DevOps at Scale: A True Story

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Microsoft MVP – Visual Studio ALM
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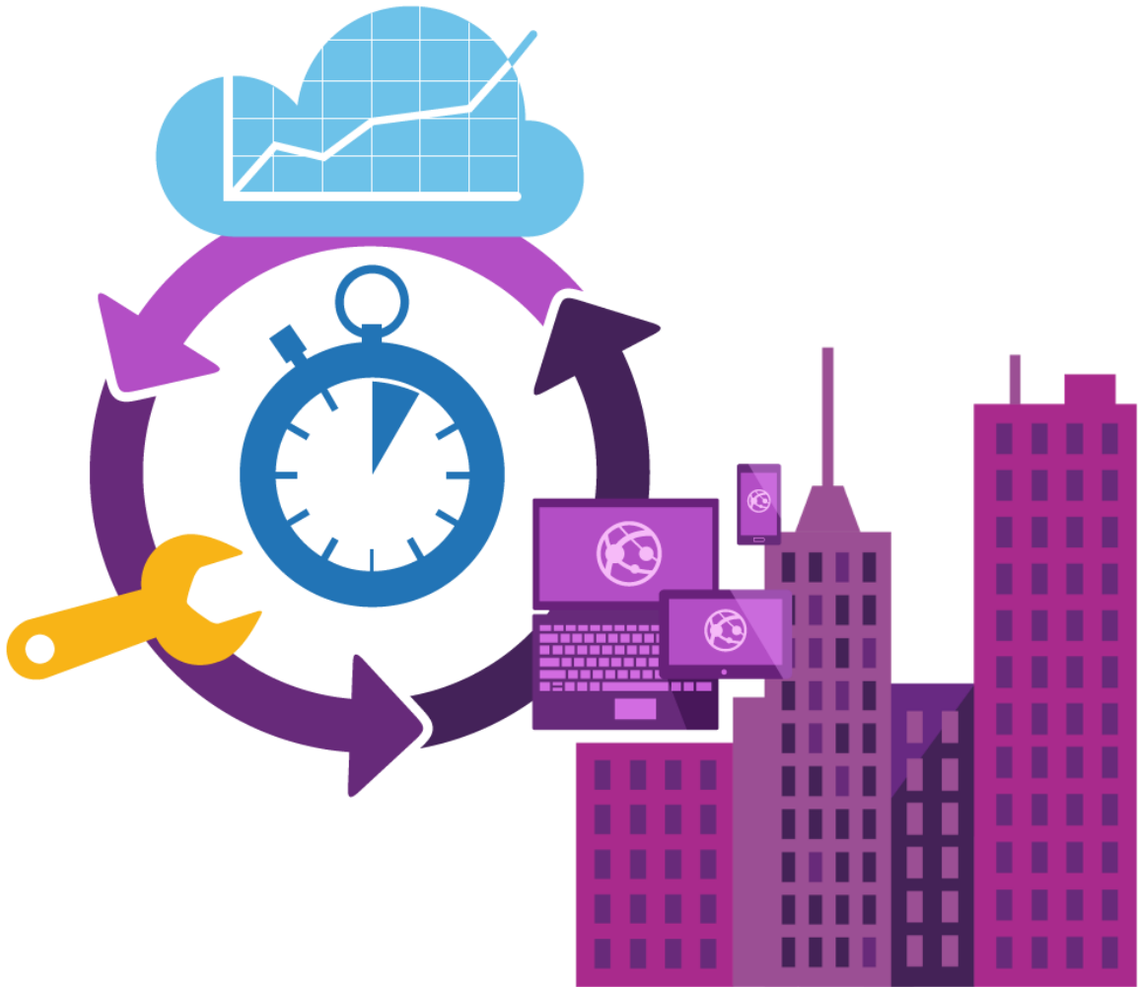

Microsoft® Most Valuable Professional

@bout Me

Davide Benvegnù

Director & CTO – DBTek Ltd

Former International Development Manager – Aruba.it

Microsoft **MVP** in Visual Studio ALM

Speaker - Trainer

Community Contributor (1 in HK, 2 in Italy)

13+ years experience in IT, 10+ years experience in ALM / DevOps

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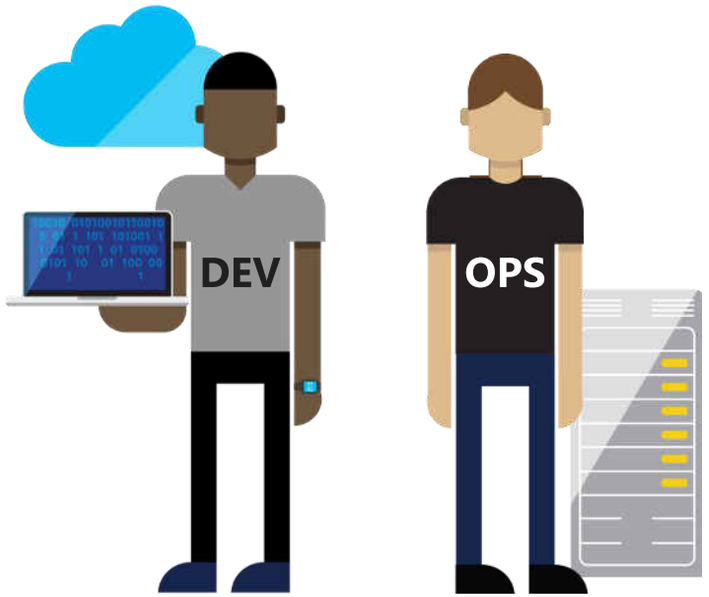
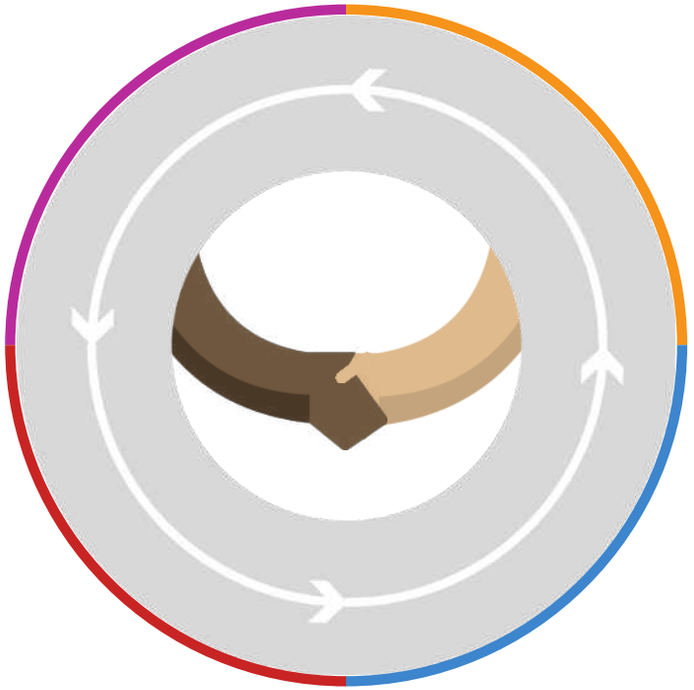
DevOps: the three stage conversation





1	People

2	Process

3	Tools

DevOps Framework

Client Workstations

Source and Version control

Test

Build

Deploy

Production

Pre-Production

Integration

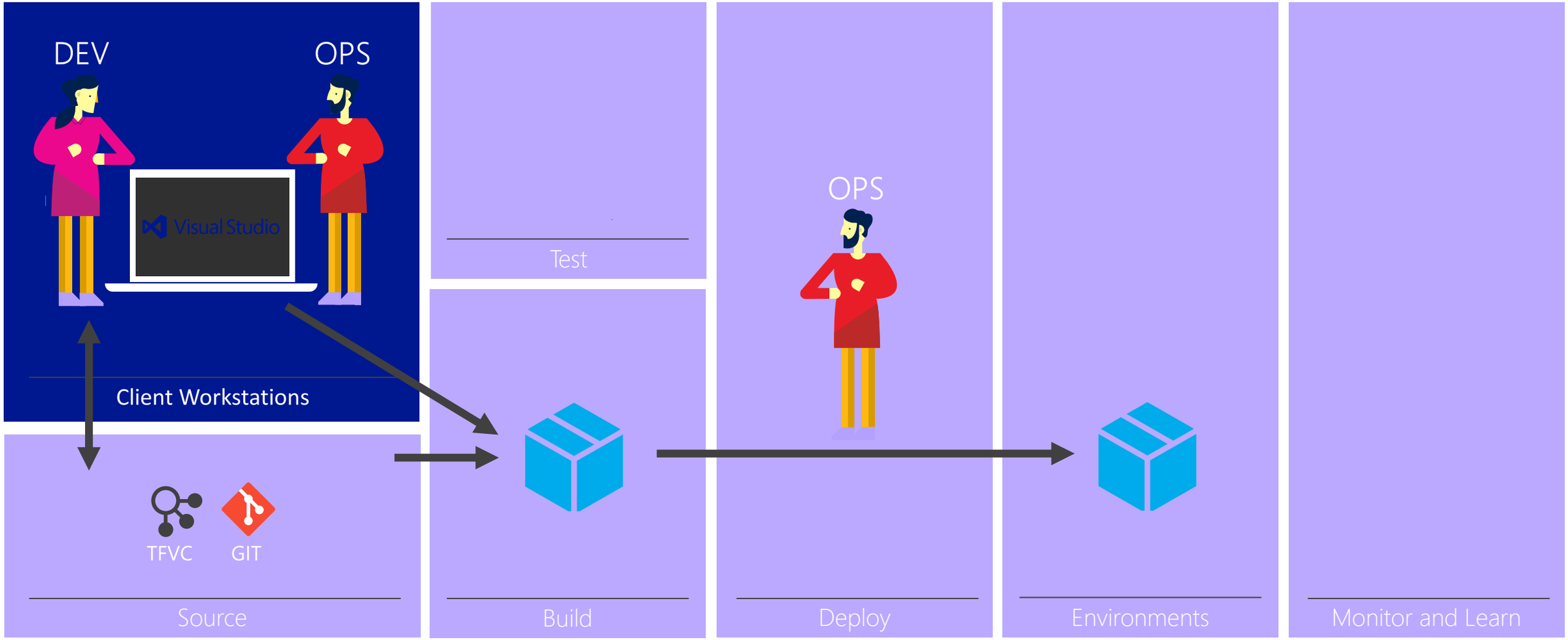
Dev/Test

Environments

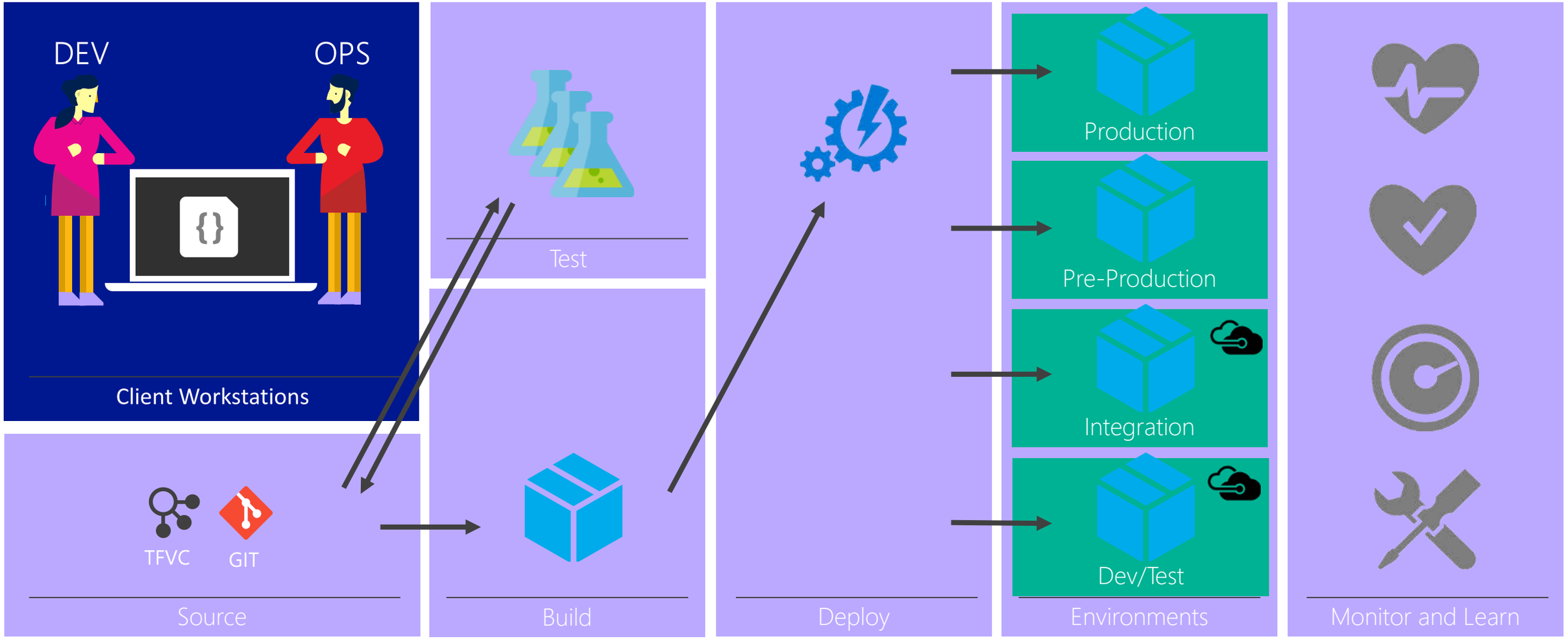
Monitor and Learn

Processes

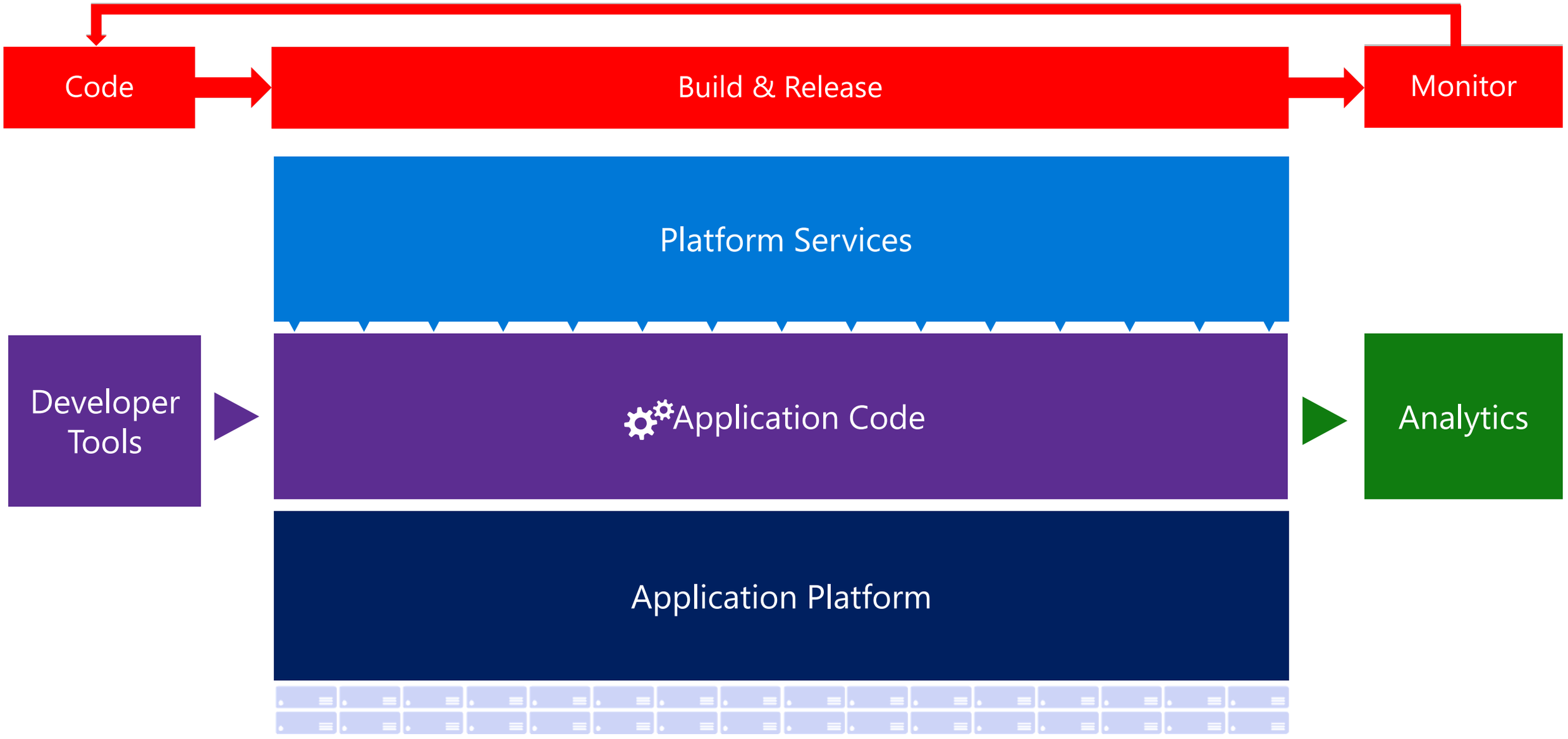
Manual Builds and Deploy



Continuous Integration and Deployment



Microsoft's Cloud Development Platform



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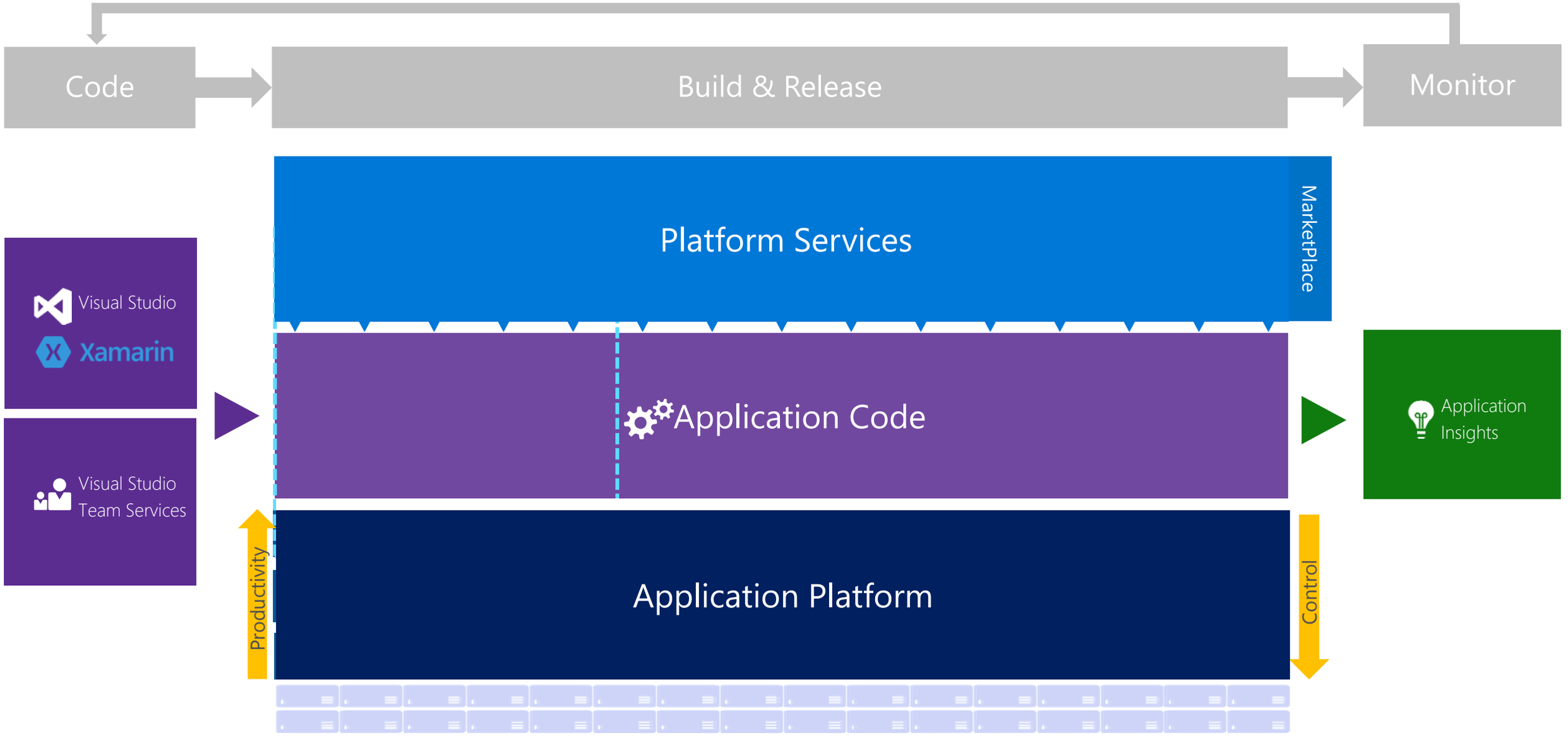
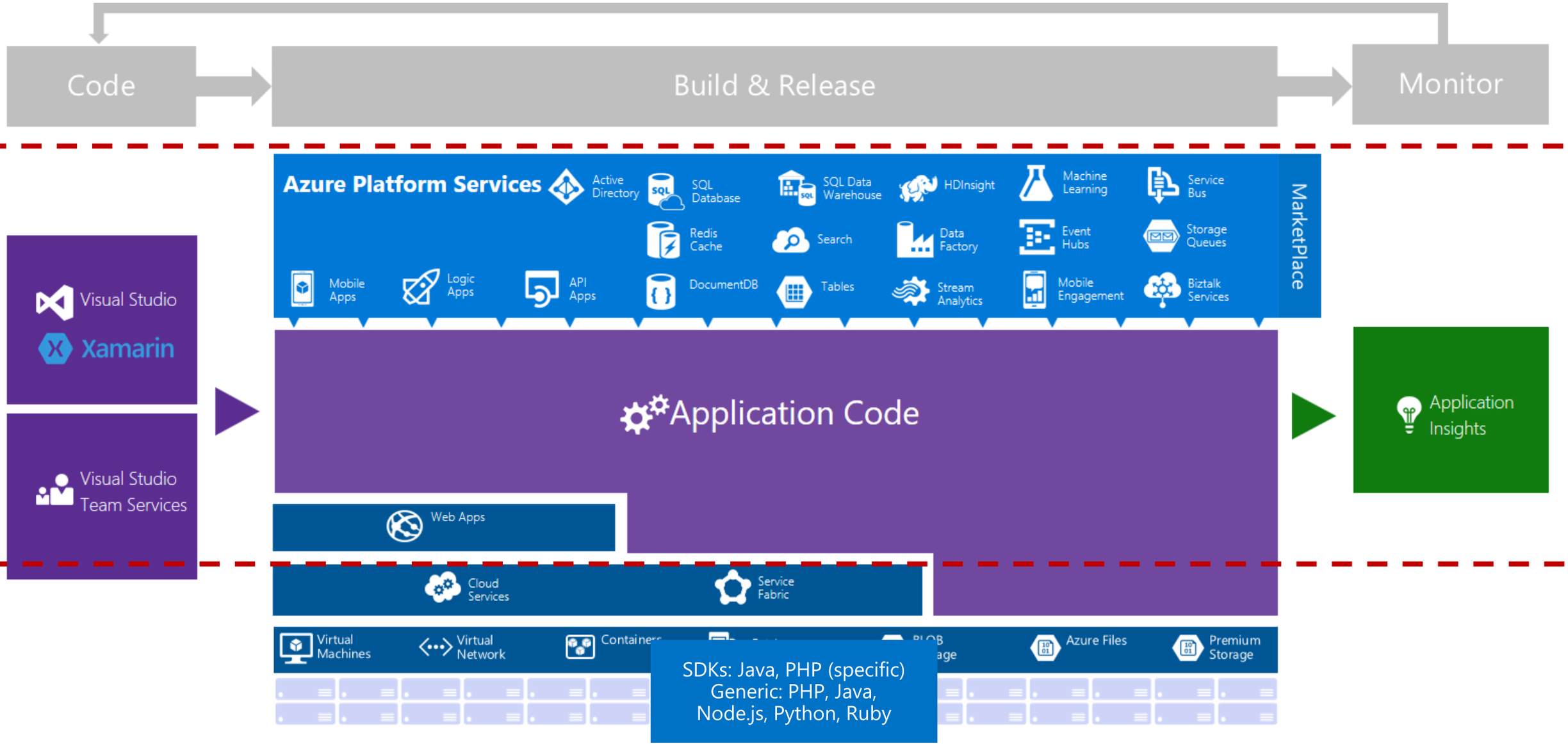
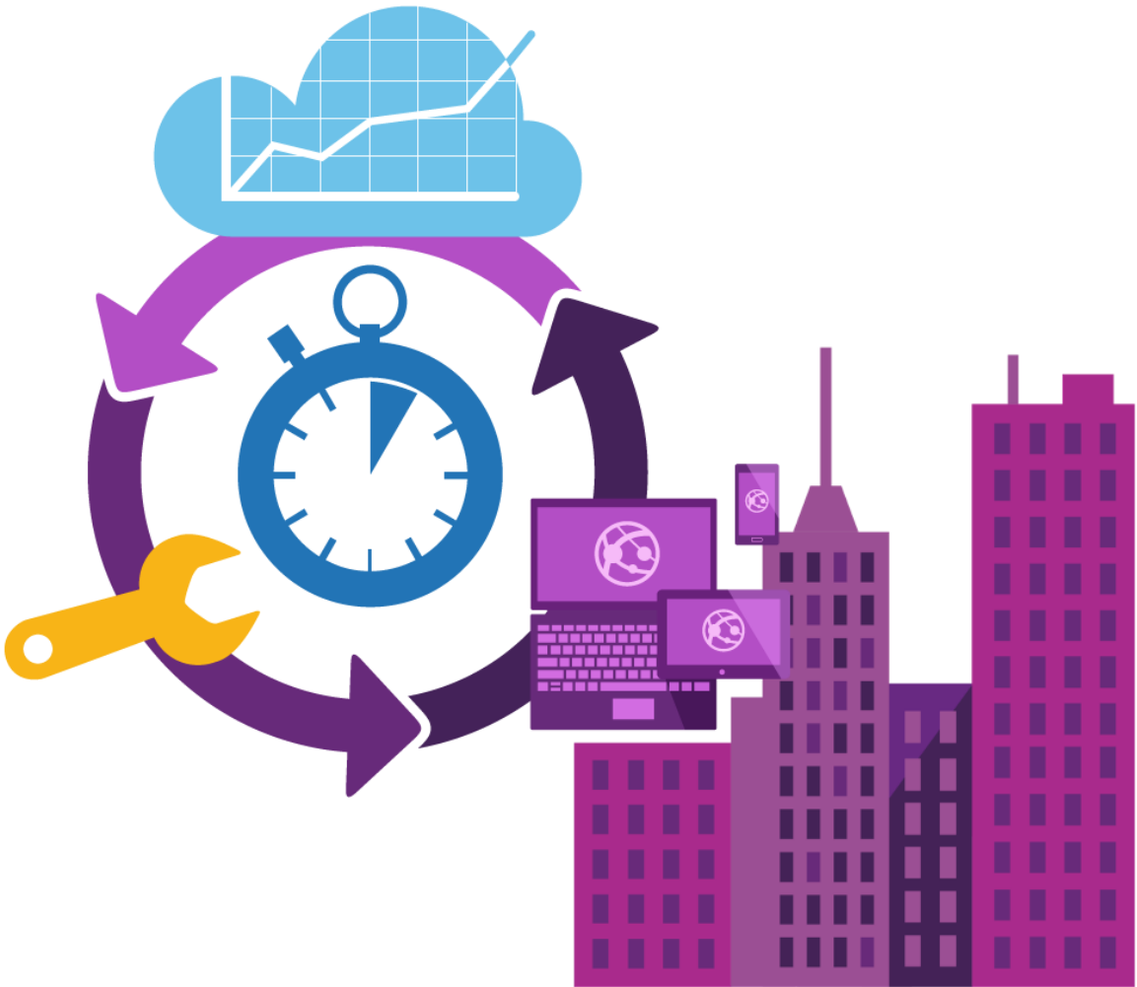


Enterprise Web & Mobile Dev Platform



The Microsoft DevOps solution

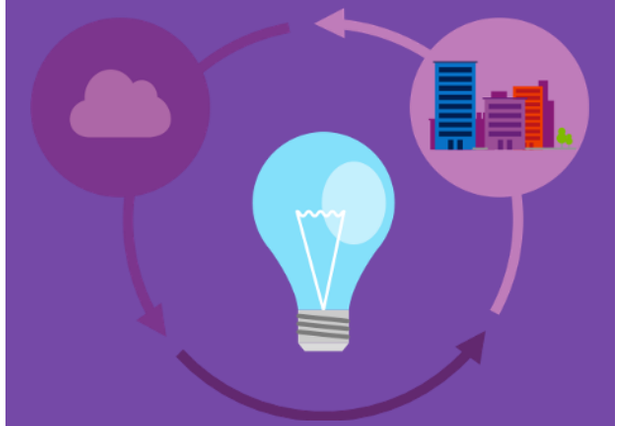
Overview



The Microsoft DevOps solution

An integrated, end-to-end solution for teams of any size to design, build and manage enterprise solutions and cross-platform mobile business apps.

Shorten cycle times and deliver value faster



Improve quality and availability

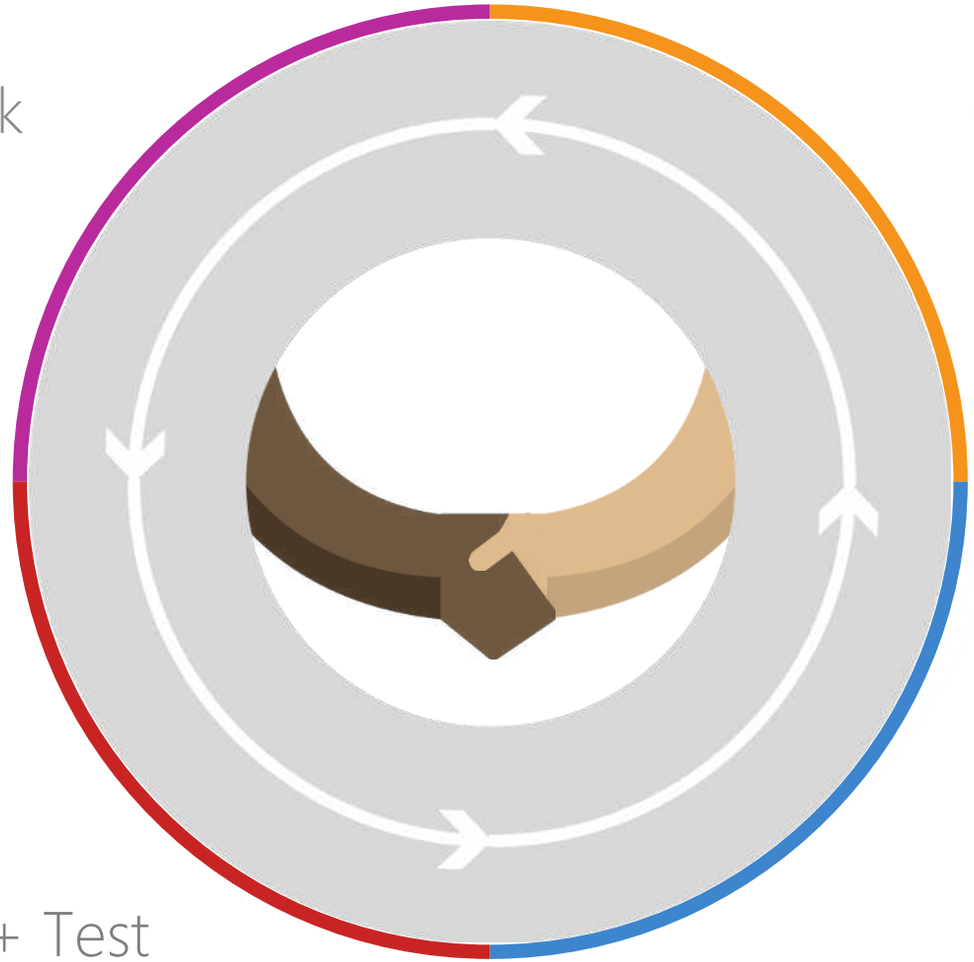
Optimize resources and eliminate waste

Deliver mobile apps with digital-era velocity

End-to-end DevOps

1 Plan + Track

4 Monitor + Learn



Development

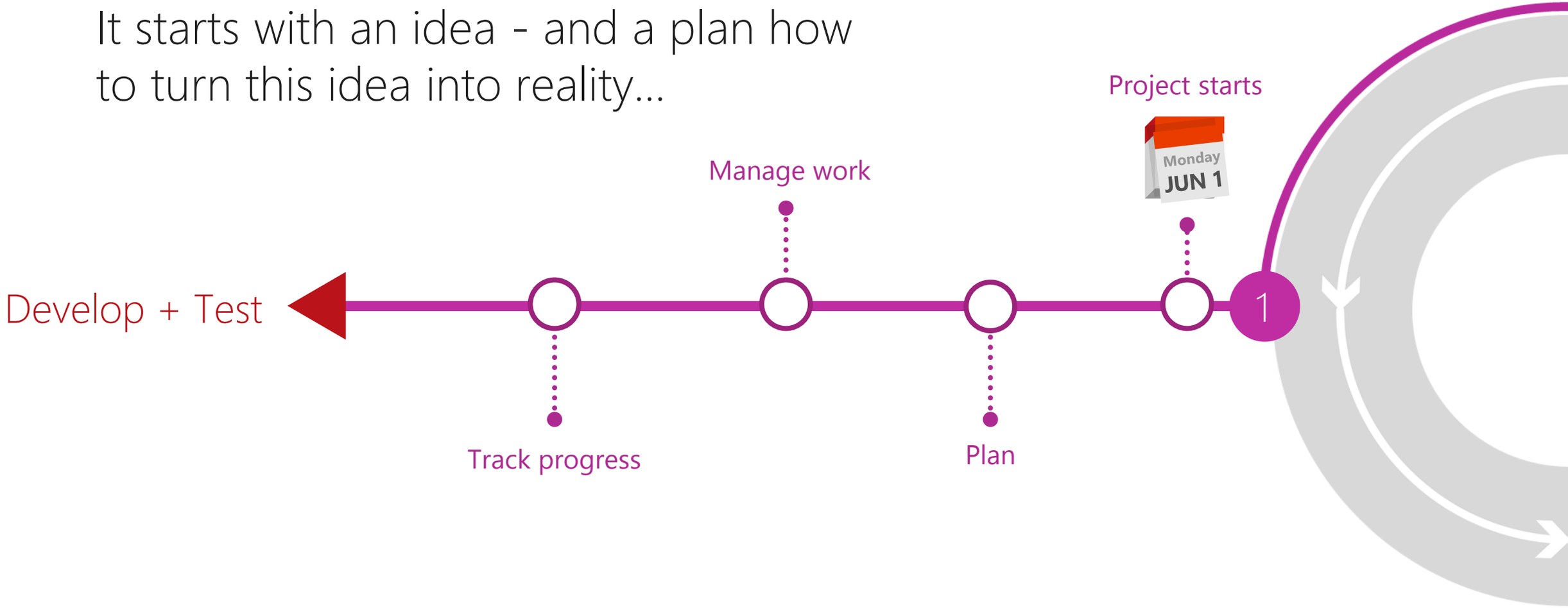
Production

2 Develop + Test

3 Release

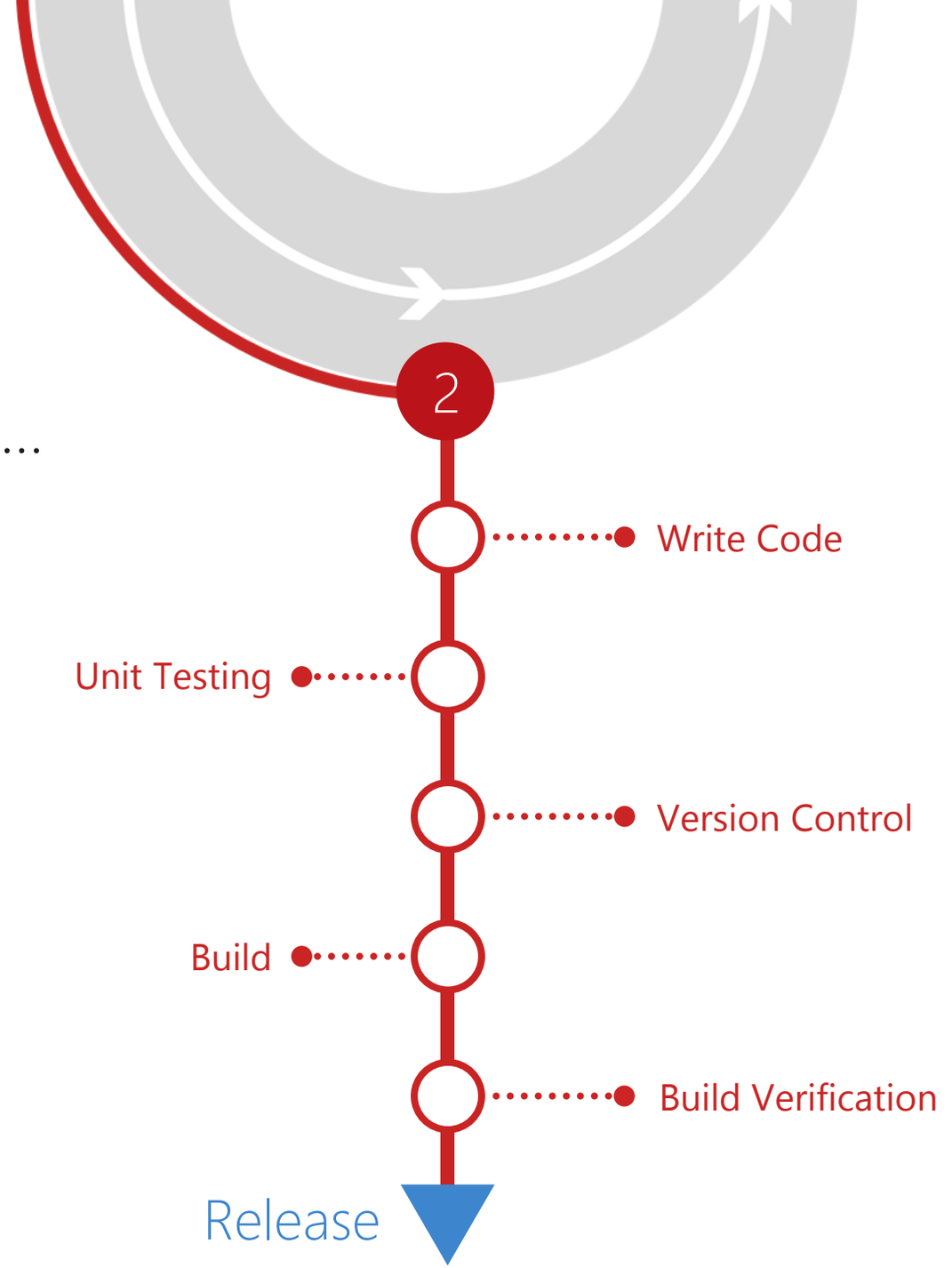
Plan + Track

It starts with an idea - and a plan how to turn this idea into reality…



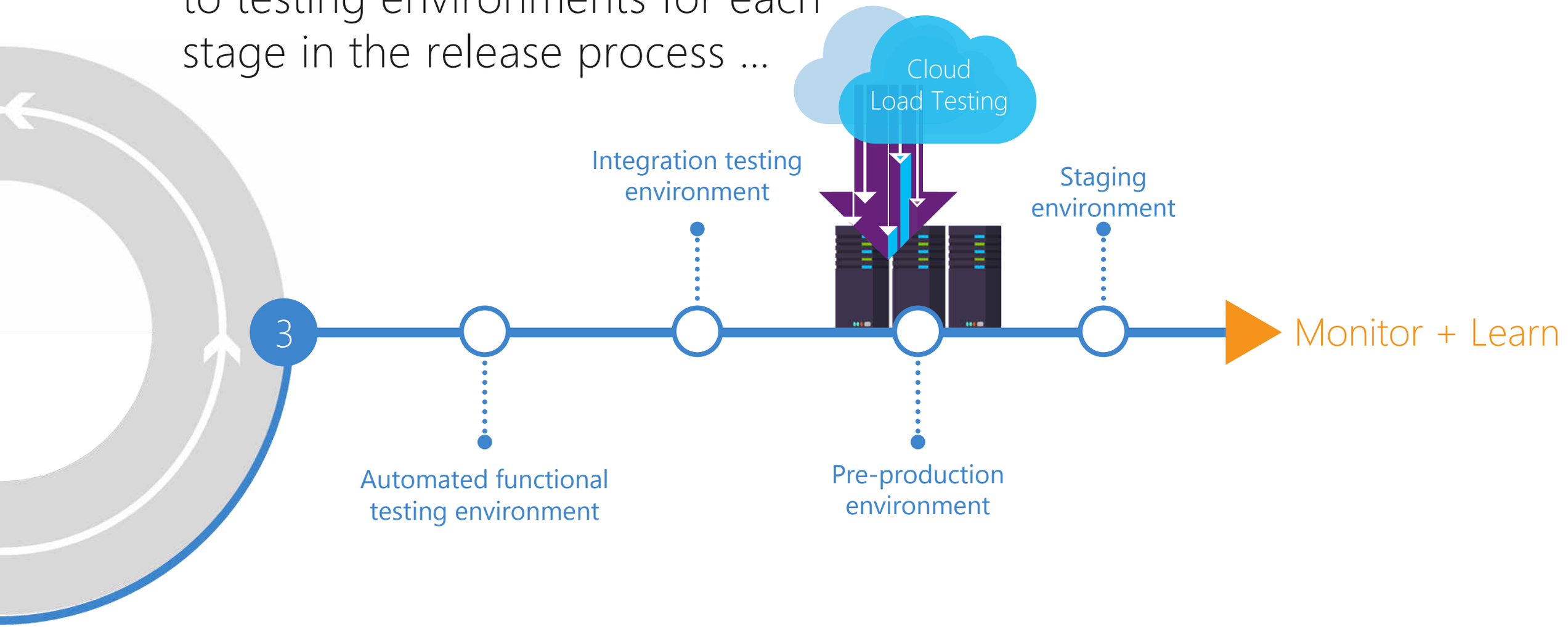
Develop + Test

After the iteration starts, developers turn great ideas into features and functionality …



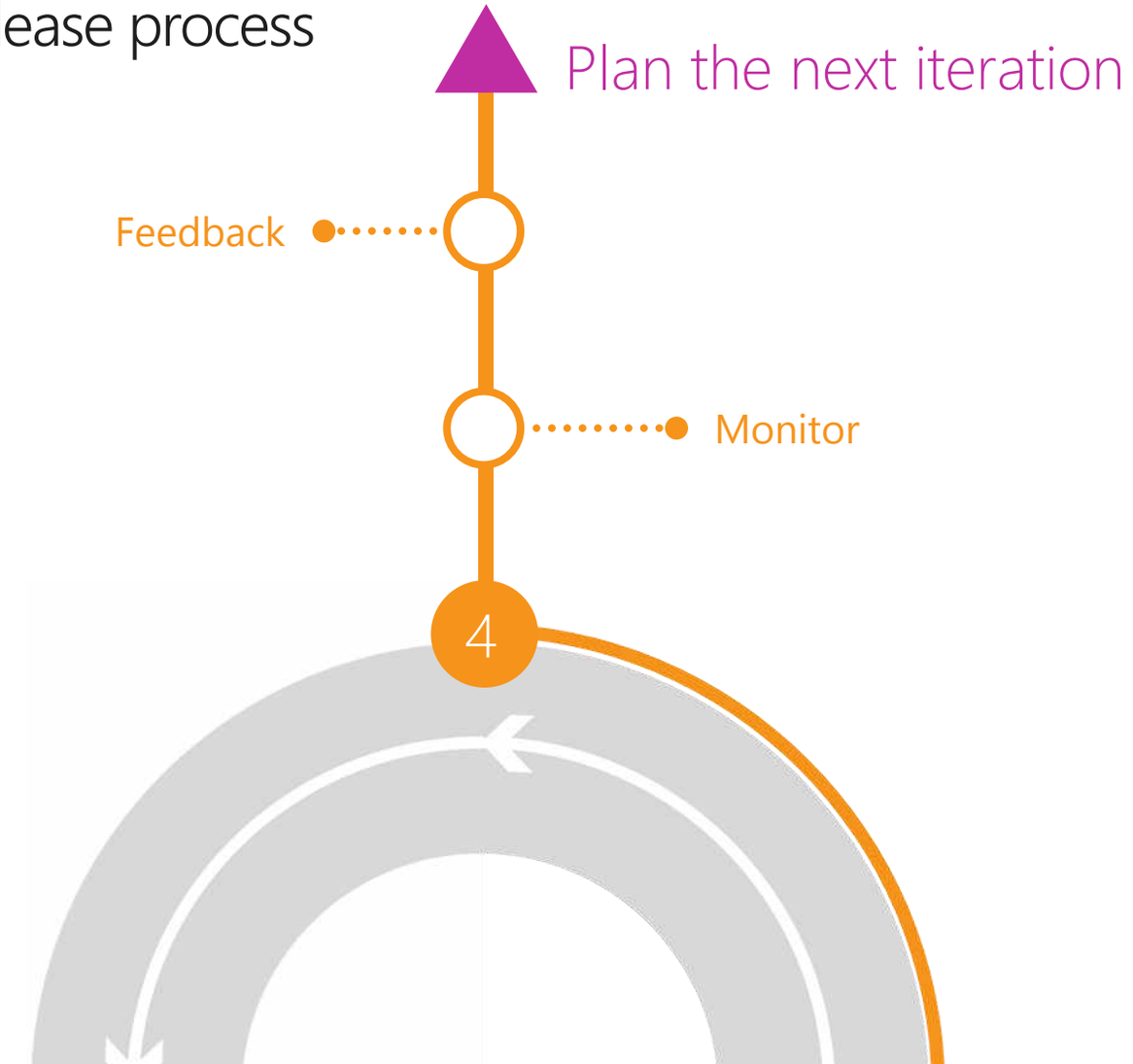
Release

When all tests pass, the build is deployed to testing environments for each stage in the release process …



Monitor + Learn

When all tests pass, the build is deployed to testing environments for each stage in the release process



Real example: *Aruba.it*

- 6 developers teams: Italy, Czech Rep., Poland, Ukraine
- 1 QA team
- 4 main products: Cloud, Hosting, Email, VPS

	Pre MS DevOps	Post MS DevOps
Avg project time:	~ 3 months	~ 1 month
Avg simultaneous projects:	5	10
Successful deploys to Prod:	43%	88%
Number of testers:	12 (QA)	12 (Sprint + QA)
Number of «deployers»:	6	2

Real Example: HOW?

SVN → TFVC

Source and Version control

Auto UI test +

Test Manager

Test

Continuous Integration TFS

Build

Release Management

Continuous Deployment

Deploy

Production

Staging

Integration

Dev/Test

Environments

App Insights: Health & Performance Analysis

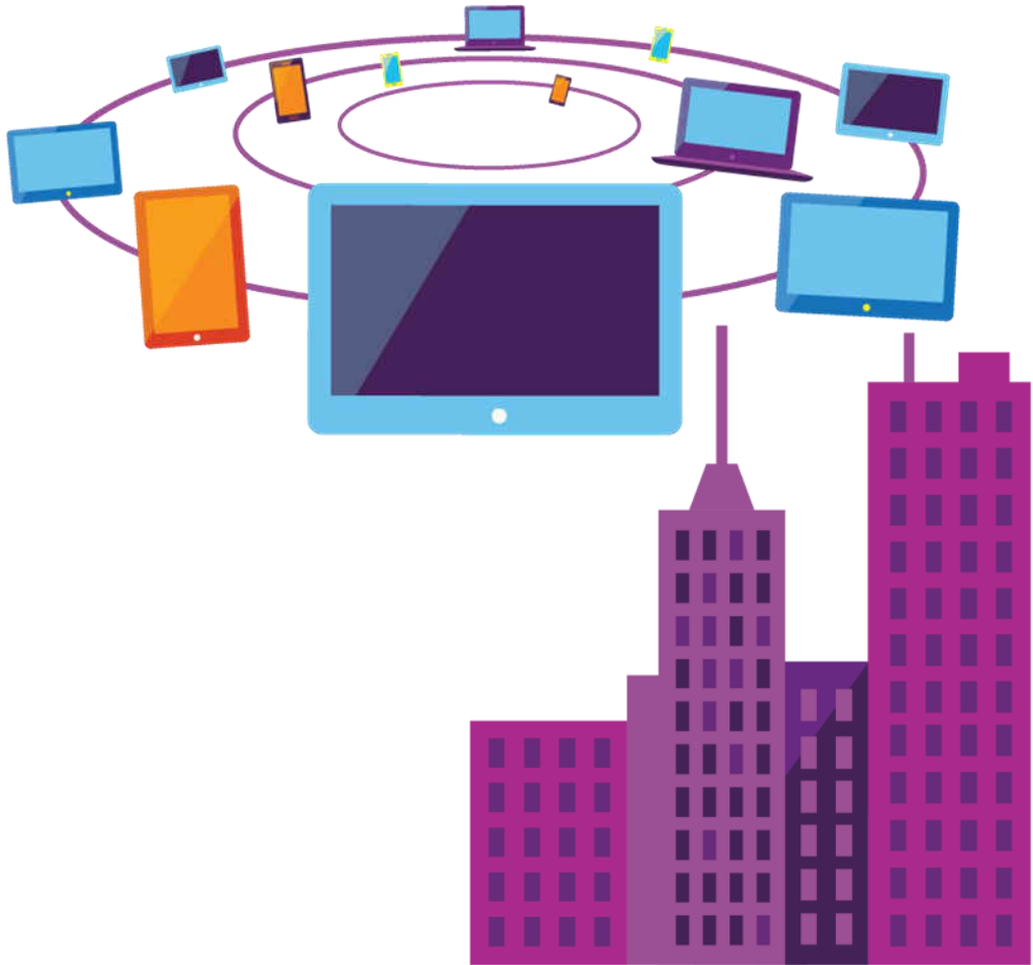
Monitor and Learn

Agile management with TFS (Scrum, Kanban, Task)

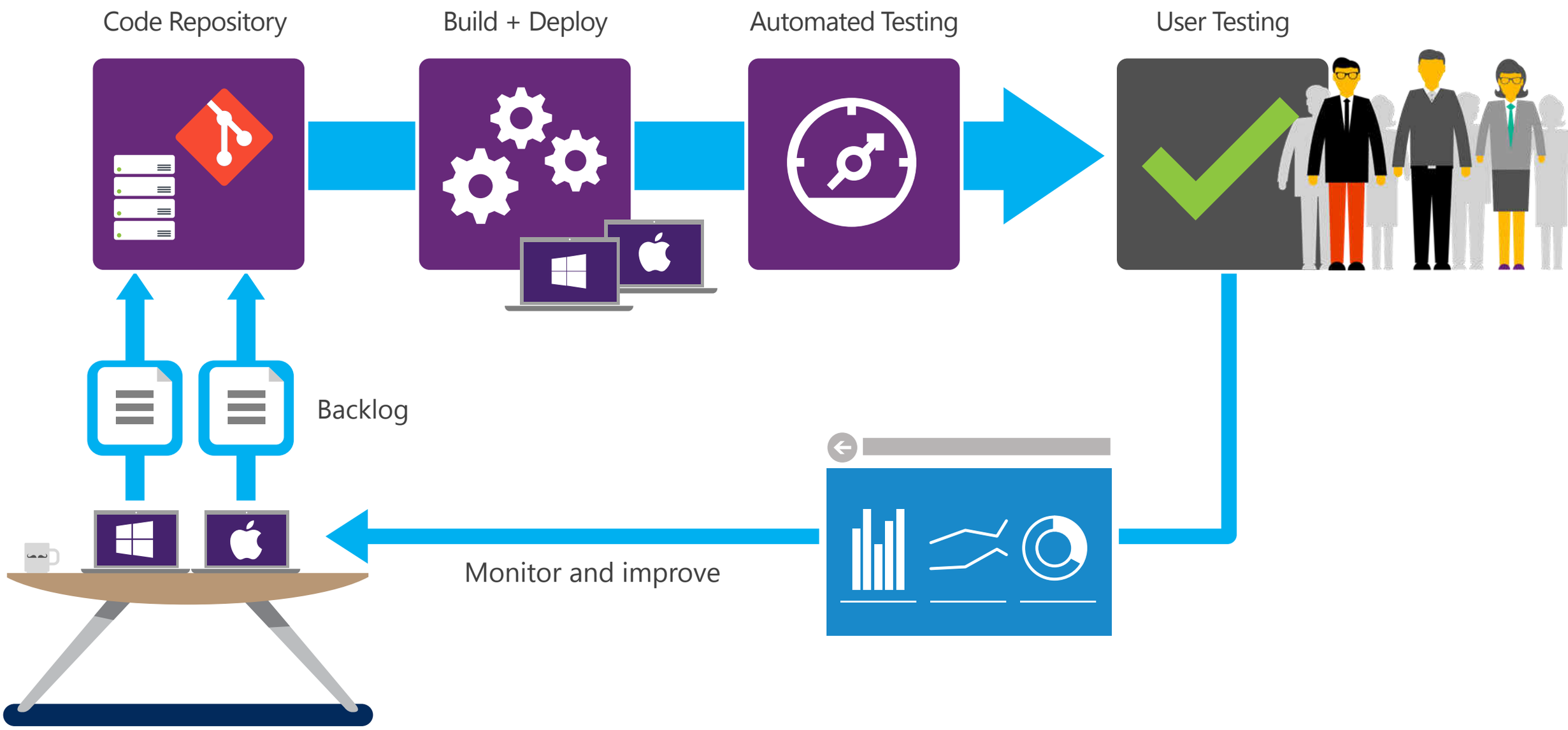
Processes

The Microsoft DevOps Solution

DevOps for the digital era



Mobile app CI and CD



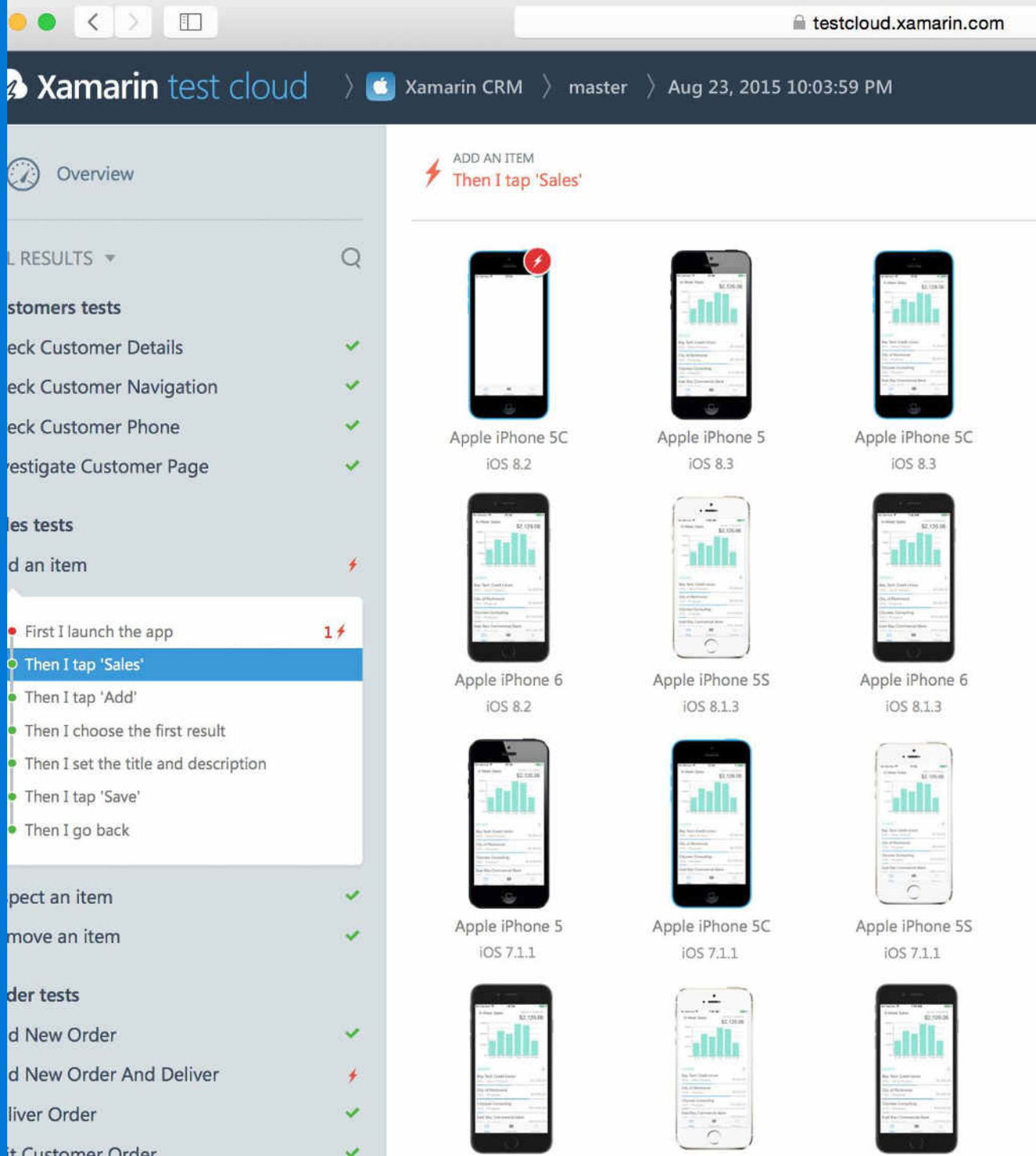
Xamarin Test Cloud

2,000+ devices

Automate your app testing and run them on over 2,000 different real devices. Test everything users do, as well as any performance problems with step-by-step memory and performance tracking.

Real devices, real quality

- Ensure higher quality by testing on real devices
- Automate app testing on over 2,000 real devices
- Use C#, Ruby, or Cucumber to build automated tests
- Integrates with any continuous integration system



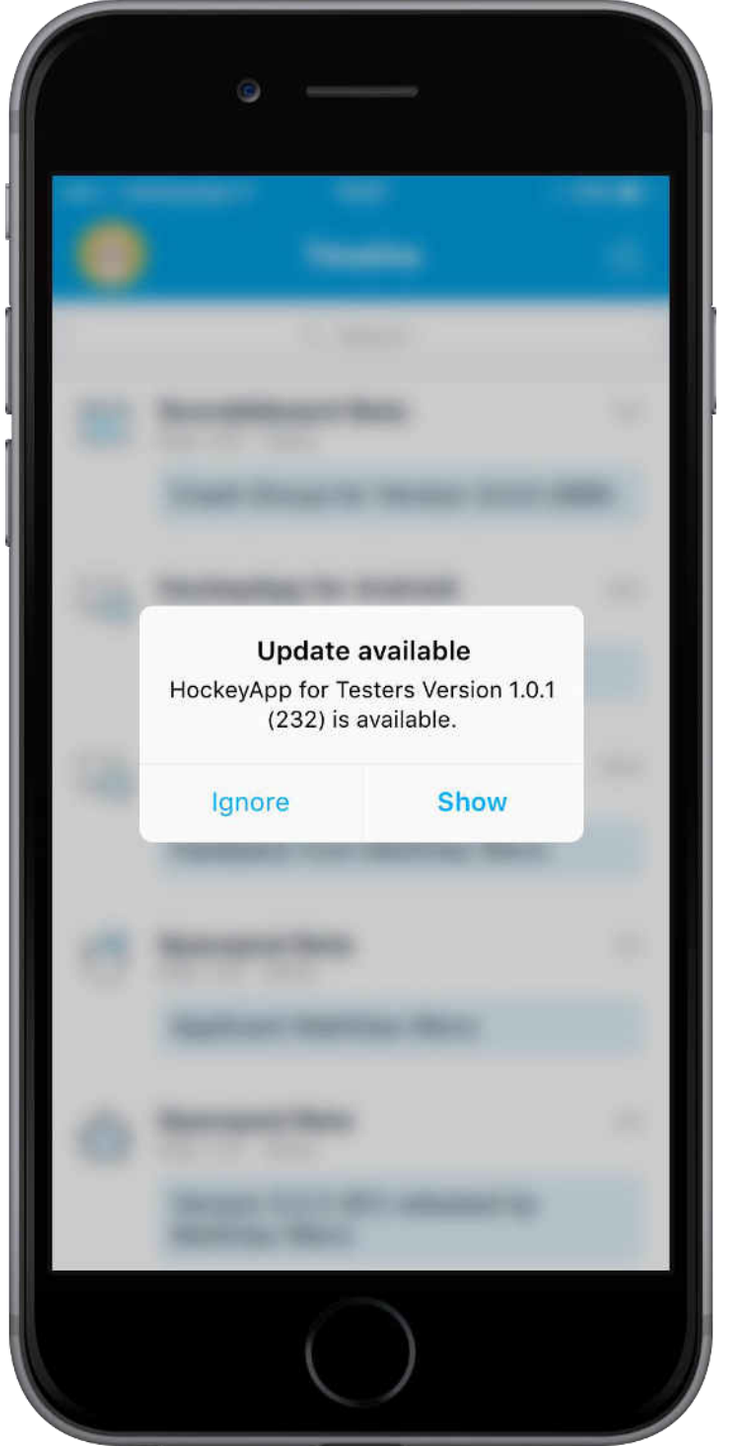
HockeyApp Beta Distribution

In-house App Store for testers

Upload beta versions of your application to the HockeyApp store to allow testers to install and test beta versions on actual devices.

Deployment made easy

HockeyApp's desktop application automatically tracks all necessary information about your latest build in order to make uploading beta versions easy.



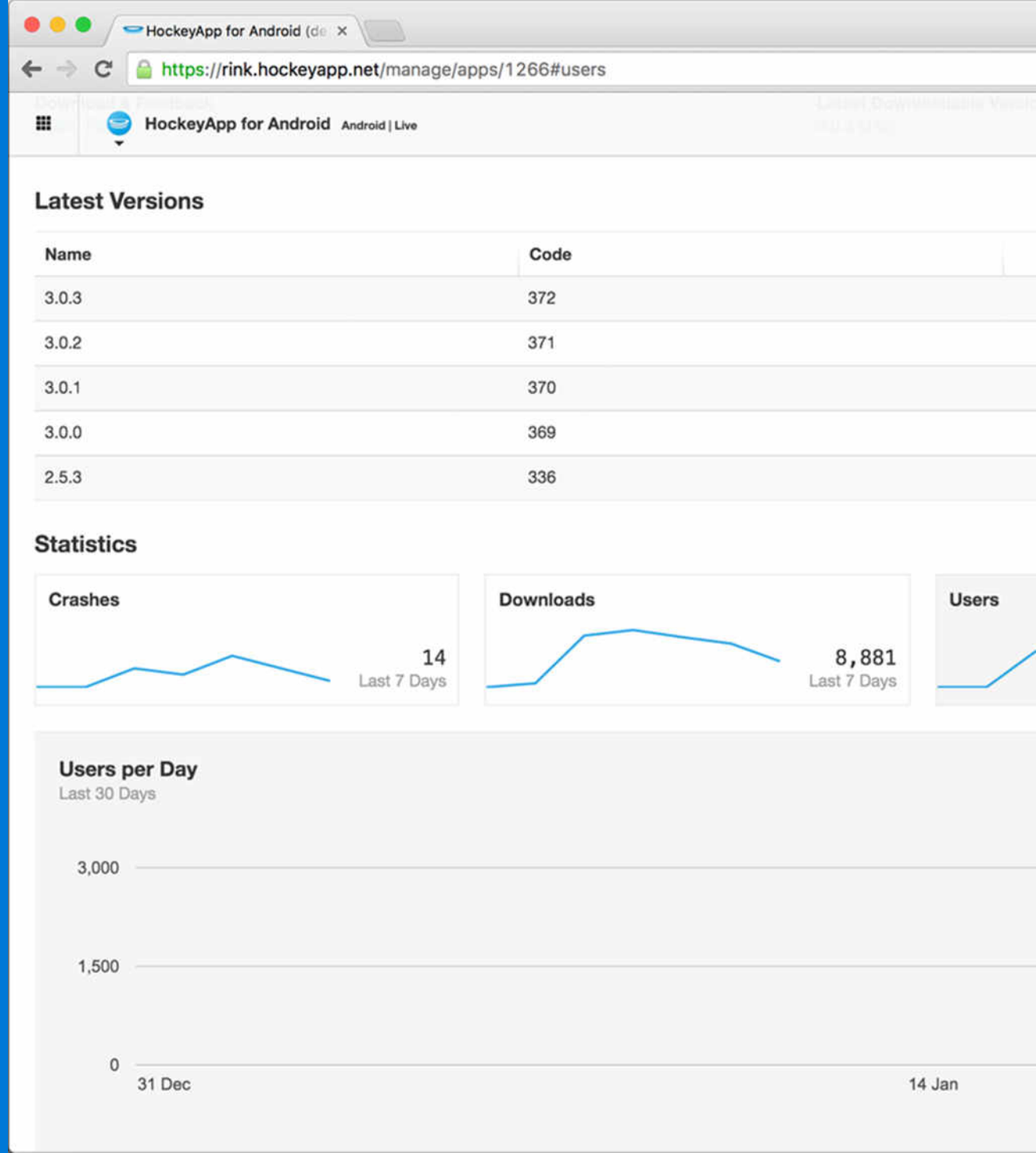
Beta test coverage

Real usage matters

Advanced metrics to see which devices were used, how long the app was used for, and which language was tested. No additional setup.

Detailed charts

HockeyApp features both raw data from analytics as well as live, interactive charts for the most important metrics.



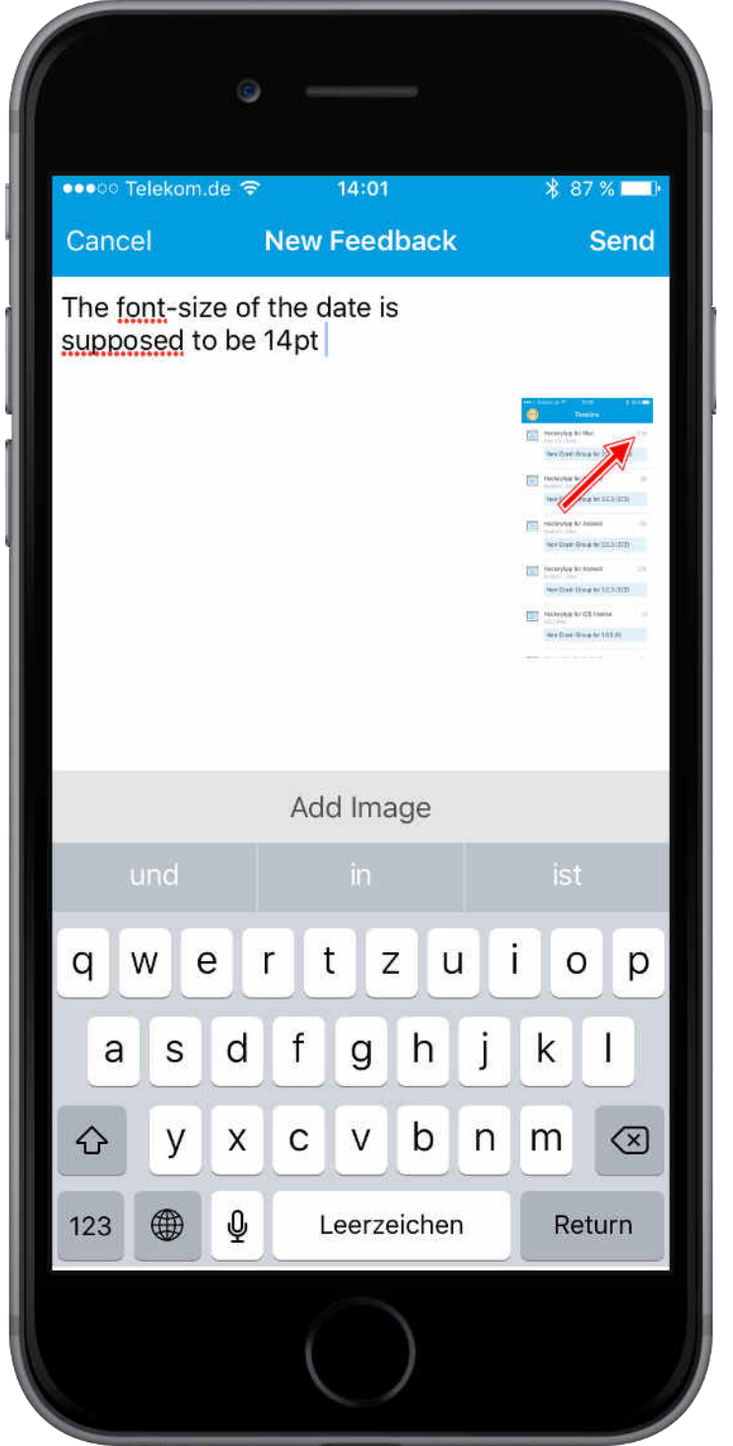
User feedback management

A conversation with your users

All feedback is handled as discussions. You can manage discussions in the web interface or through email. Search discussions, mark them as completed or create work items based on them. Give your users a voice outside of the app store.

For all development phases

You can use the feedback feature for all builds of your app or just beta versions. Either way, HockeyApp makes it easy for users to tell you what's what. Let them post ideas right from within your app.



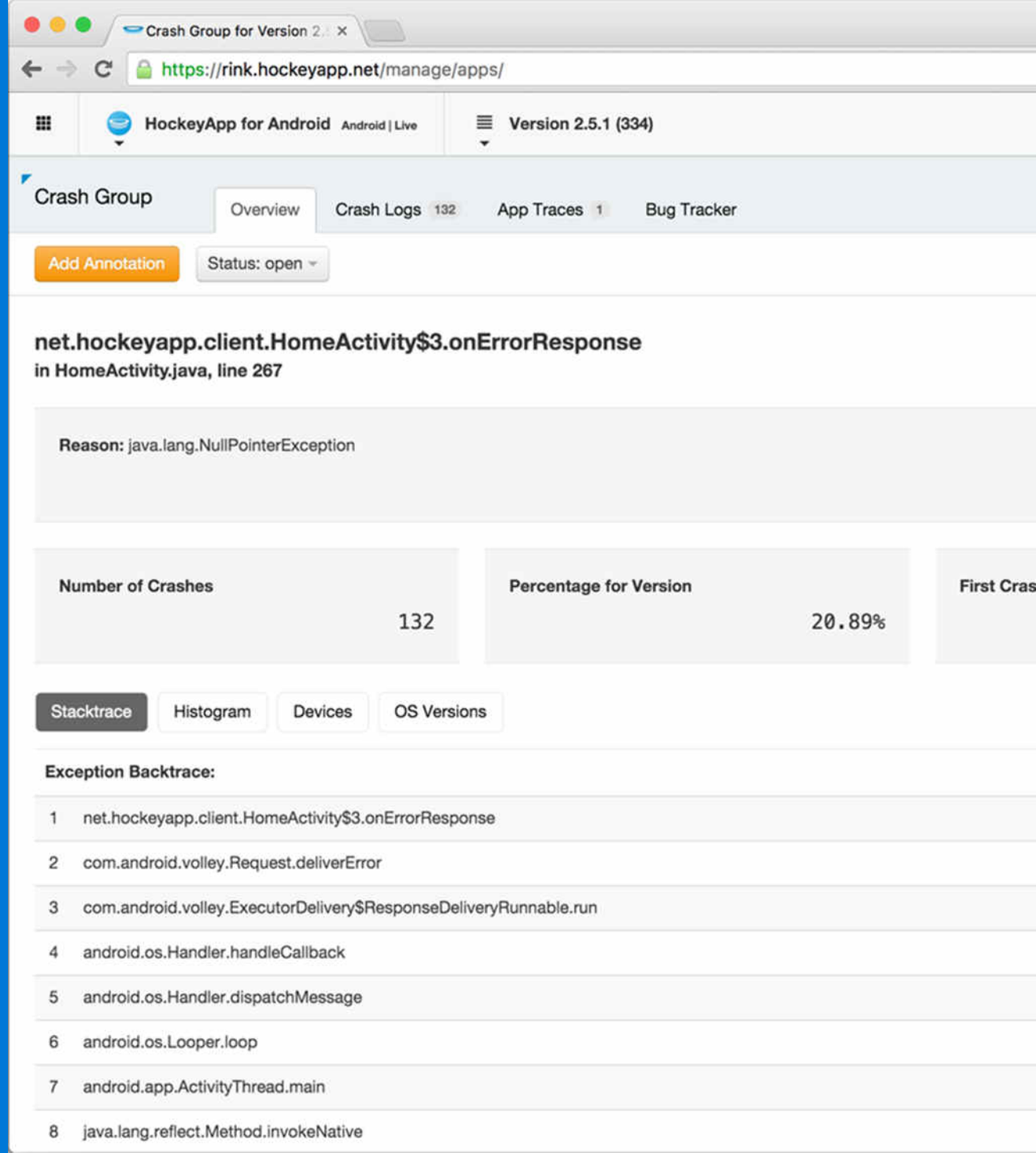
HockeyApp Crash Analytics

No additional code

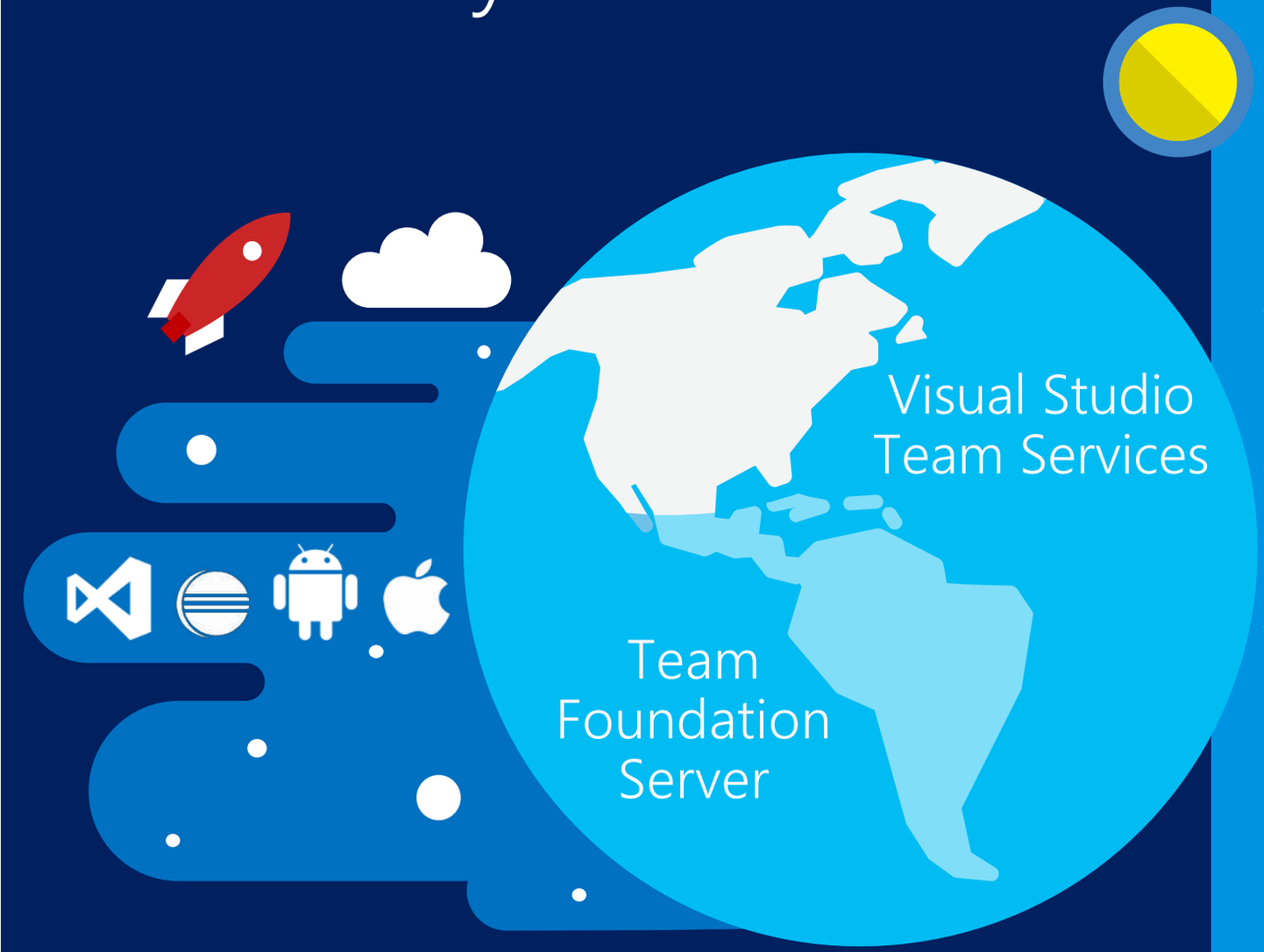
By integrating HockeyApp's open source SDK for Android, iOS, Mac, and Windows your apps can send crash reports directly to HockeyApp, no additional code needed.

Powerful crash analytics

HockeyApp processes and symbolicates all crash reports. This gives you meaningful stack traces with friendly class names, methods, and accurate line numbers.



Summary



Open, flexible and extensible cross-platform DevOps tools

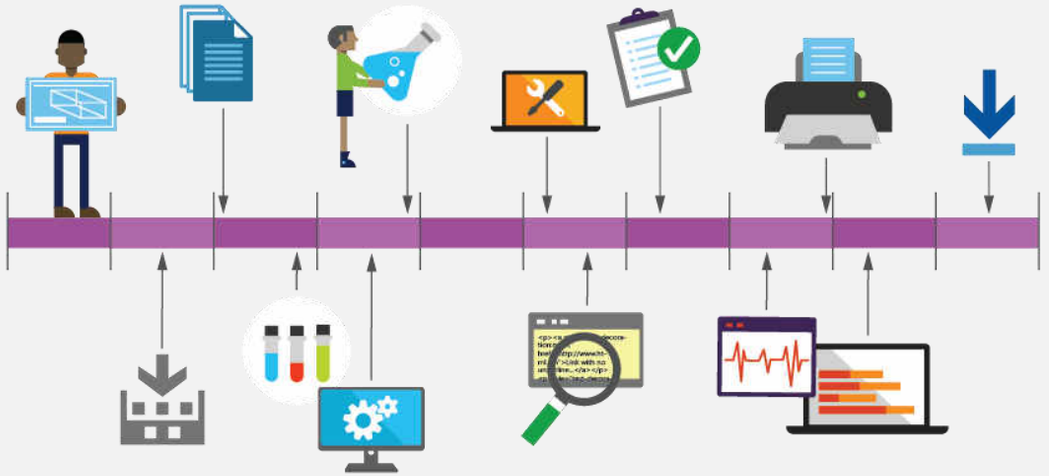
Enterprise Ready

- *SLA*
- *Security*

Enables Mobile DevOps

- *Xamarin Test Cloud*
- *HockeyApp*

Thanks!



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