

### **Mendix Application Test Suite**

Expert Webinar - September 30 - 2016

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### **Agenda**

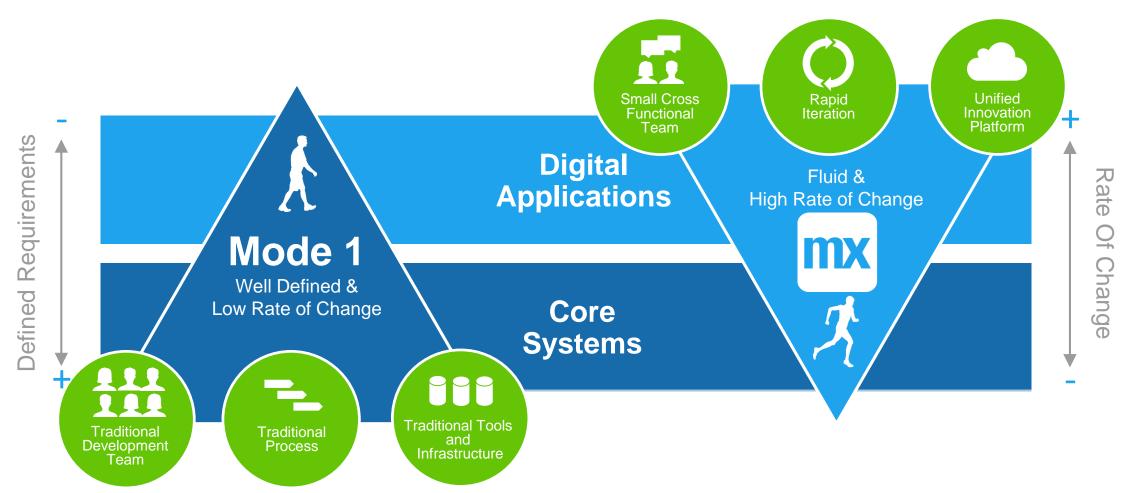
- Introduction to ATS
- Demo ATS
- Adopting ATS
- Roadmap
- ▶ Q&A



### Introduction to ATS



# Mendix Provides the Fast Track for Digital Innovation

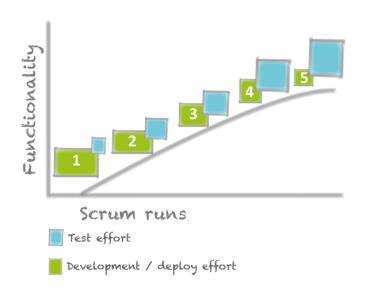




### **Testing in Mode 2**

- QA critical success factor in Mode 2
  - Make quality an integral part of the development process
  - Minimize regressions
  - Provide feedback to developers as quickly as possible
  - Maximize efficiency
- This requires a test & performance management framework that is fully embedded in the ALM cycle
  - Simple, easy to use and highly automated
  - Fitted for small cross-functional teams (DIY, Do It Yourself)
  - Boosts the DevOps experience

### The challenge of keeping test and development efforts in balance







### **Mendix Application Test Suite**

- A cloud service offered by Mendix in partnership with Mansystems to automate functional testing of Mendix applications.
- Built as add-on to Selenium (in Mendix):
  - Cross-browser functional testing based on keywords
  - Recording of test scenarios
  - Supports scheduling and parallel testing
  - Seamless compatibility with Mendix platform version





### **Key Benefits**

- Reduce cost & effort of testing
  - Less effort spent on testing thanks to automation
  - Less rework for developers thanks to testing early-on in the project
  - Less incidents / tickets after go-live
- Contributes to shorter Time to Market
- Contributes to 'First Time Right' delivery
- Leads to higher customer satisfaction





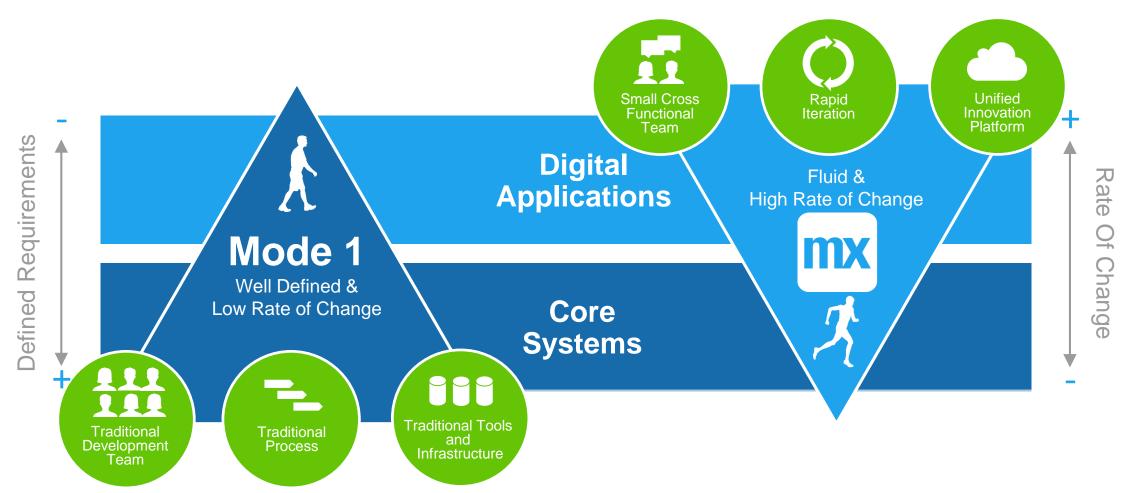
### **Demo**



### Adopting ATS in the enterprise

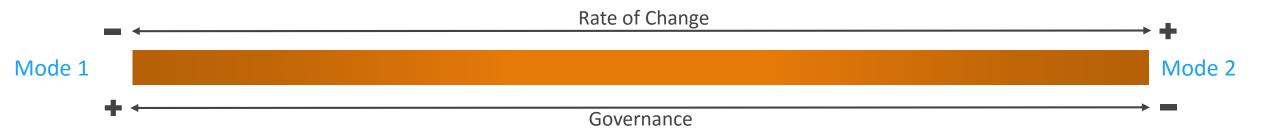


# Mendix Provides the Fast Track for Digital Innovation





### Preserving agility when adopting ATS



#### **Mode 1 - Traditional:**

- Emphasizing safety & accuracy
- Quality safeguarded by formal testing process
- Traditional testing stages (V-model)
- Developers & testers not in same team

**Key success factor:** well-implemented process

#### Mode 2 - Innovation:

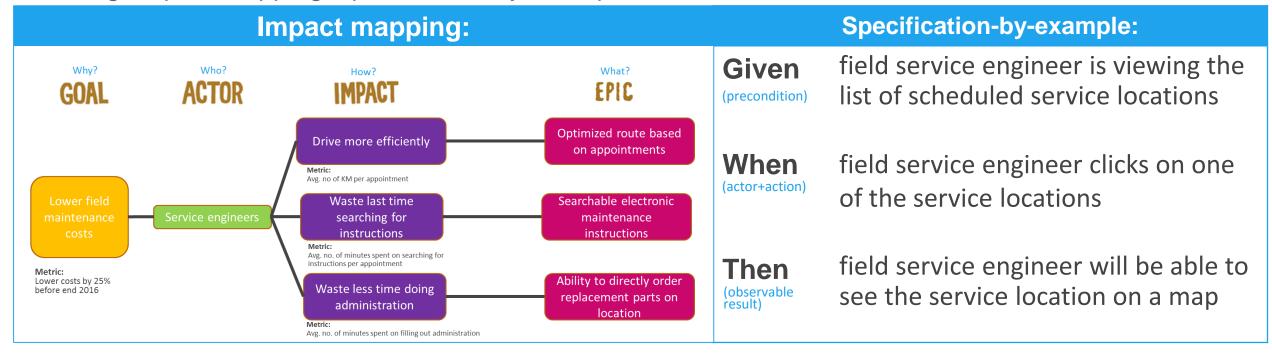
- Emphasizing agility & speed
- Quality safeguarded by active product owner
- Development & testing done simultaneously
- Developers & testers in same (Scrum) team

**Key success factor:** effective day-to-day product ownership



### Effective agile product ownership

- ▶ Takes active responsibility for testing based on business goals
  - Is in close dialogue with business stakeholder that has a stake in app quality
- Uses agile requirements and specification practices
  - E.g. impact mapping, specification-by-example



### **Example Impact map**

Broken up into user stories





Service engineers





Optimized route based

on appointments

Searchable electronic

maintenance

instructions

Drive more efficiently

Metric:

Avg. no of KM per appointment

Waste last time searching for instructions

Avg. no. of minutes spent on searching for instructions per appointment

> Ability to directly order replacement parts on location

Metric:

Waste less time doing

administration

Metric:

Avg. no. of minutes spent on filling out administration

Lower field maintenance costs

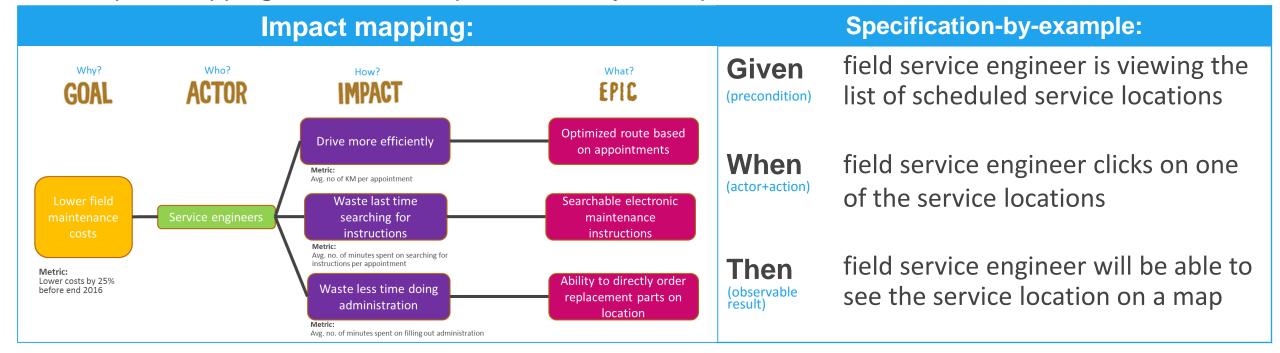
Metric:

Lower costs by 25% before end 2016



### Effective agile product ownership

- ▶ Takes active responsibility for testing based on business goals
  - Is in close dialogue with business stakeholder that has a stake in app quality
- Uses agile requirements and specification methodologies
  - Impact mapping, user stories, specification-by-example



### **Example Specification**

#### **User story:**

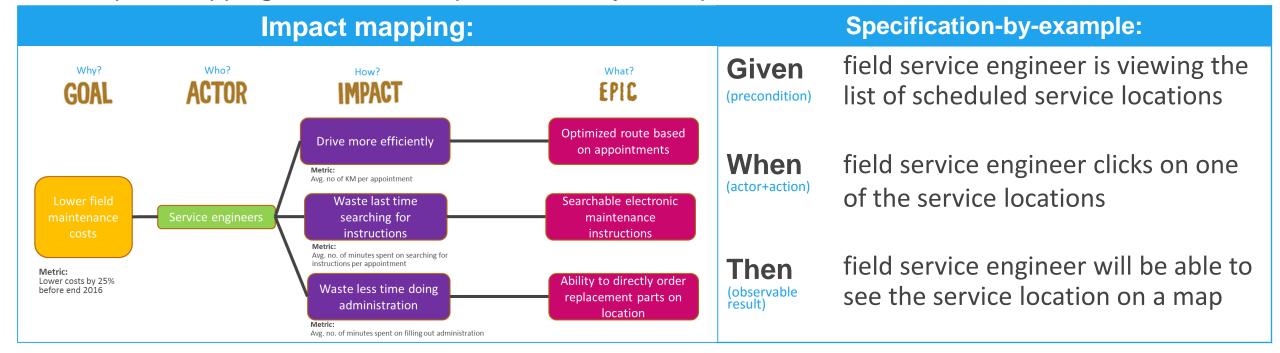
As a field service engineer I want to view my scheduled service locations on a map

Specification-by-example:		
Given (precondition)	field service engineer is viewing the list of scheduled service locations	
When (actor+action)	field service engineer clicks on one of the service locations	
Then (observable result)	field service engineer will be able to see the service location on a map	



### Effective agile product ownership

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### Getting started with testing your app

- Define main functional flow
- 2. For this flow, create a test script
- 3. Duplicate this test script for re-use
- 4. Modify these duplications, as needed, by:
  - Inserting new steps in these duplications
  - 2. Modify test data used in these duplications
- 5. Execute test scripts
- 6. Examine failed test scripts



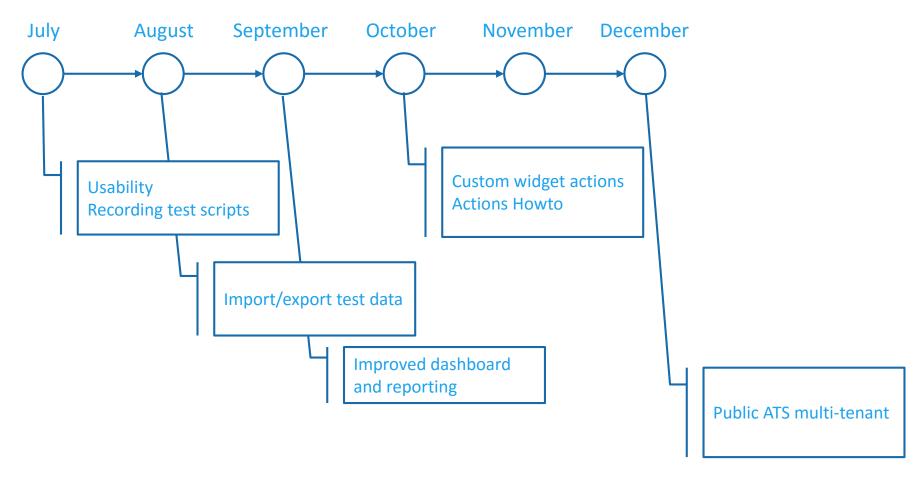
### Organizing your team for testing

SCRUM role	Testing responsibilities
Scrum Master	<ul> <li>Ensure registration of the project in ATS</li> <li>ATS account management</li> </ul>
<b>Product Owner</b>	<ul> <li>Define hierarchy for test scripts</li> <li>Examine test outcomes with business</li> <li>Schedule automatic execution of test scripts for regression purposes</li> </ul>
Team member (junior)	<ul> <li>Define individual test scripts</li> <li>Manual test execution</li> <li>Evaluate test results and report to product owner</li> </ul>
Team member (senior)	<ul> <li>All responsibilities of a junior member defined above</li> <li>Create actions for custom widgets</li> </ul>

## Roadmap



### **ATS** roadmap





### **Thank You**