

Manifesto for Digital Architecture

Values

Innovation and ecosystems over industrialization and value chains
Service contracts and automation over technology standards and processes
Focus and refactoring over detailed architectural design

Principles

Our highest priority is to ensure the digital happiness of the customer by creating beautiful solutions, being transparent, and respecting customer values.

Because the customer knows best we involve her each step of the way, iterating on fulfilling her needs with constant feedback, being agile, and using automation.

We want to be a player in the customer's ecosystem of value, collaborating with other players, in order to maximize customer value.

We recognize that security measures are a trade-off between risk and innovation speed, and the best way to deal with this is to address security from the start.

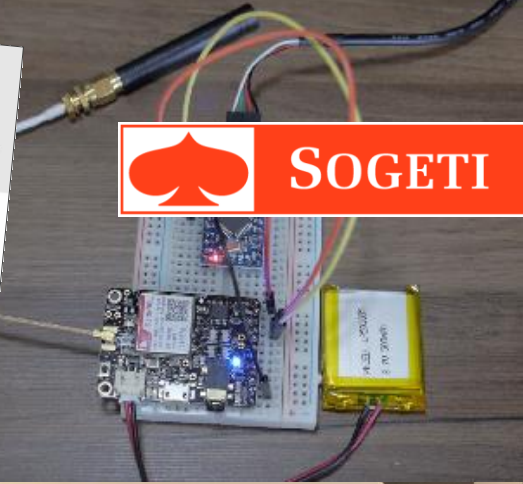
Instead of trying to meet everyone's needs, creating something that no one wants, we design a usable service to support an actual need.

We support heterogeneity and interoperability, so instead of standardization on technology, we focus on creating clearly defined service contracts.

We know that we constantly have to refactor both the way we think, work, and interact as well as the architecture, technical solutions, and code.



SOGETI



Christian Forsberg
Global Chief Architect

<http://youtu.be/cxGXQxsaPy8>



Beautiful Delivery

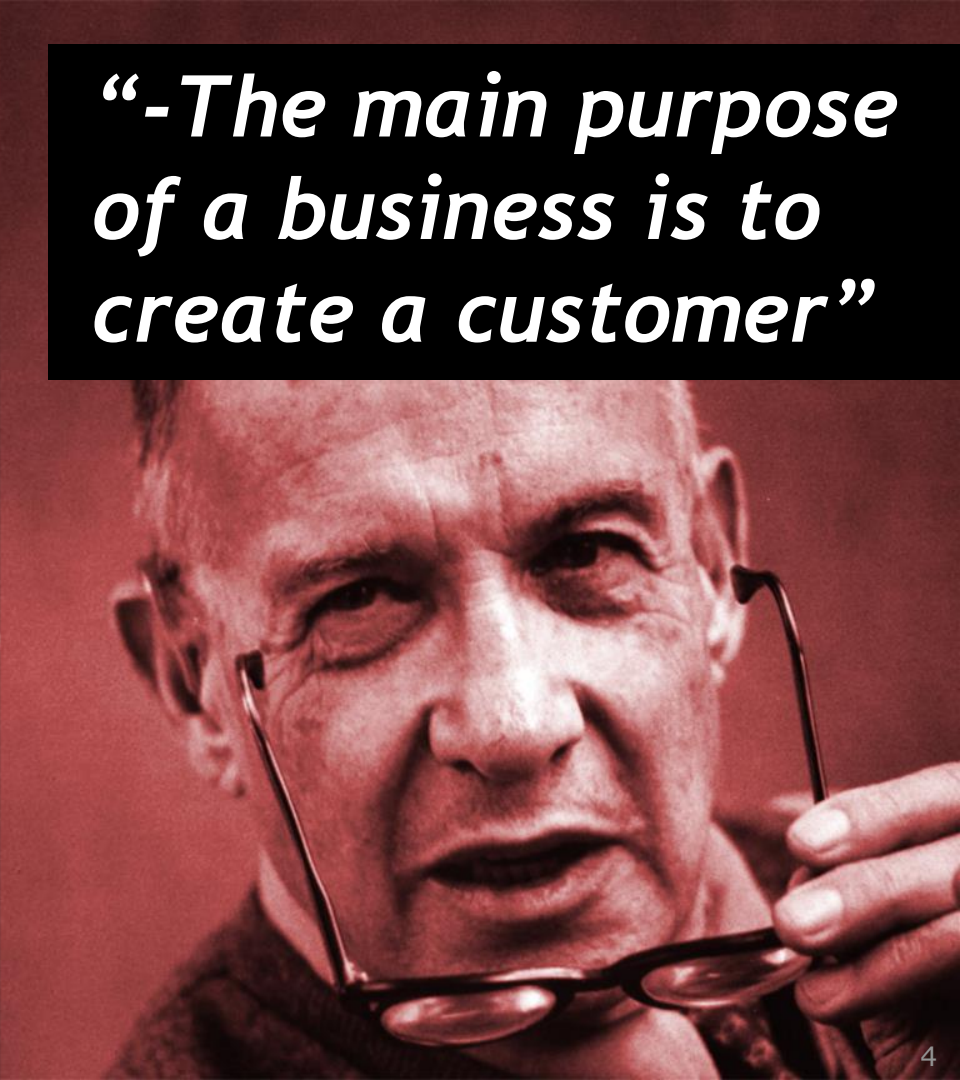
Christian Forsberg, Global Chief Architect

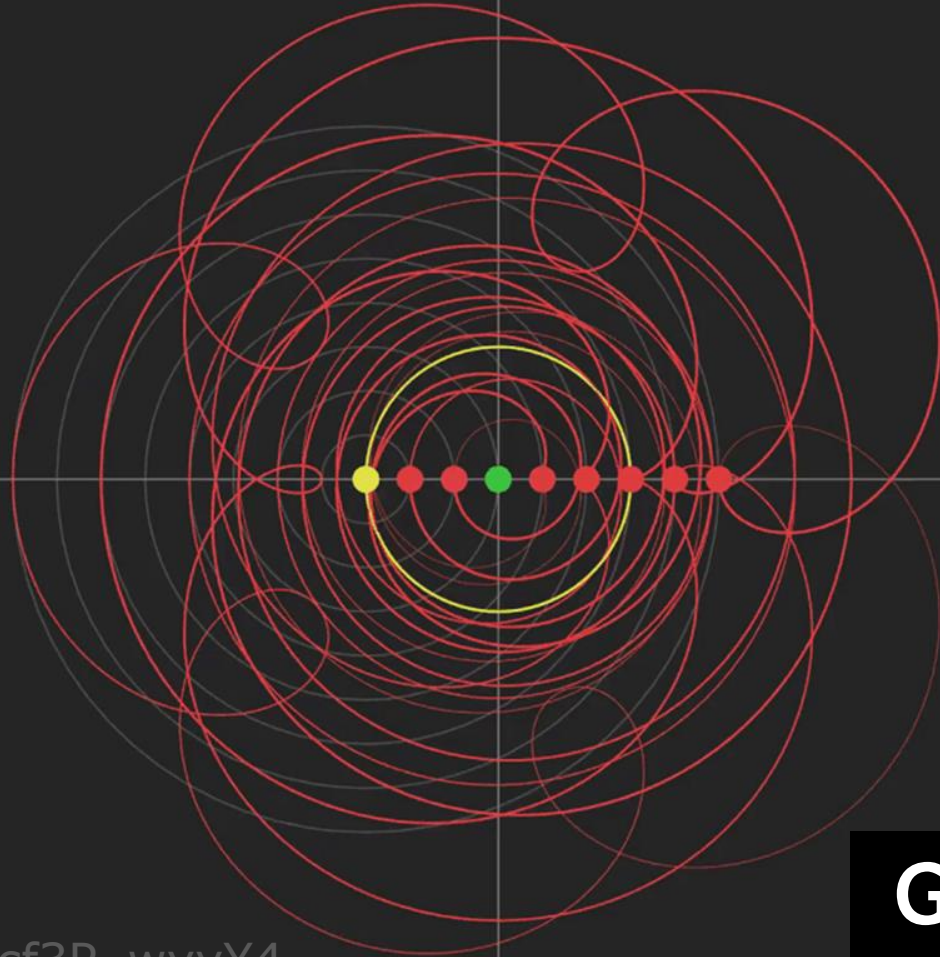
What is your focus?



***“-The main purpose
of a business is to
make money”***

***“-The main purpose
of a business is to
create a customer”***





Geocentrism

http://youtu.be/ccf3P_wyyY4



C⁵

Compassion

Curiosity

Creativity

Commit

Cross-disciplinary

A day with an autonomous team



Idea from customer feedback

Discuss how: CX, design, tech, biz

Decide to do it today!



Owner/tester write requirements/tasks

Architect sketch solution

Designer sketch UX/UI

DevOper prepare environment

Team goes through all together

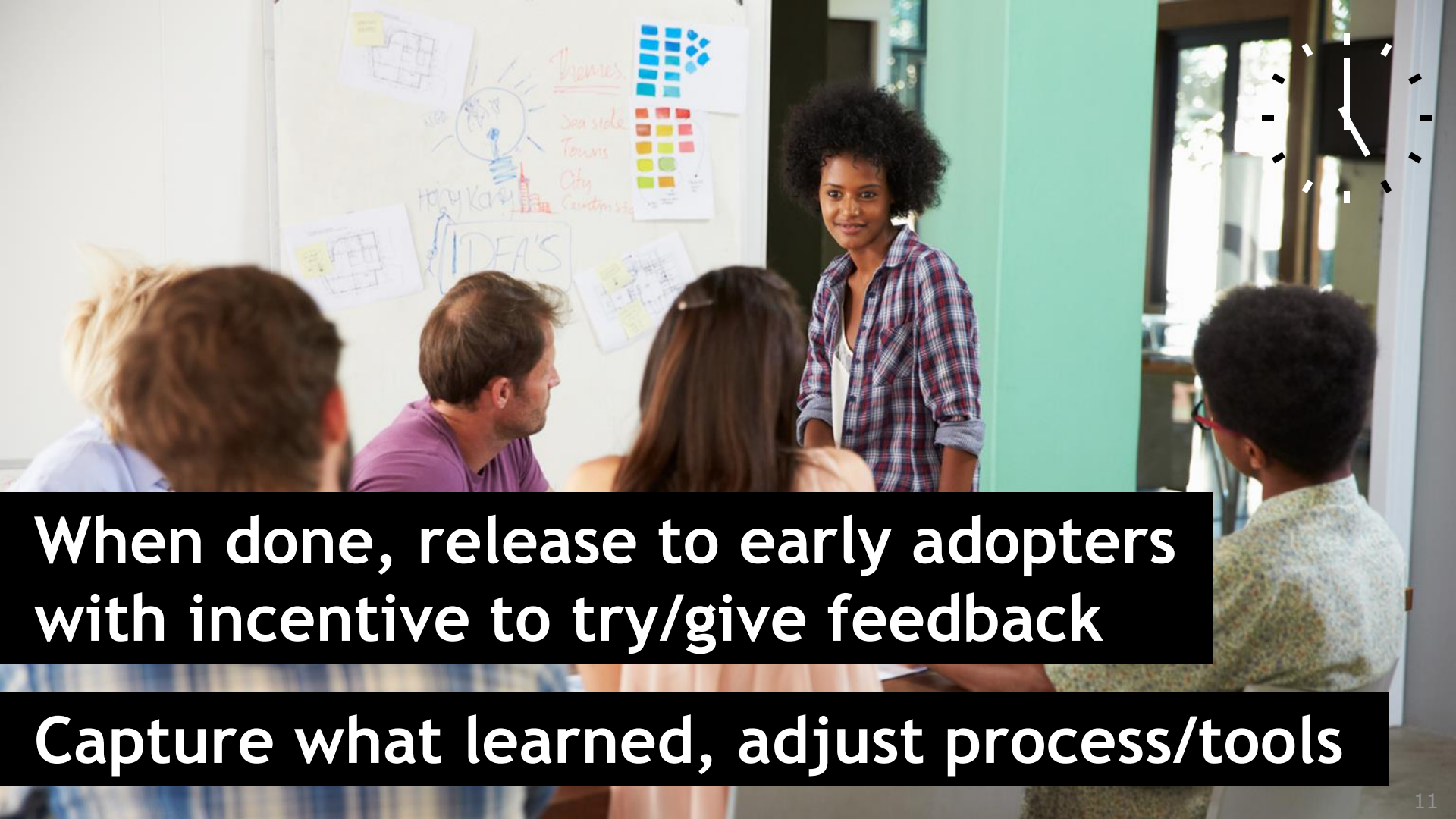


DevOps code, commit often, auto-deploy

Everyone iterate, scope, arch, design, tests

Constant sync with all, often work in pairs

Frequent validation: tester, coach, owner



**When done, release to early adopters
with incentive to try/give feedback**

Capture what learned, adjust process/tools

Behind the scenes



Org + Tech → Quality @ Speed

From hierarchy to autonomous teams

Automate, learn, refactor

Process

Start with assumption

Simplest way to prove it

Prototype or product

Use metrics to evaluate

Learn and refactor



Roles and tools



Represent stakeholders

Set metrics

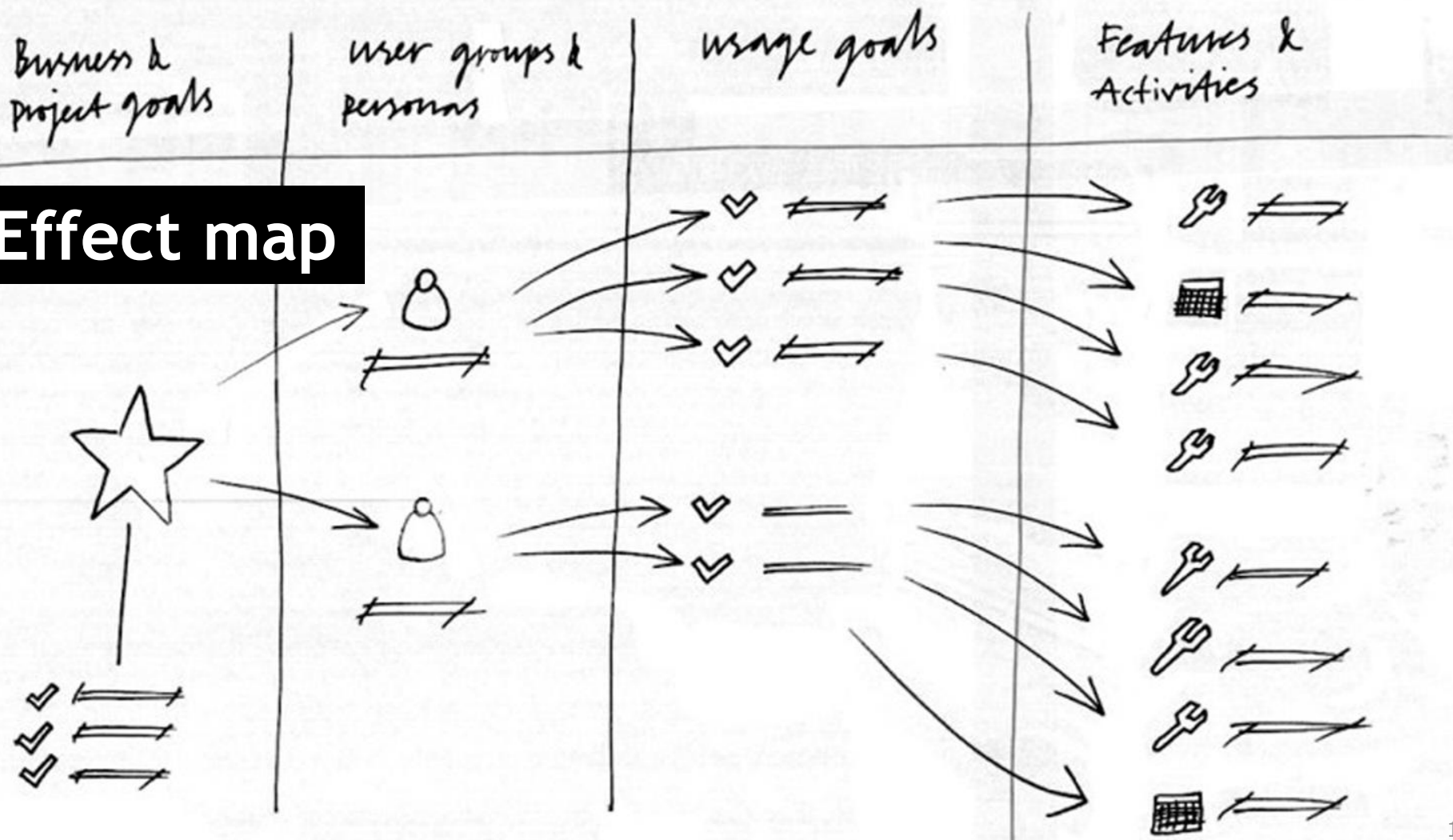
Define customer journey

Owner

Write/prioritize user stories

Communicate

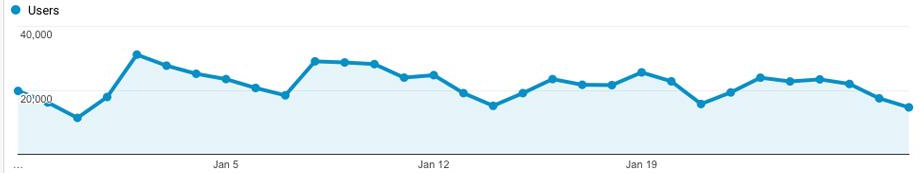
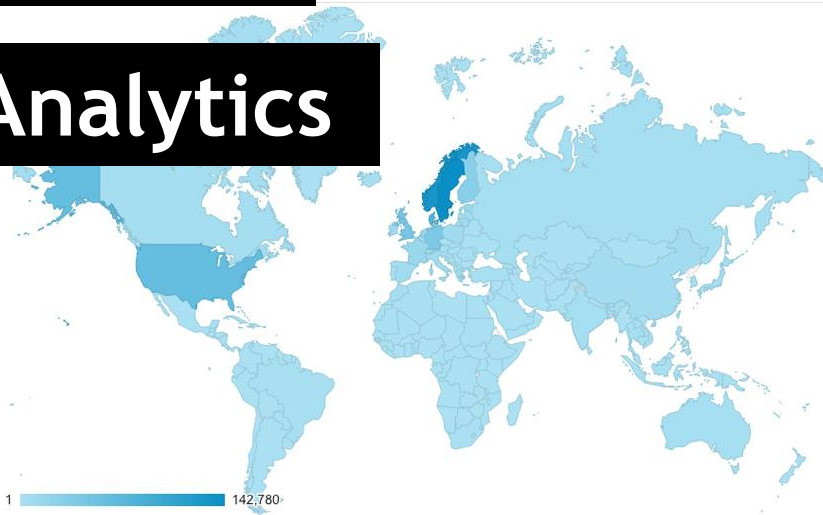
Effect map



Service Blueprint

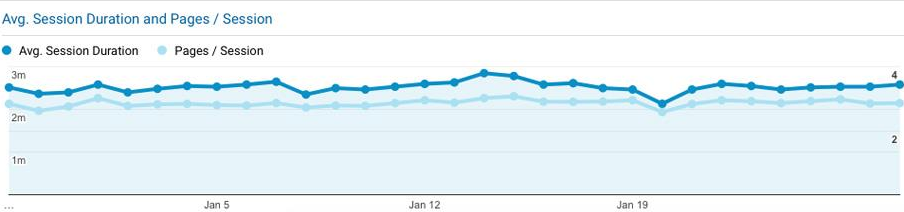
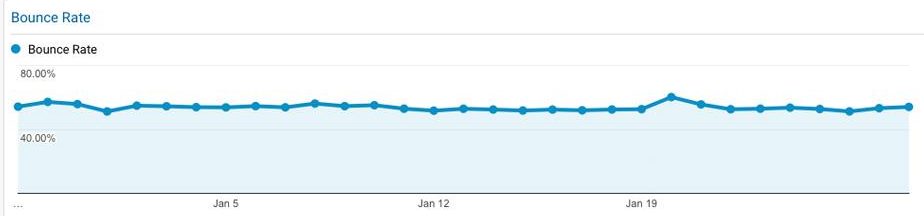
Metrics

Analytics



Sessions by Browser

Browser	Sessions
Chrome	292,095
Safari	239,847
Internet Explorer	81,267
Firefox	56,376
Safari (in-app)	40,739
Edge	22,529





Capture business rules

Detail requirements

Coach agile process

**Promote self-organization
and cross-functionality**

Coach



Priority Board for Digital Platform

Control Chart

Switch report

Board

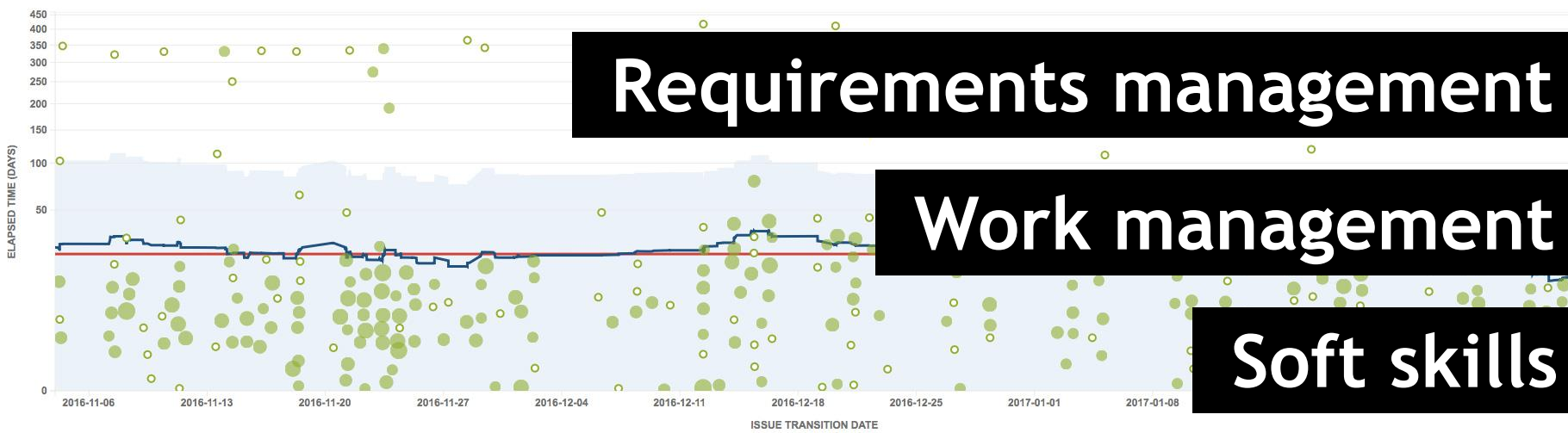
2016-11-04 to 2017-02-01 (Past 3 Months) [How to read this chart](#)

3w 15h 50m average 5d 2h median 0 min time 59w 4d 6h max time 726 issues

- Issue

Cluster of issues
- Average

Rolling average
145 issue window
- Standard deviation



Time scale

Timeframe

Past 3 Months

Custom dates

4/Nov/16

 to

1/Feb/17

Reset to default

Refine report

Columns

In Progress, ST, UAT

Swimlanes

Fastrack - To be tested in U...

Quick Filters

None

Reset to default

Viewing options

☐ Include non-working days in calculations

Reset to default

A woman with long dark hair, wearing a pink sleeveless top with a black lace pattern, is pointing her right index finger towards a whiteboard. The whiteboard has several diagrams: a floor plan on the left, a grid of blue squares in the center, and the word 'Team' written in red cursive. A yellow sticky note with the word 'CREATIVE' is on the top left. Other people are blurred in the background.

Set architecture principles

Set up digital platform

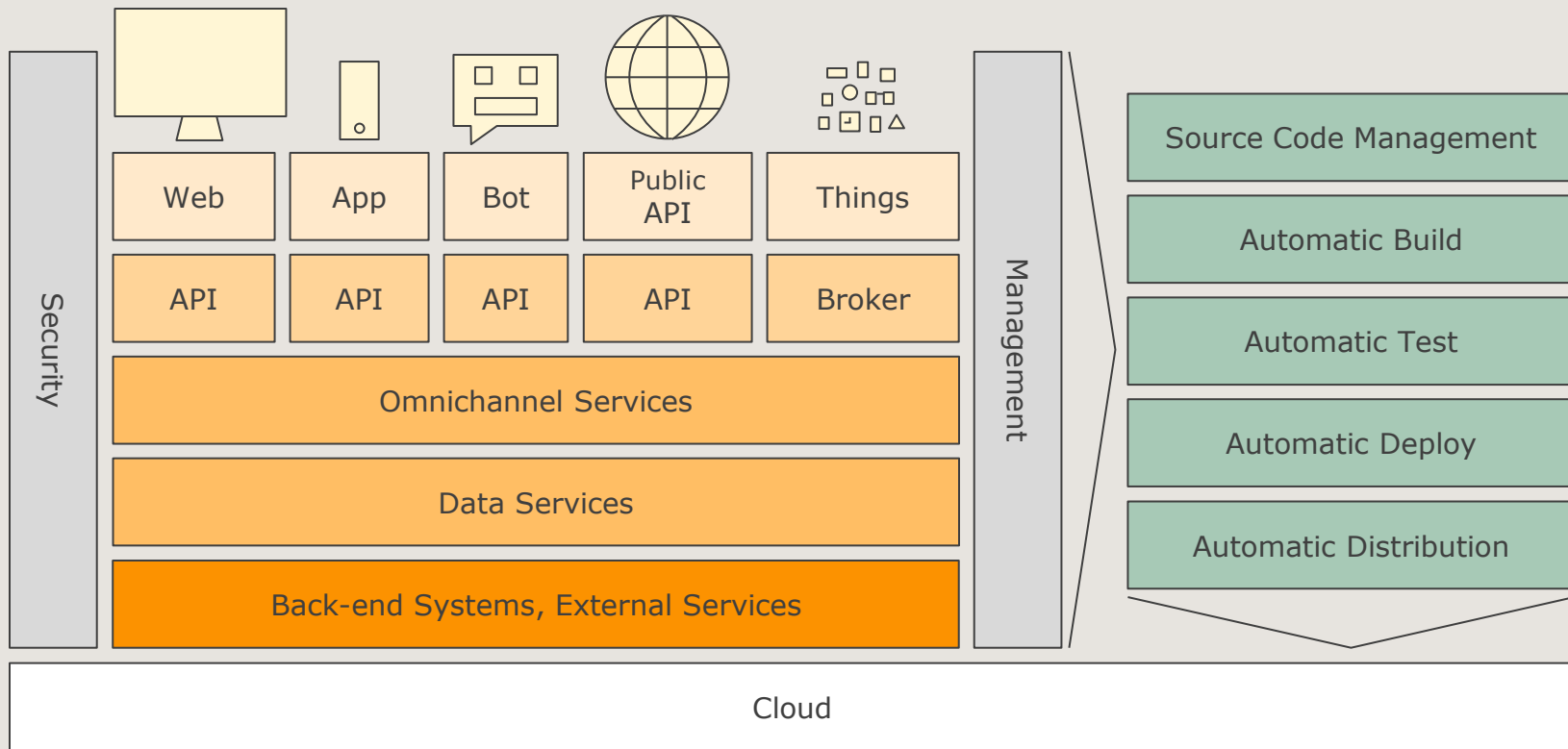
Configuration Management

Coach implementation

Define master data, service interfaces

Architect

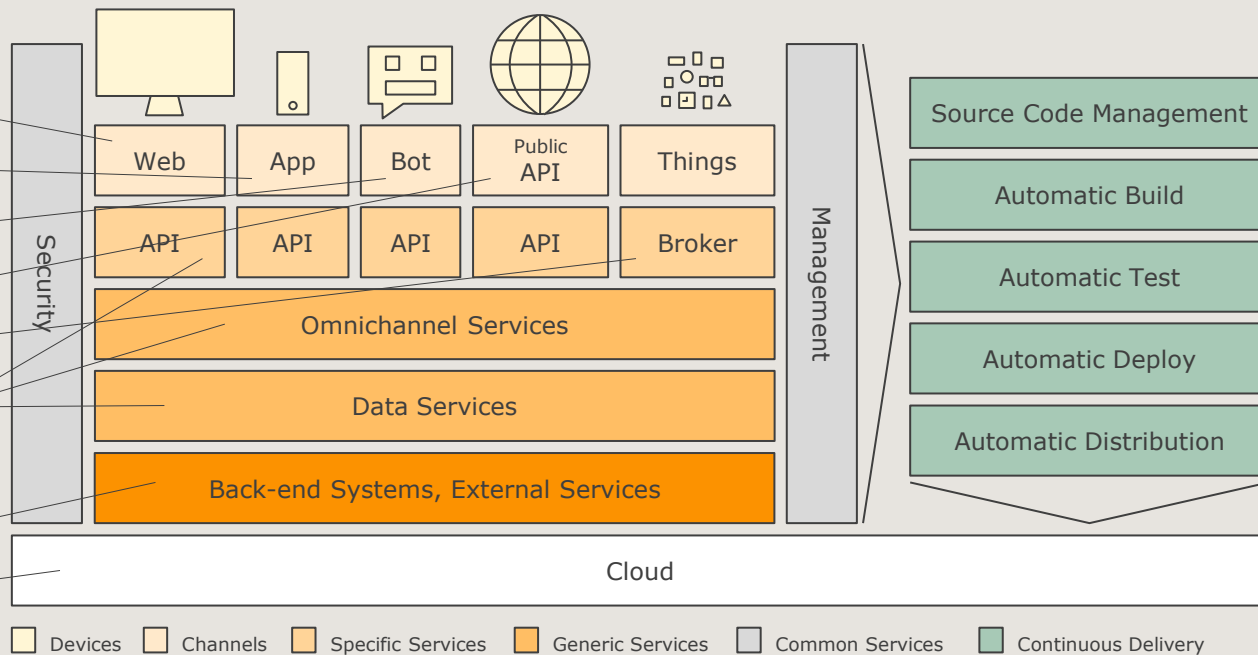
Digital Platform



Microsoft Digital Platform

Stack:

- Responsive
- Xamarin
- Azure Bot
- API Mgmt
- IoT Hub
- Azure Funcs
- C#
- CosmoDB
- Azure



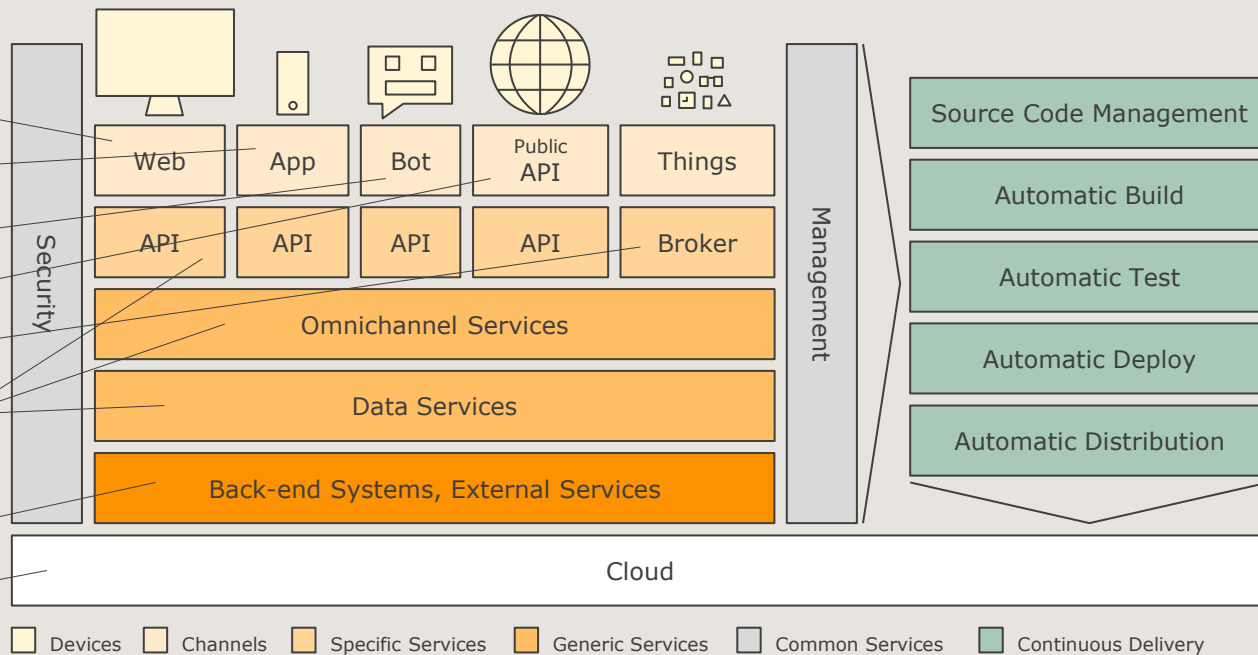
Automation:

- Git
- Scripts
- Webhooks
- Visual Studio Team Services
- HockeyApp

Mixed Digital Platform

Stack:

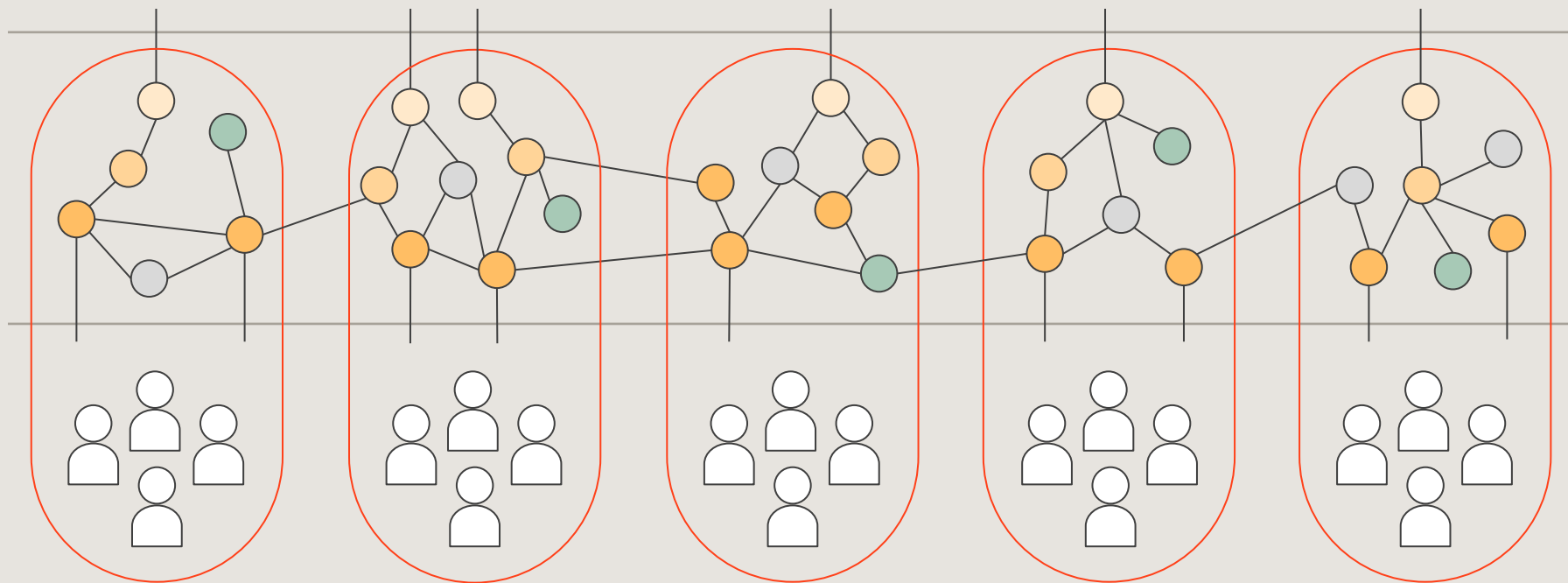
- Progressive
- iOS/Android
- DialogFlow.ai
- API Gateway
- Watson IoT
- AWS Lambda
- Node.js
- Cassandra
- Multiple



Automation:

- Git
- Scripts
- Webhooks
- Jenkins
- Mocha
- Chai
- HockeyApp

Service Ecosystem



○ Touchpoints ○ Specific Services ○ Generic Services ○ Common Services ○ Automation Services — Responsibility — Requests

Virtual Machines

Refresh

Name	Cloud	PowerState	Usage	Action	Schedule Snooze/Dismiss
WindowsVs2015	AWS	Stopped			
I-05869517a4464bd7a	AWS	Stopped			

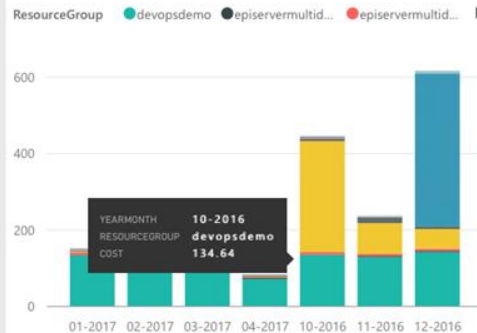
Azure VMs

DEMOHPALM	Azure	Deallocated	0h/5d		
DEMOHPLR1	Azure	Deallocated	0h/7d		
DEMOHPPC1	Azure	Deallocated	0h/10d		
DEMOHPSV	Azure	Deallocated			
DemoHPUFT	Azure	Deallocated	0h/15d		
DevOpsDemo	Azure	Deallocated			

Softlayer VMs

BluemixIoT	SoftLayer	Stopped			
BluemixNetwork	SoftLayer	Stopped			
devops	SoftLayer	Started			
FESA-TEST-VM1	SoftLayer	Started			
LAMPStack	SoftLayer	Stopped			
MEANtest	SoftLayer	Stopped			
Mobiletest	SoftLayer	Stopped			
serverweb	SoftLayer	Stopped			
WebDTool	SoftLayer	Stopped			

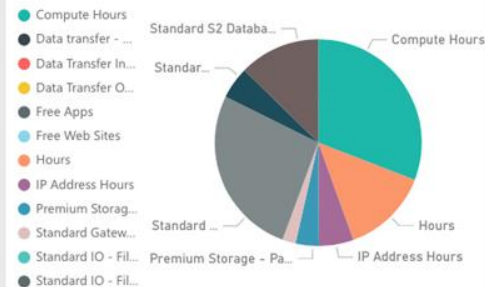
Azure Resource Group Cost



Azure Subscription Service Usage Graph

Azure Subscription Service Usage

Meter Category



Cloud management

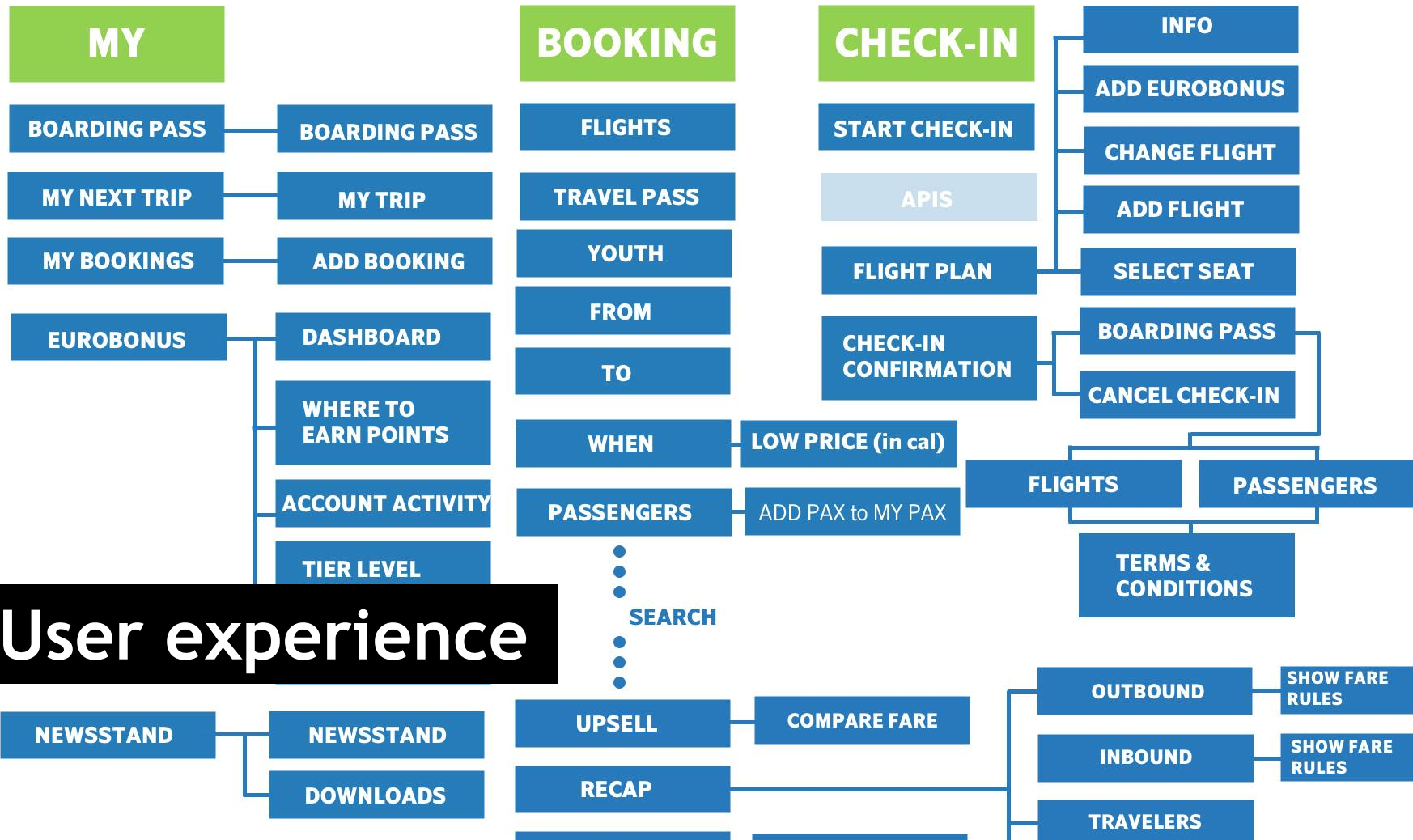
Define user experience

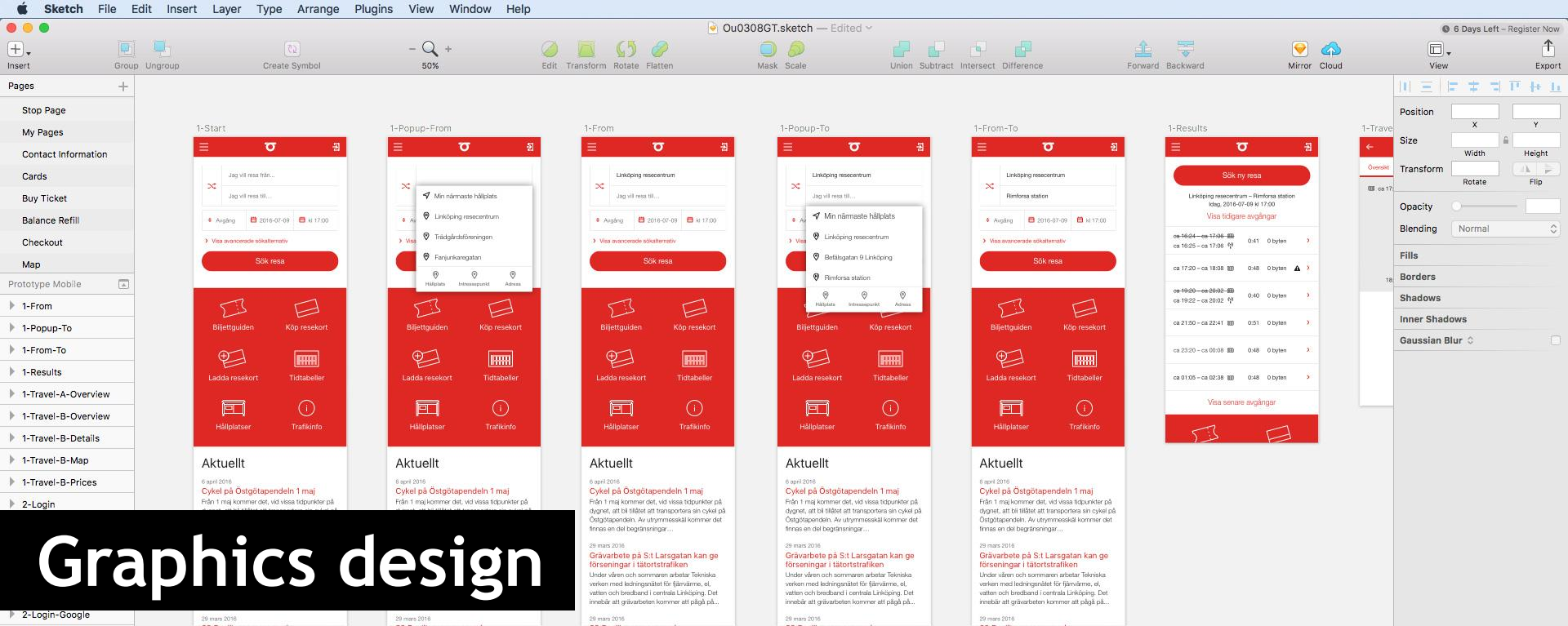
Set design guidelines

Create user interface

Graphics design

Designer





Graphics design

Position X Y

Size Width Height

Transform Rotate Flip

Opacity

Blending Normal

Fills

Borders

Shadows

Inner Shadows

Gaussian Blur

A group of people are gathered around a table in a meeting. A man with dark skin, glasses, and a floral shirt is speaking and gesturing with a marker. Other people are visible in the foreground and background, some out of focus. A whiteboard with diagrams is visible in the background.

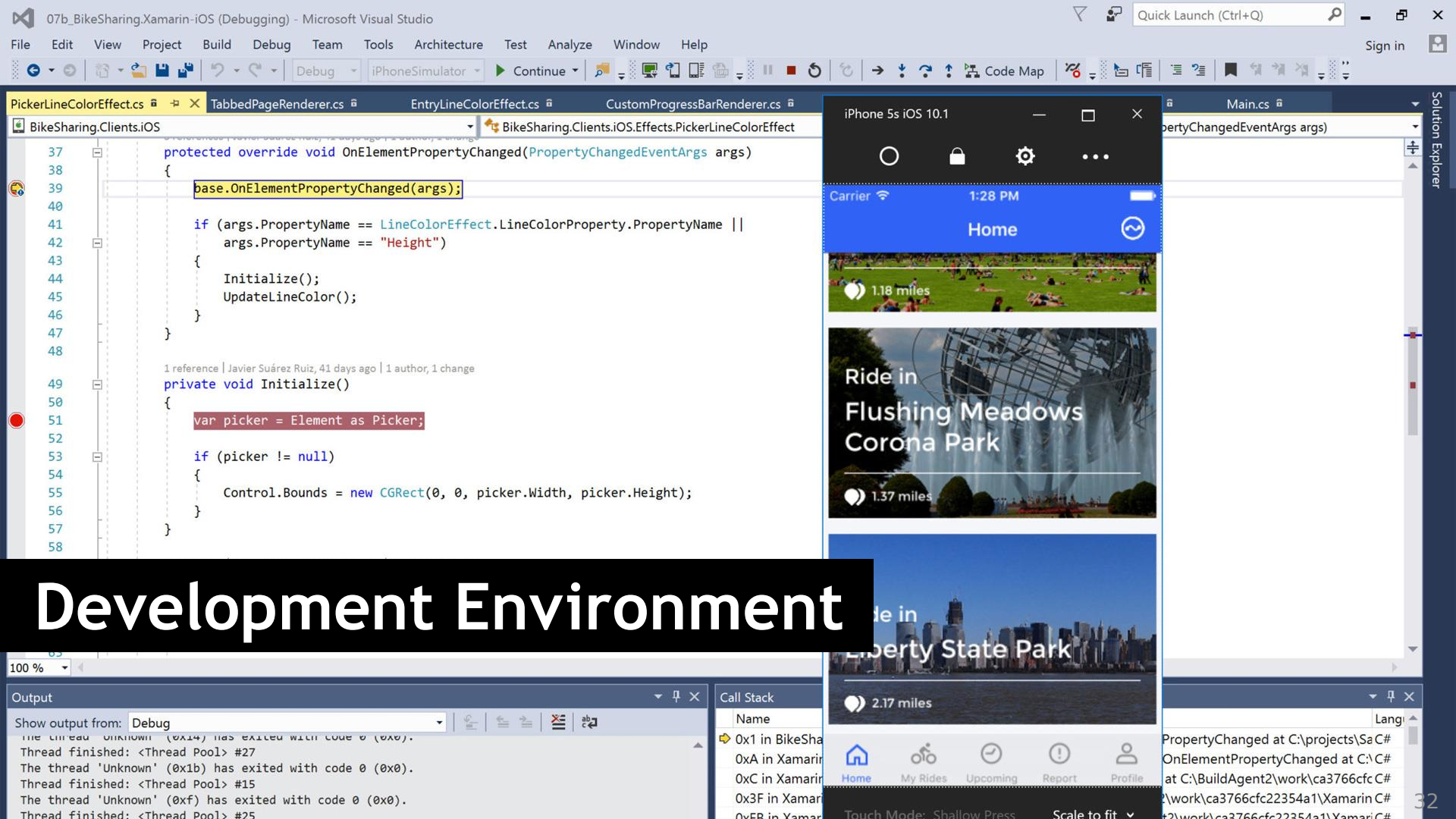
Manage continuous delivery

Code implementation

Code unit tests

Operate environments

DevOper




Development Environment

- ✓ Build 20170125.4
 - ✓ Build
 - ✓ Get Sources
 - ✓ NuGet restore **\SogetiDevOpsv2.sln
 - ✓ Fetch the Quality Profile from SonarQ...
 - ✓ Build solution **\SogetiDevOpsv2.sln
 - ✓ Test Assemblies **\release*test*.dll;:-...
 - ✓ Finish the analysis and upload the resu...
 - ✓ Publish symbols path:
 - ✓ Copy Files to: \$(build.artifactstagingdi...
 - ✓ Publish Artifact: drop
 - ✓ Copy Publish Artifact: DB
 - ✓ Add release annotation to Application...
 - ✓ Post Job Cleanup

DevOpsv2_BuildDef / Build 20170125.4

Edit build definition Queue new build... Download all logs as zip Release

Build succeeded

 Build 20170125.4
Ran for 3.5 minutes (DevOpsv2AgentPool), completed 7 days ago

Summary Timeline Artifacts Code coverage* Tests

Build details

Definition	DevOpsv2_BuildDef (edit)
Source	\$/MVCWebApp
Source version	80
Requested by	[sogeti-devops]\Project Collection Service Accounts on behalf of Naveen Mangtani
Queued	Wednesday, January 25, 2017 6:41 AM
Started	Wednesday, January 25, 2017 6:41 AM
Finished	Wednesday, January 25, 2017 6:44 AM

Issues

Build

- ⚠ The ownership of the SonarQube related build tasks is being transferred to SonarSource.
- ⚠ Please replace this build task with the one brought by SonarSource's extension on the marketplace: <https://aka.ms/sqextension>

Test Results

Total tests

3 (+0)

3 Passed (3)

0 Failed (0)

0 Others (0)

Failed tests

0 (+0)

0 New (0)

0 Existing (0)

Pass percentage

100% (+0%)

Run duration

4s 46ms (-4ms)

[Detailed report >](#)

Code Coverage

Blocks

2.18%

71/3,250

Lines

2.90%

49/1,692

Continuous build, test, deploy

⚠ SogetiDevOpsv2\Models\Owner_Lease_Monthly.cs (3, 26)
SogetiDevOpsV2\Models\Owner_Lease_Monthly.cs(5,26): Warning S101: Rename class "Owner_Lease_Monthly" to match camel case naming rules, consider using "OwnerLeaseMonthly".

⚠ SogetiDevOpsV2\Models\Owner_Lease_Monthly.cs (56, 22)

[Download Code Coverage Results](#)

Tags



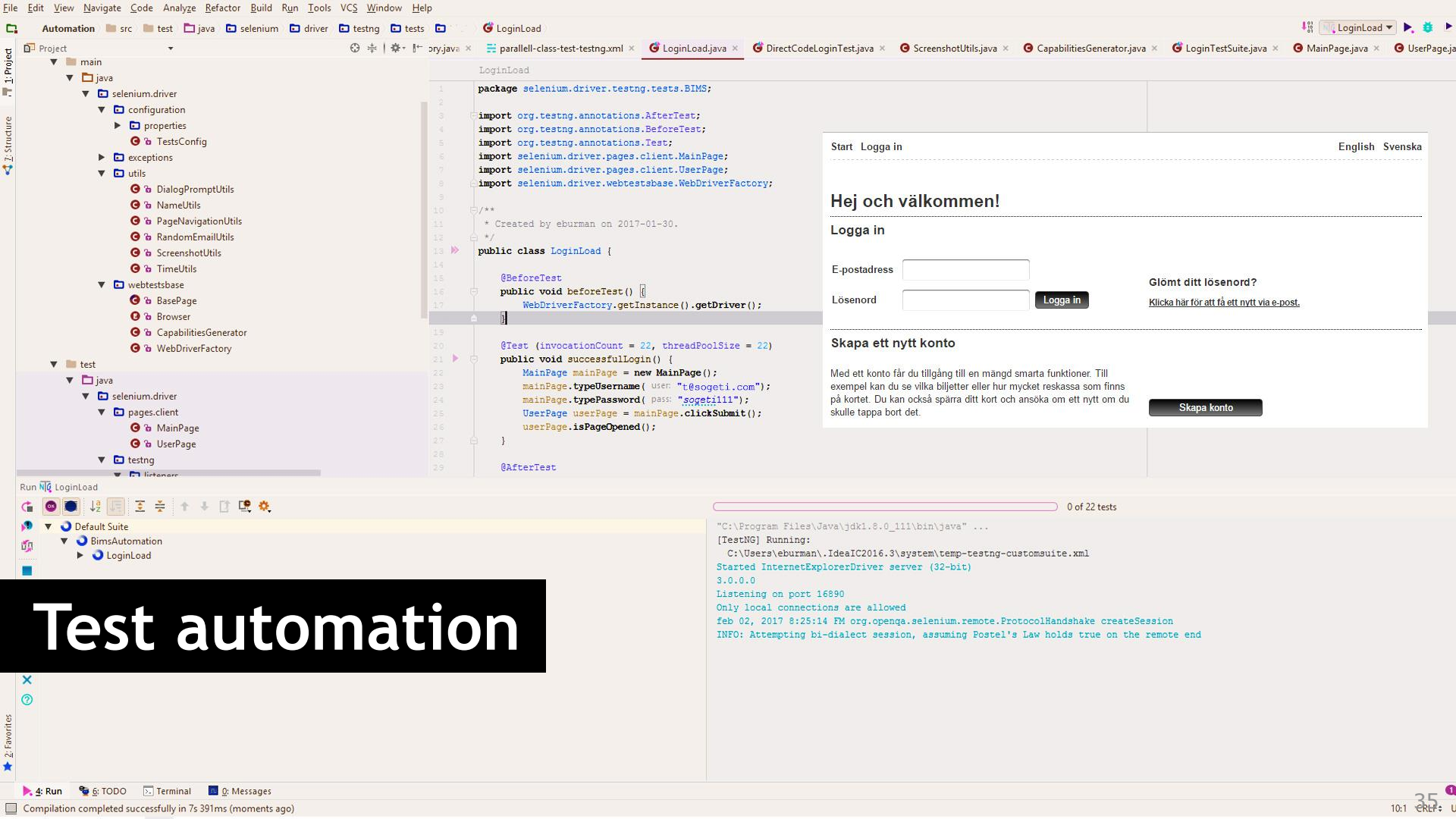
Proactively ensure high quality

Capture user quality issues


Code automatic UI tests

Tester

Exploratory testing



Test automation

 Overview

ALL RESULTS

Account Verification

Verify Account Has Paper Item

Given when I start the app

Then I tap the menu button on homescreen

Then I tap the Accounts button

Then I tap the first account

Then I tap the order history button

Then I verify that we have a Paper item

ACCOUNT VERIFICATION

Then I tap the first account

Filter devices

Apple iPhone 4S
iOS 8.0.2

Apple iPhone 5C
iOS 8.0.2

Apple iPhone 5S
iOS 8.0.2

Apple iPhone 6
iOS 8.0.2

Apple iPhone 6 Plus
iOS 8.0.2

Apple iPad 2
iOS 7.1.2

Apple iPad Air

Apple iPad Mini Retina
iOS 7.1.2

Apple iPhone 4S
iOS 7.1.2

Apple iPhone 5C
iOS 7.1.2

Apple iPhone 5S
iOS 7.1.2

Apple iPad 2
iOS 7.1.1

Apple iPad 4
iOS 7.1.1

Apple iPad Air
iOS 7.1.1

Apple iPad Mini
iOS 7.1.1

Apple iPad Mini Retina
iOS 7.1.1

Apple iPhone 4S
iOS 7.1.1

Apple iPhone 5
iOS 7.1.1

Device clouds

36

How do you get started?



**Select an important objective
with executive support**



Set up a digital cloud platform



Put together an autonomous team



Get out of their way

Don't scale too fast!

2008: one team

2009: several teams

2010: 25 teams

2011: division, 4000p

2015: company wide



<http://youtu.be/HXZUys4KAFc>

How we can help:

Complete team

Any of the roles

Cloud platform





Thanks!

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Global Chief Architect

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