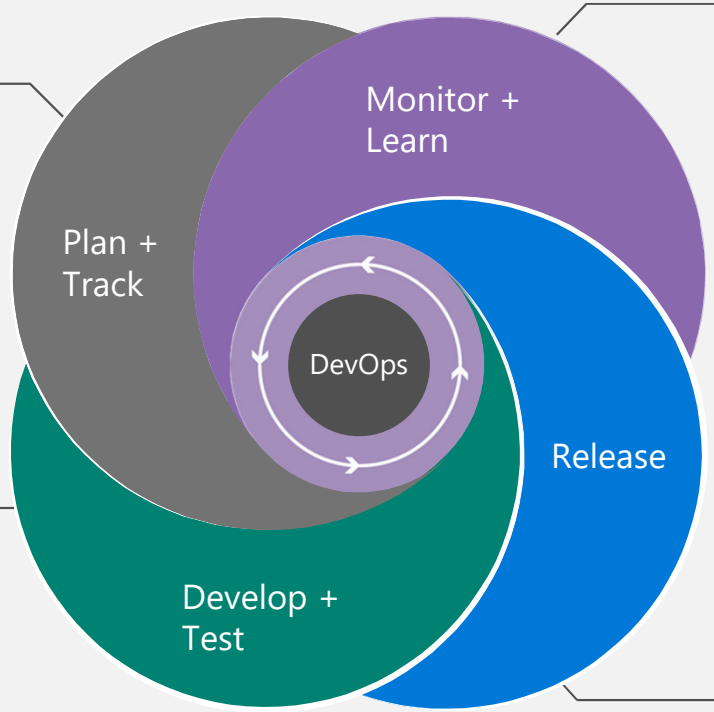

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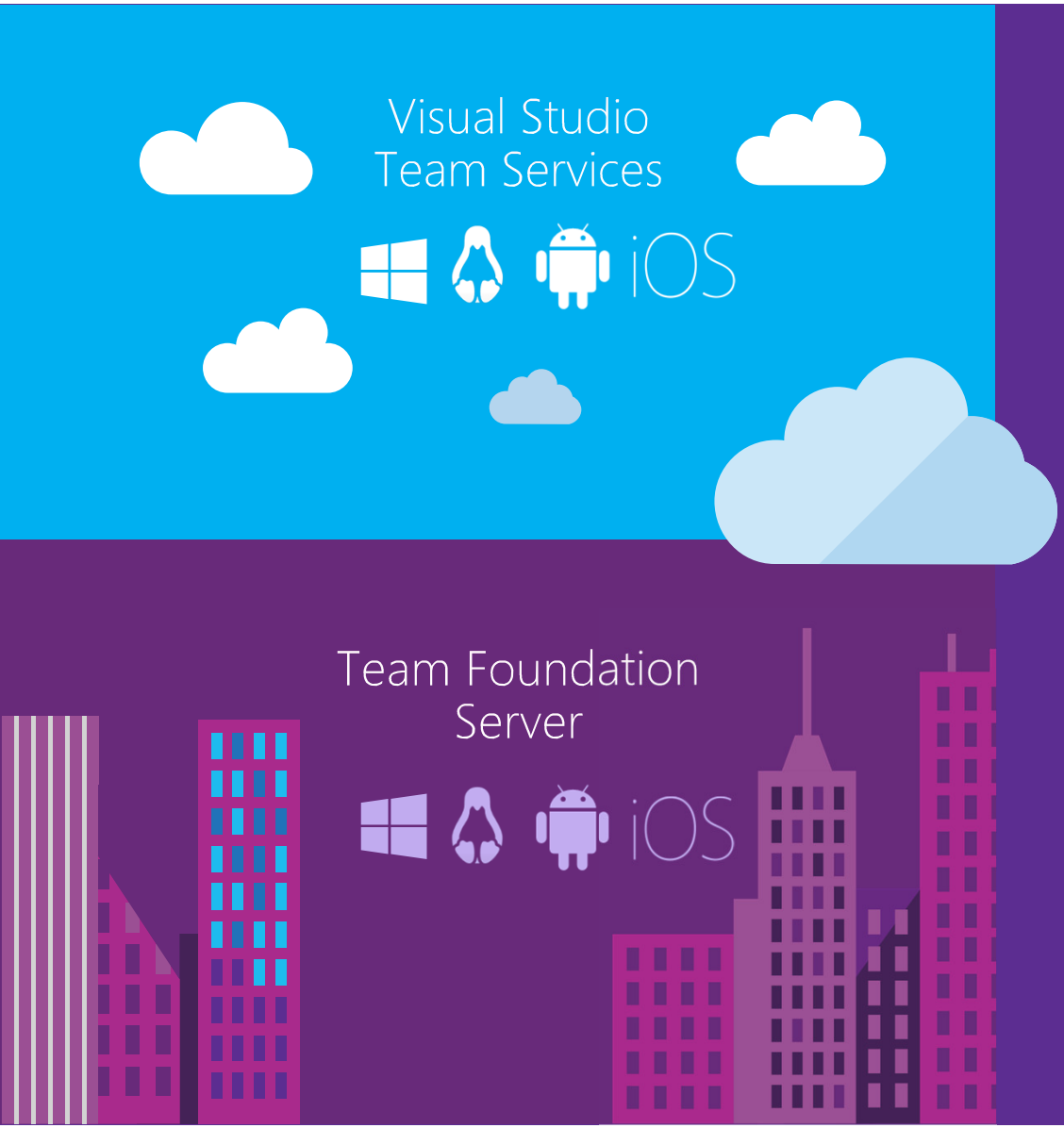
Visual Studio Team Services **Team Foundation Server** **Application Insights** **Visual Studio Mobile Center**



Plan & Track Work

Source Code Management

Package Management

Quality Management

Cross-platform Build

Continuous Deployment

Release Management

Feedback Management

Application Telemetry

Extend, Customize & Integrate

Plan & Track Work

Visual Studio Team Services and Team Foundation Server give you the tools you need to effectively create, manage and deliver against your backlog.

Enterprise collaboration

Agile planning tools

Dashboards & charts

Source Code Management

VSTS and TFS provide unparalleled flexibility for your evolving codebase.

All your code is linked directly to the story, bug, or task driving the work.

Flexible version control

Collaborate on code

Any IDE, any code

Quality Management

A toolset optimized for QA professionals, giving them flexibility in how they work while at the same time keeping them in sync with the rest of the team.

Test planning and tracking

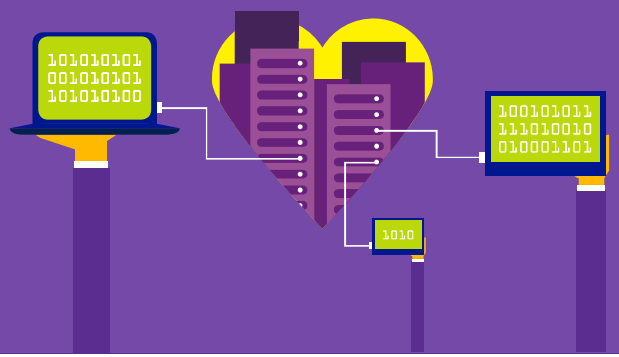
Manual and exploratory testing

Performance and load testing

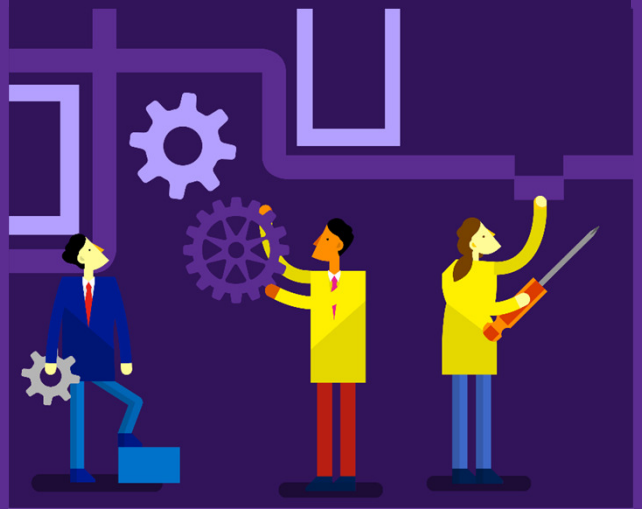
Cross-platform Build

No matter what tools you use or what language you prefer - Team Foundation Build builds your app your way, for your platforms. Just open your browser!

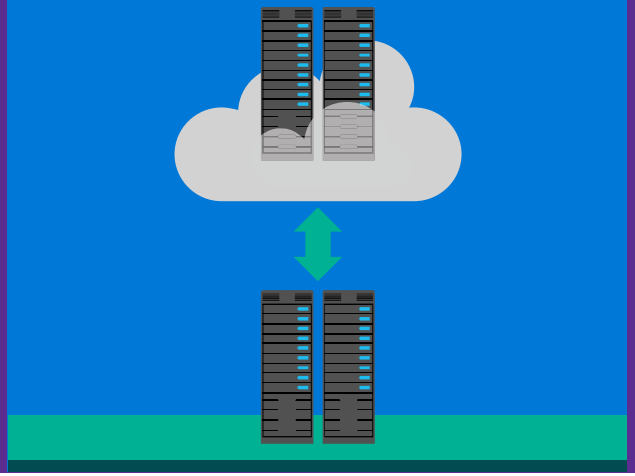
Cross-platform build for iOS, Java and Android



Flexible, extensible and customizable builds



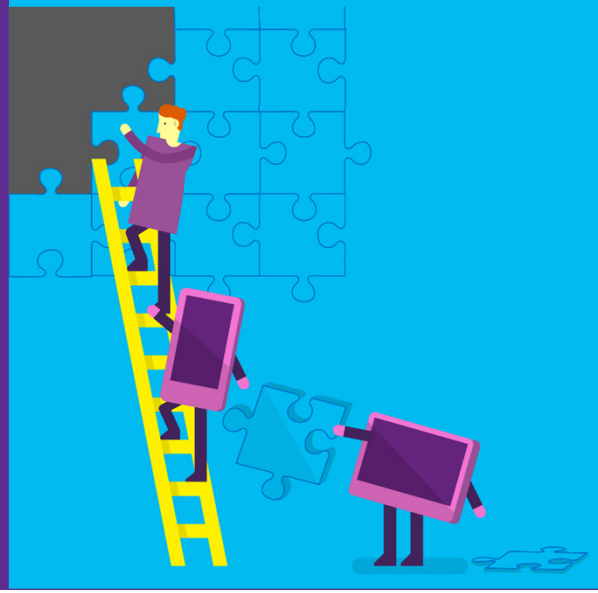
Cloud, hybrid or on-premises infrastructure



Continuous Delivery

Streamline and automate the workflow between development and IT Ops and deliver higher quality software more frequently with less risk.

Continuous Integration



Release Management

Continuous Quality

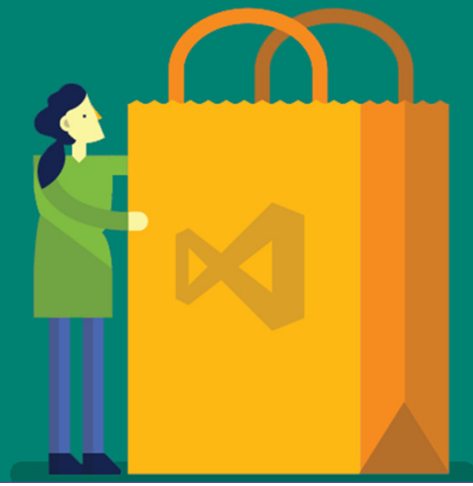
Extend, Customize & Integrate

Customize and extend the Visual Studio platform and create the perfect development environment that you'll love as much as your code.

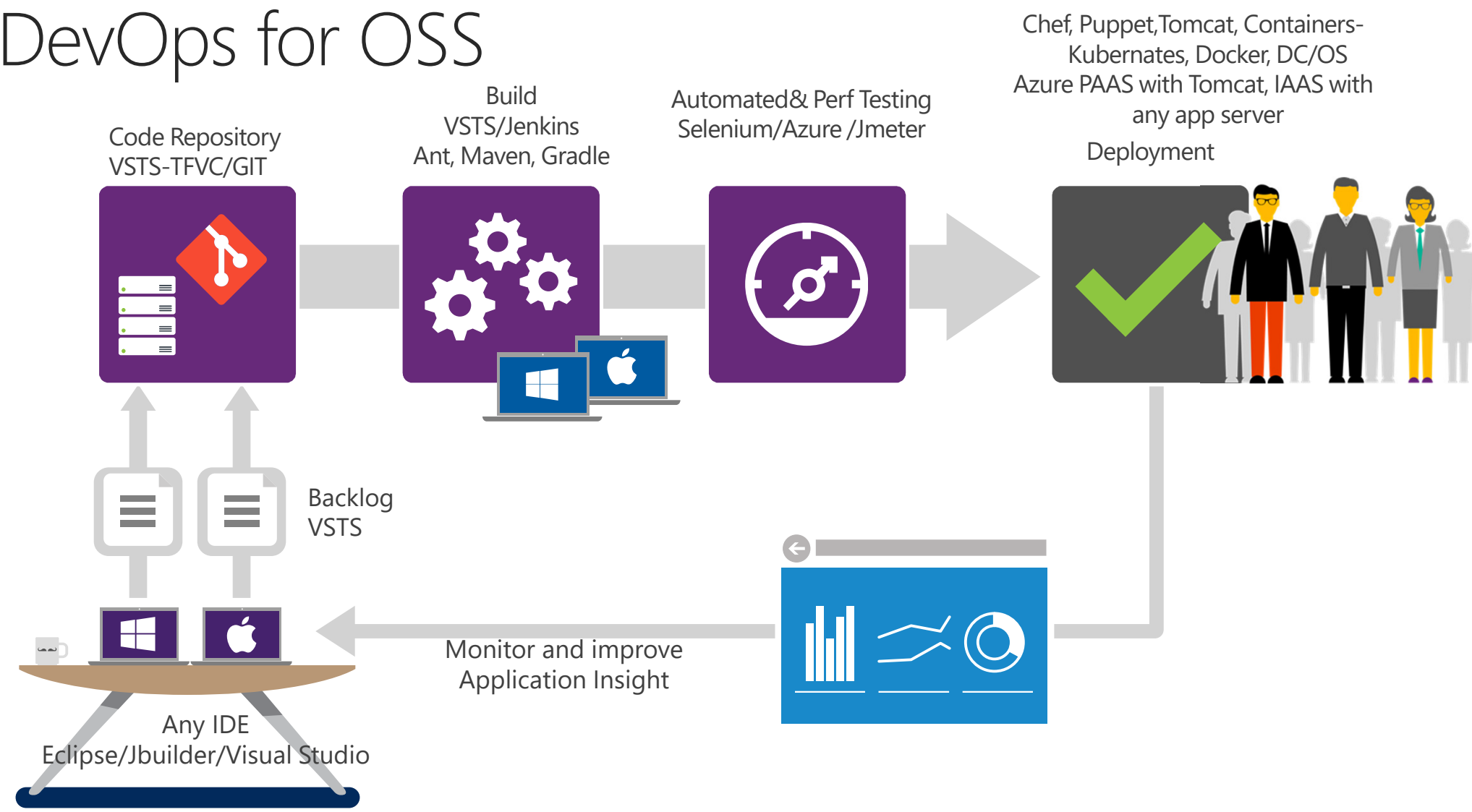
Open platform

Extensions

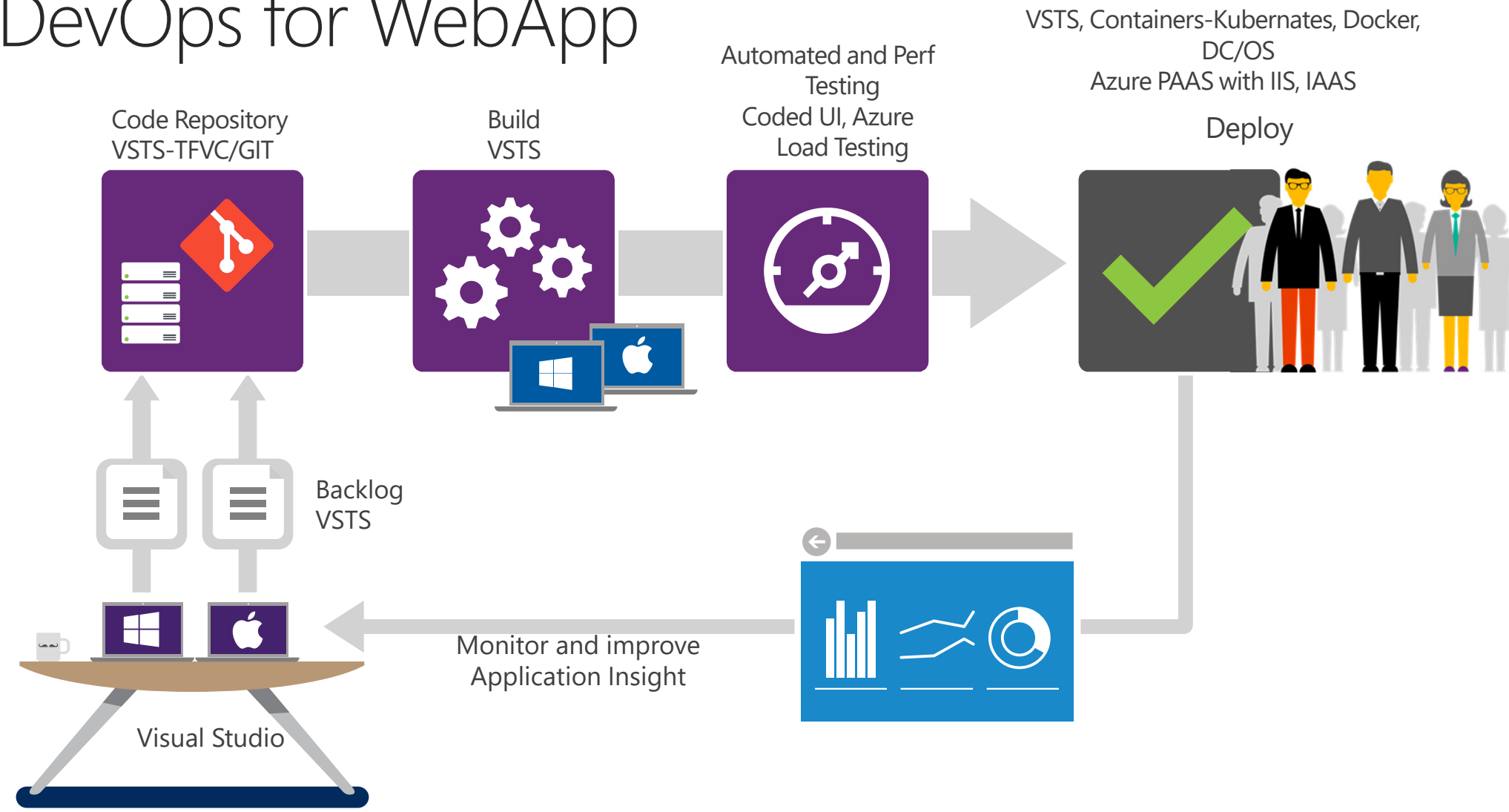
Visual Studio Marketplace



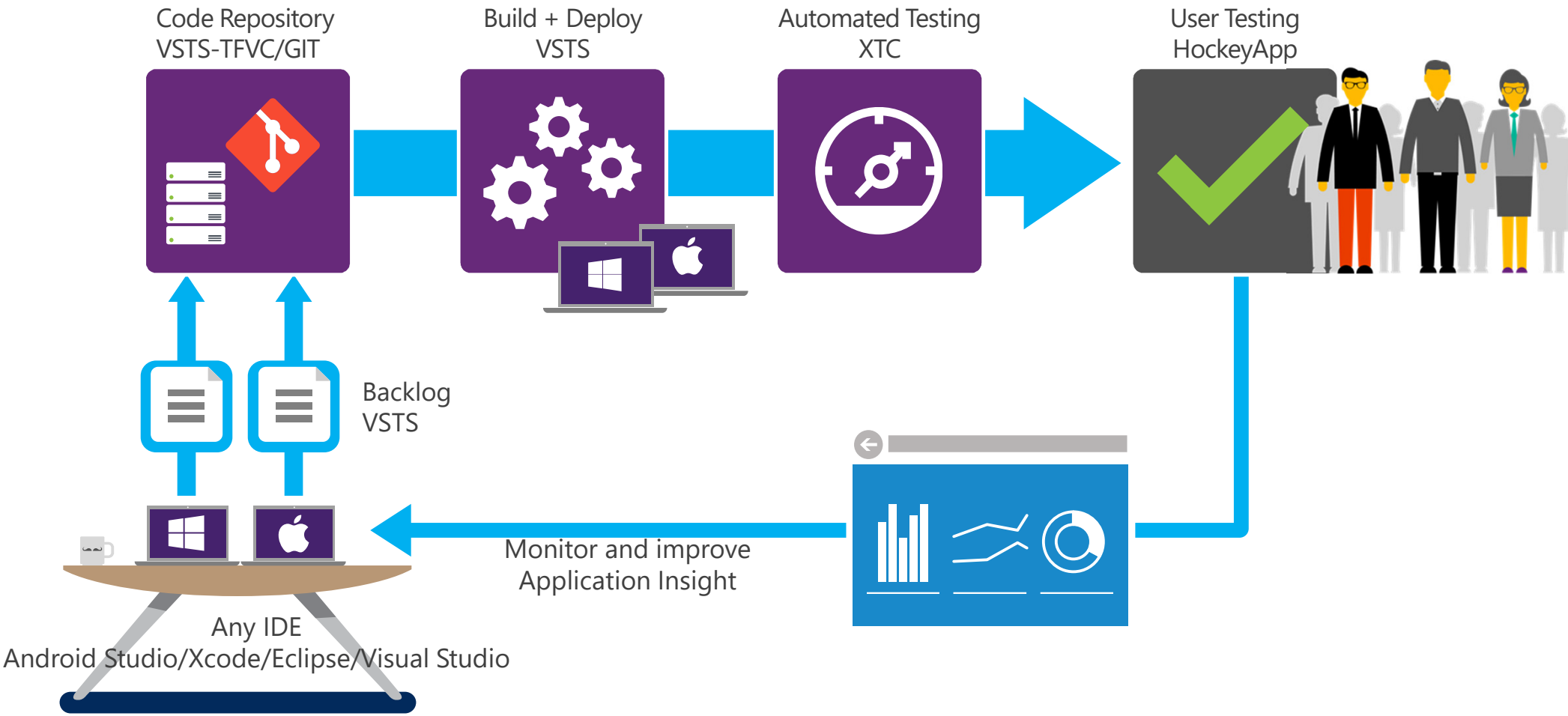
DevOps for OSS



DevOps for WebApp

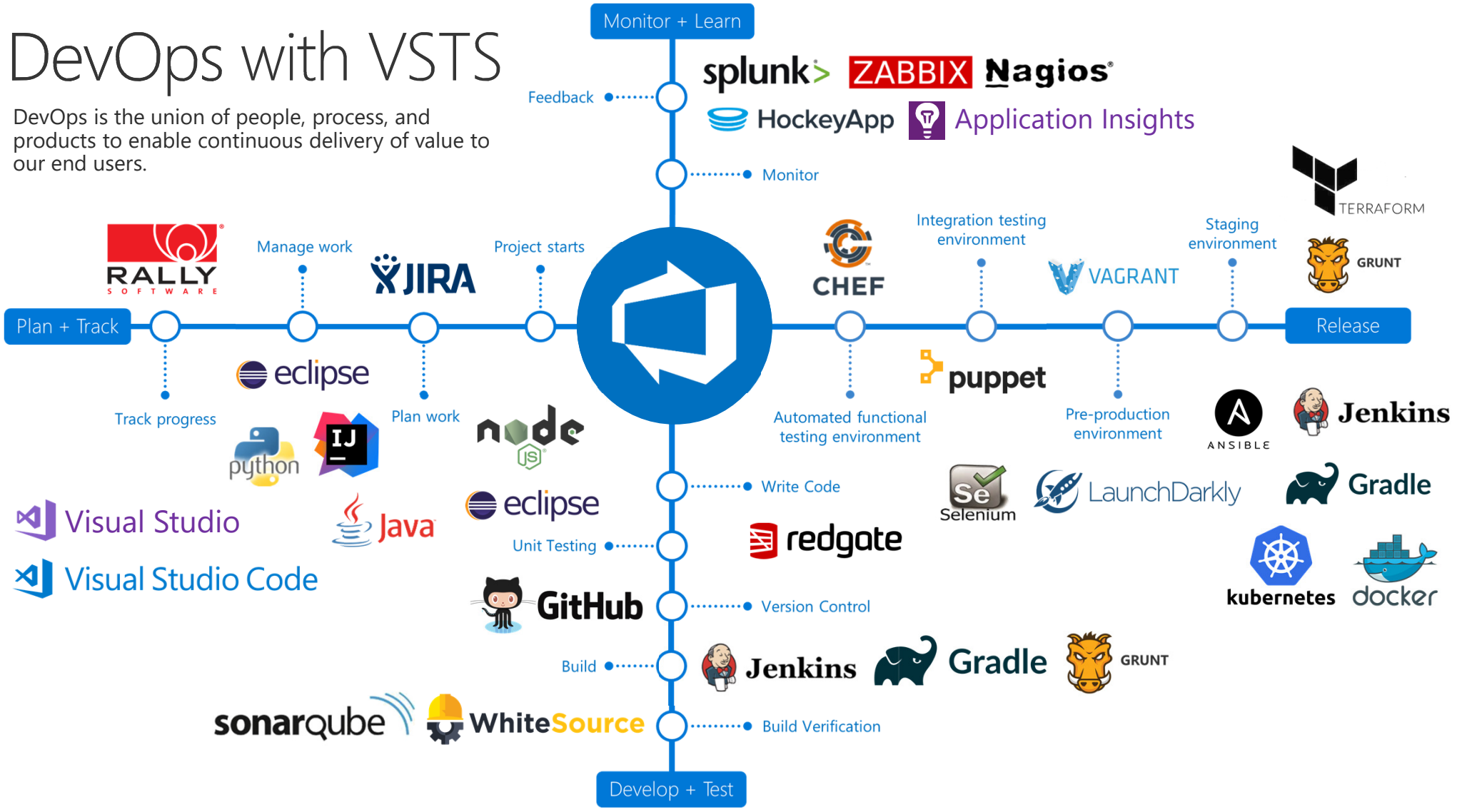


DevOps for Mobile app



DevOps with VSTS

DevOps is the union of people, process, and products to enable continuous delivery of value to our end users.



Q & A

Thank you

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