

# FUNCTIONAL TEST AUTOMATION WITH HPE UFT

## COMMON CHALLENGES TO OVERCOME IN SOFTWARE TESTING ACROSS VERTICALS

- Failure to adequately identify, document, and track requirements
- Poor testing planning and execution
- Poor effort estimation
- Inadequate communication, including process tracking and reporting
- Complexity in transitioning from siloed module based testing, to full business process testing that can often have cross module functionality

## EVOLUTION IN FUNCTIONAL TESTING

Testing as early as possible, to accommodate the challenges and changes within the applications, utilizing the 'Shift-Left' strategy which consist of shifting functional testing early on the project lifecycle.

IMPROVE EFFICIENCY

ACCELERATE THE APPLICATION DELIVERY

REDUCE THE TEST BURDEN

## Why is it critical to 'SHIFT LEFT'

### AGILE & DEVOPS

55%

55% can't apply test automation at appropriate levels.

93%

93% of IT leaders use Agile for software development projects but 61% report a lack of good testing approach that fits agile.

42%

42% don't have the right test tools to create reusable test sets.

\$60B

Annual savings by business using open source

### OPEN SOURCE

\$2B

Open source Software Sales\*

140%

Increased interest in purchasing open source software since 2010.

200%

Increase in open source projects in 2014 vs. 2012 (2M projects projected).

## MOBILE DEVICES CHANGE DEFINITION OF QUALITY

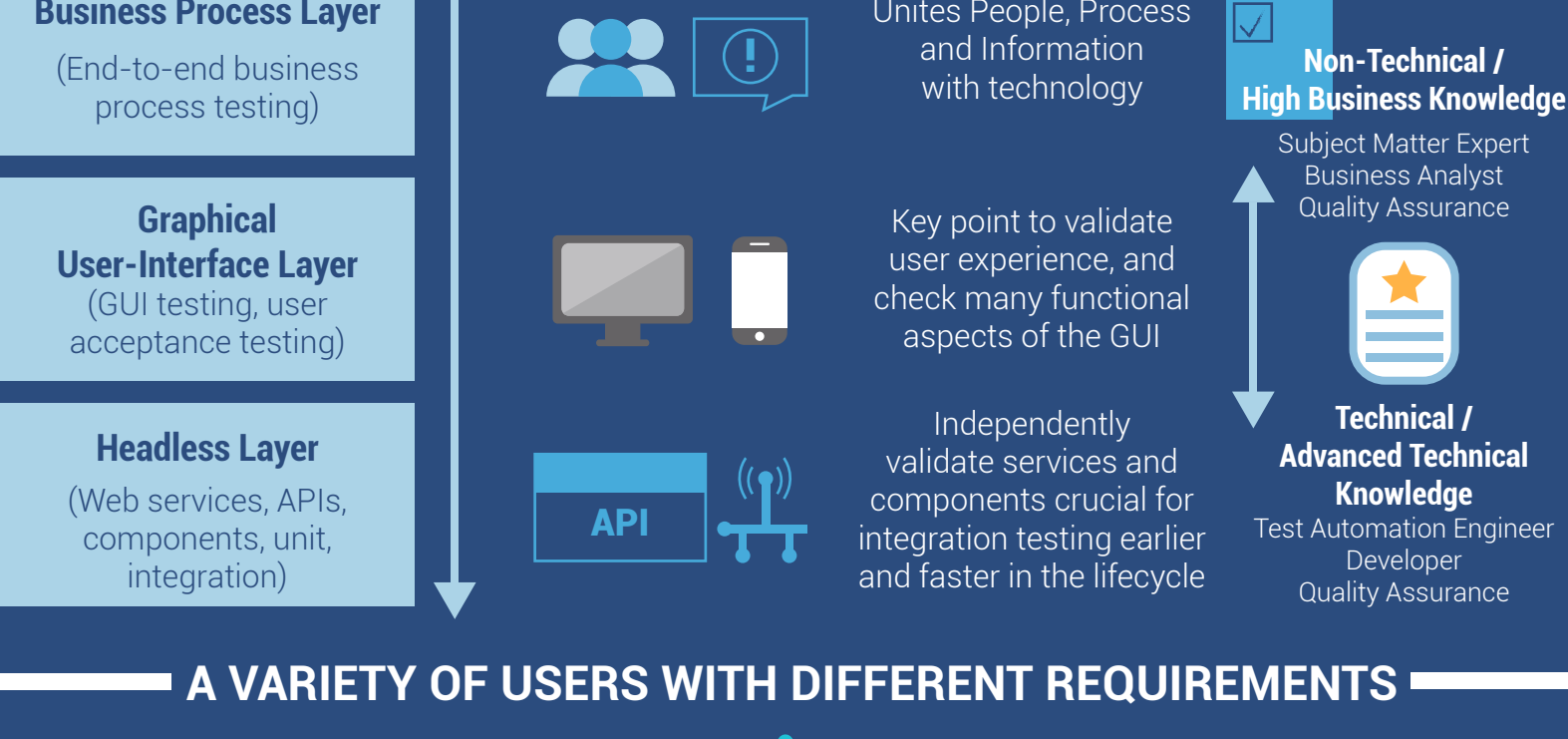
57% Global population estimated to be connected by 2019\*

30B autonomous things estimated to be attached to the Internet by 2020\*

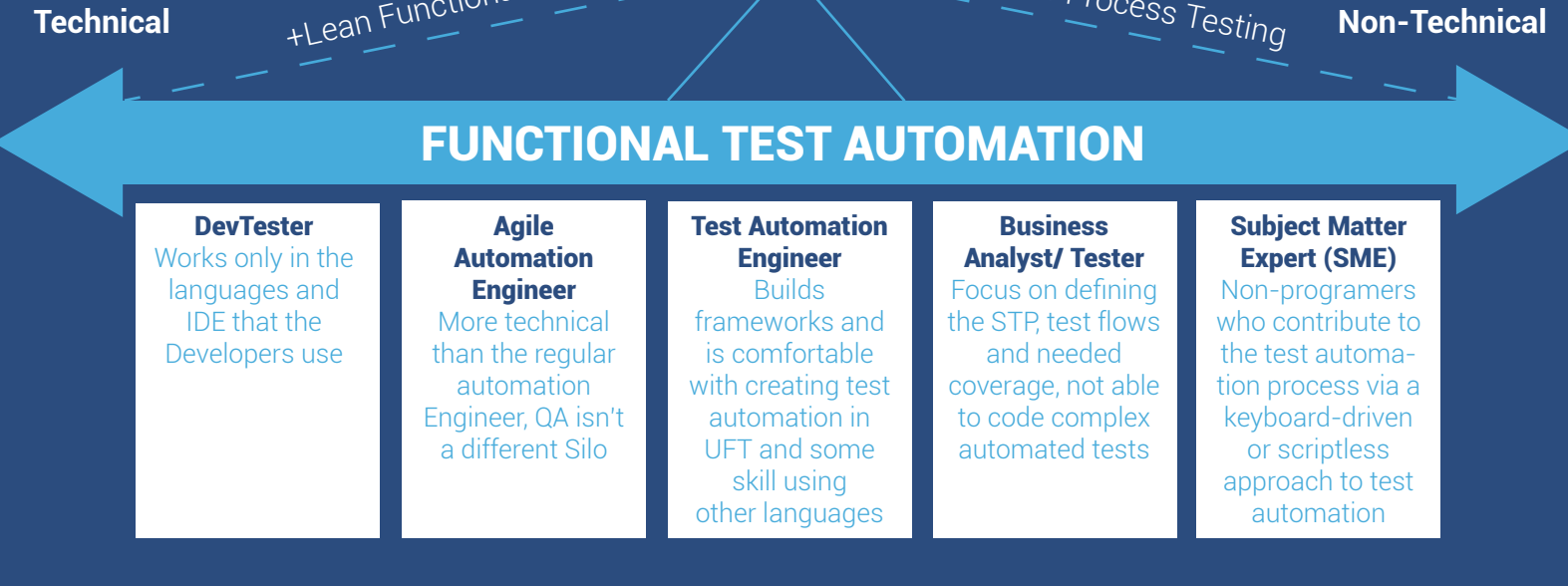
Top industries is driving IoT, including Wholesale, Communications & media, consumer, utilities.

## A MODERN APPLICATION ARCHITECTURE

The challenge of testing complex interactions between many systems.



## A VARIETY OF USERS WITH DIFFERENT REQUIREMENTS



### DevTester

Works only in the languages and IDE that the Developers use

### Agile Automation Engineer

More technical than the regular automation Engineer, QA isn't a different Silo

### Test Automation Engineer

Builds frameworks and is comfortable with creating test automation in UFT and some skill using other languages

### Business Analyst/Tester

Focus on defining the STP, test flows and needed coverage, not able to code complex automated tests

### Subject Matter Expert (SME)

Non-programmers who contribute to the test automation process via a keyboard-driven or scriptless approach to test automation

### Cross-browser Testing

Script once, replay all tests across browsers including Chrome, Firefox, IE and Safari

### Continuous Testing

UFT includes the Lean Functional Testing (LeanFT) plugin for test creation in Visual Studio/C# or Eclipse/Java

Broad ecosystem of integrations for source control management, CI tools, and HPE tools such as HPE Sprinter and HPE Service Virtualization

Supports over 30 different technologies, more than any competitor in the market

# UFT

## Unified Functional Testing (UFT)

The complete, industry-standard solution for automation of web, mobile, API and packaged applications

### API & Web Service Testing

Create tests beyond the UI for increased velocity

### Mobile Application Testing

Ensure mobile app quality via integration with HPE Mobile Center

### Business Process Testing (BPT)

Use the BPTesting framework for keyword-driven and scriptless test automation

## COMPONENTS TO BUILD YOUR FRAMEWORK FOR AUTOMATION

- Project Framework
- Test Planning & Resourcing
- Frequency of Testing - Types and rounds of Testing
- Where is the testing being performed?
- Areas of Automation
- Usability
- Tool of choice
- Target Applications

## 3 AREAS TO LEVERAGE FOR TEST AUTOMATION

- Continuous Integration**  
 Unit testing  
 Functional unit testing  
 Integrated unit testing  
 Build validation testing
- Common Testing Cycles**  
 Functional Testing  
 Integrated Testing  
 Regression Testing  
 User Application Testing
- Patching**  
 Consistent way to test patches before migration  
 Focused testing of fixes in patch  
 Easy to quantify for reporting

### USING HPE UFT TO ACCELERATE YOUR TESTING AUTOMATION

Hewlett Packard Enterprise (HPE) is in the Leaders quadrant of Gartner's Magic Quadrant for Software Automation report of 2016.

HPE promotes a continuous testing approach with a product set for automating tests at scale that targets a wide range of personas, from technical experts to business experts.

HPE UFT delivers a very strong set of capabilities and built-in support for UI technologies, mobile, and API and web service testing. It has built-in BPT framework support for keyword-driven and scriptless testing, and bundled LeanFT functionality.

HPE has a broad network of service and technology partners - including IT Convergence who have the ability to combine UFT's robustness with our testing consulting expertise which translated into our set of automation accelerators for ERPs.

## CUSTOMER SUCCESS WITH HPE FUNCTIONAL TESTING SOLUTIONS

- Automated **98%** of all key deposit transactions
- Automated **54%** of all SAP transactions
- Automated **90%** of business critical transactions

### TAKE YOUR NEXT STEP IN SOFTWARE TESTING AUTOMATION, REQUEST A:

- HPE UFT DEMO:** Have HPE solution architects review your environment and use cases and guide you through the live application.
- FREE VIRTUAL TESTING ASSESSMENT:** Obtain recommendations from our testing experts on:

- How you can better leverage and extend functionality
- How you can leverage existing footprint and adjacent technologies
- Next steps for technical review of additional solutions

### CONTACT US:

Phone: +1-415-901-7500 | Email: [contact@itconvergence.com](mailto:contact@itconvergence.com) | Website: [www.itconvergence.com/testing](http://www.itconvergence.com/testing)