



How Reliant Energy Reduced Costs and Increased Quality with Automated Testing of SAP®



The Webinar will begin shortly.



Agenda

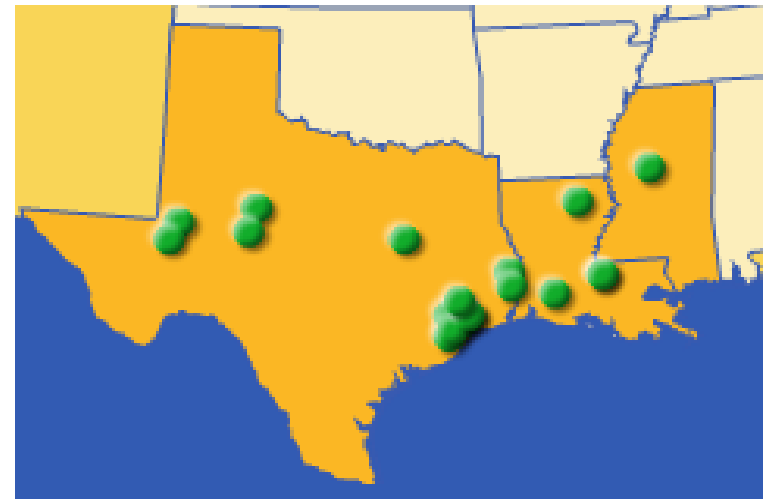


- Who is Reliant
- Application environment
- Company need
- Selection process
- What we have learned
- Future plans
- Intangibles
- Trends in automated testing
- The Worksoft difference

Reliant's Parent Company - NRG



- NRG is at the forefront of changing how people think about and use energy.
- A Fortune 300 and S&P 500 Index company, NRG is a pioneer in developing cleaner and smarter energy choices for our customers.
- We are one of the largest solar power developers in the country.
- NRG owns and operates about 47,000 megawatts of generation capacity, including nearly 11,000 megawatts of capacity in Texas.



Reliant's Parent Company - NRG



NRG encompasses several companies:

- eVgo, the first privately funded electric vehicle charging infrastructure
- Diverse power generating facilities which can generate about 47,000 megawatts from solar, wind, fossil and nuclear. Enough power to support almost 40 million homes.
- Our retail electricity providers - Reliant, Green Mountain Energy Company and Energy Plus



Reliant Energy



Reliant provides electricity and energy services to more than 1.5 million retail customers — including homes, small and large businesses, manufacturing facilities, government entities and institutions across Texas.

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Drivers



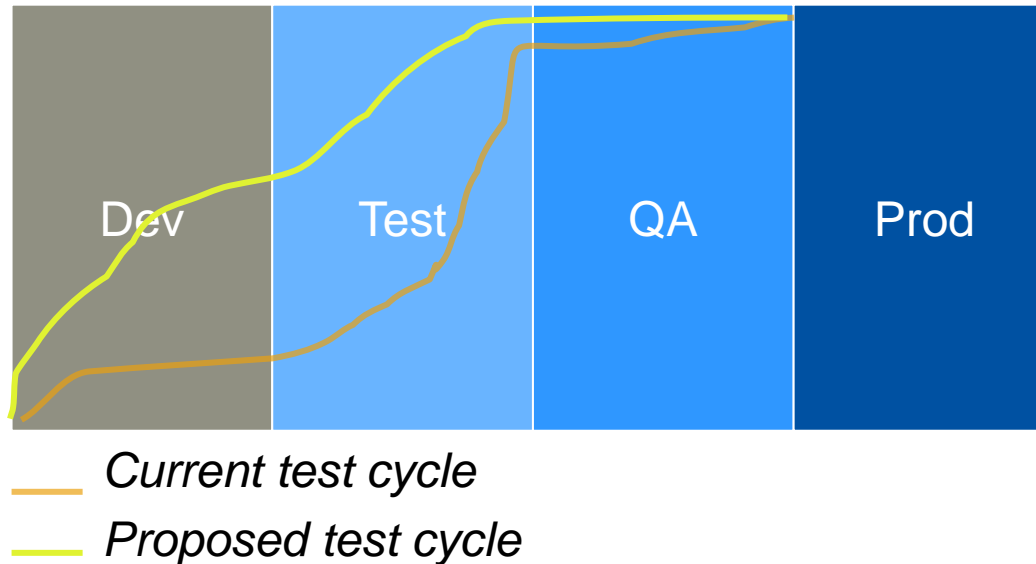
Scope of Changes

- 40 Developers
- 53,000 hours of testing per year
- 3414 of project defects per year
- 7461 hours spent on defects per year
- 5%-10% automation in testing
- Testing is the highest cost on any project

Automation Breakdown

- Developer Unit Tests 0%
- Functional Unit Tests 0%
- Security Tests 0%
- System Integration Tests 0%
- User Acceptance Test 0%
- Regression Tests 5-10%
- Average Automated 1.6%
- Reusable 1.6%

Drivers



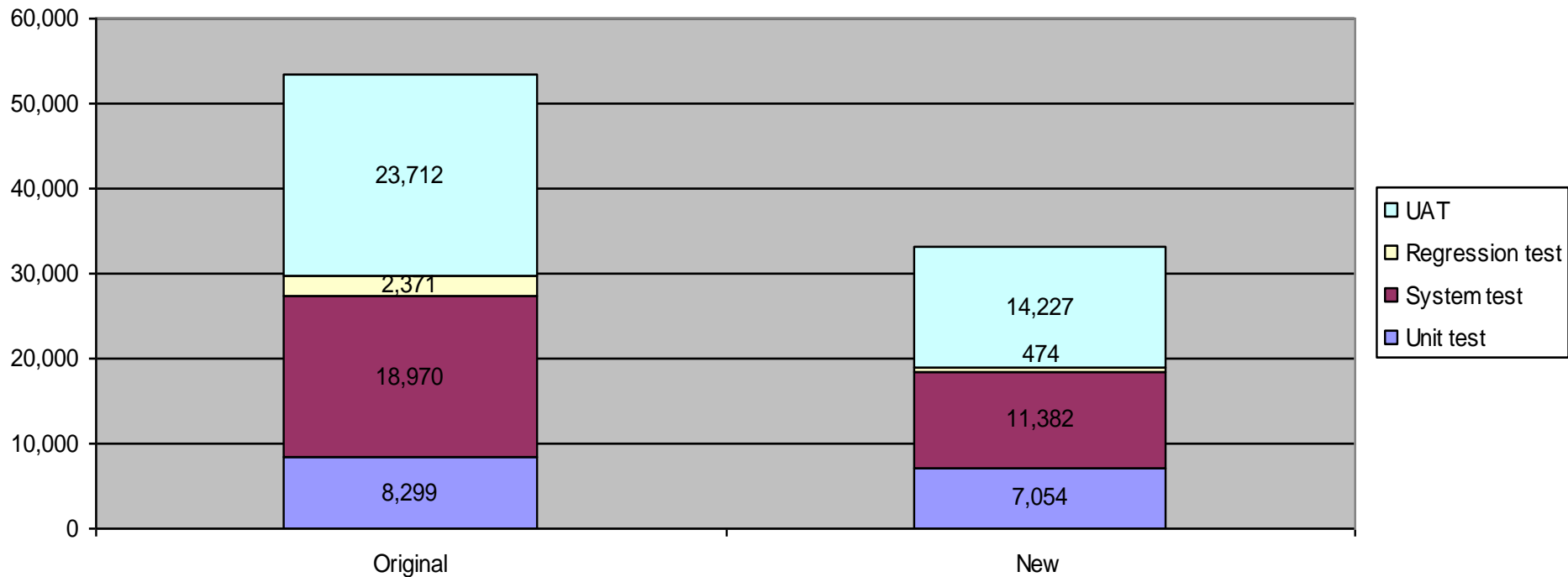
- Increase the efficiency of testing
- Reduce the impact of defects
- Increase capacity of project resources
- Provide more thorough testing
- Utilize automated testing from unit test through UAT
- Provide reusable test components
- Decrease the production support impact of project “Go-live”

Drivers



Problem Statement: Since testing represents in excess of 53,000 hours of effort per year, there is a great opportunity for improvement. By increasing the test data in the development system and utilizing automated testing we can reduce defects and reduce the incremental cost of each defect.

Comparative Hour Impact



Proof of Concept

How did Worksoft Certify® perform in our environment?



POC Scope and Results

➤ Total POC Statistics

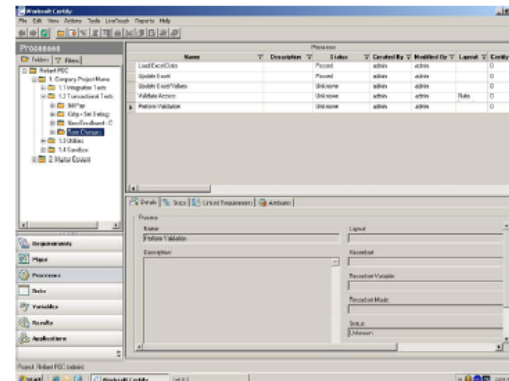
- 639 Total Process Steps
- 31 components created and reusable
- SAP GUI ECC and SRM, SAP Portal
- Date interchange between processes and applications
- Screen Captures
- Date manipulation
- Random number generation
- Variables
- Recordsets
- Data driven branching logic
- Report Interaction

➤ Effort:

- 2 Day to build

Processes Included:

- Enrollment
- Rate Change
- Kirby Debug
- Superscreen
- Bill Pay



In our 5 most challenging scenarios, Worksoft Certify® was utilized to build and execute in a fraction of the time it takes to perform the tests manually. The tests that took 4 hours to execute manually took 17 minutes to execute automatically.



Lessons Learned So Far



- Understanding of governance processes are critical
- Usability is easy, as expected
- Automation is intuitive to users familiar with other tools
- Utilizing a project specifically to develop tests to build the regression set is the most effective
- Change management coordination can be significant
- Users quickly automated their repetitive daily work

Future Plans



- Develop scalable test automation capability (organization, process, technology) resulting in a reusable test component library

- **2013 Testing Automation Capability Project**
 - Governance
 - 3 projects
 - Project 1
 - Well known highly repeatable processes
 - 3 months duration
 - High reuse by other business units
 - Project 2
 - 60% new processes
 - Minimal impact to current regression tests
 - Replaces old scripts

Intangibles



- Creates a desirable career path for testing professionals
- Increases quality awareness
- Creates a culture of automation
- Empowers more people to think creatively about their interaction with the systems (Web team, Training, Business process teams)

Quality Assurance and Testing

The Dimensions of the Enterprise Problem

Project Drivers

- New Installations
- Upgrades
- Mergers & Spinoffs
- Reorganizations
- Consolidations

Test Types

- Functional Testing
- Role-based Testing
- Performance Testing

Business Process Variations

- Countries
- Regions
- Business Units
- Site Differences
- Product Lines
- Packaging
- Compliance
- Legal Variations

Business Processes

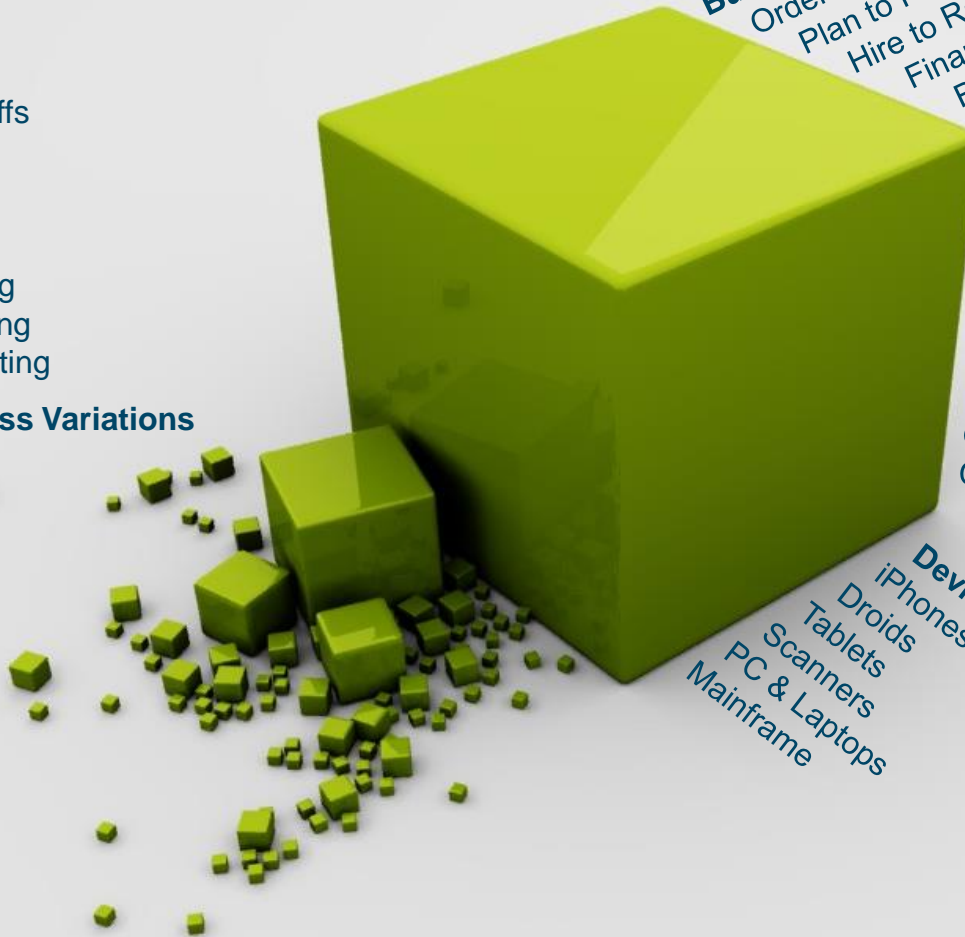
- Order to Cash
- Plan to Produce
- Hire to Retire
- Financial Closing
- Business Analytics

Applications & Technology

- Packaged Enterprise Apps
- Custom Applications
- Interfaces
- Mobile Apps
- Web & Portal
- JAVA, HTML, .NET
- On Premise
- Cloud-based

Devices & Platforms

- iPhones
- Droids
- Tablets
- Scanners
- PC & Laptops
- Mainframe



Quality Assurance and Testing

Manual Testing is Impractical and Provides Incomplete Coverage

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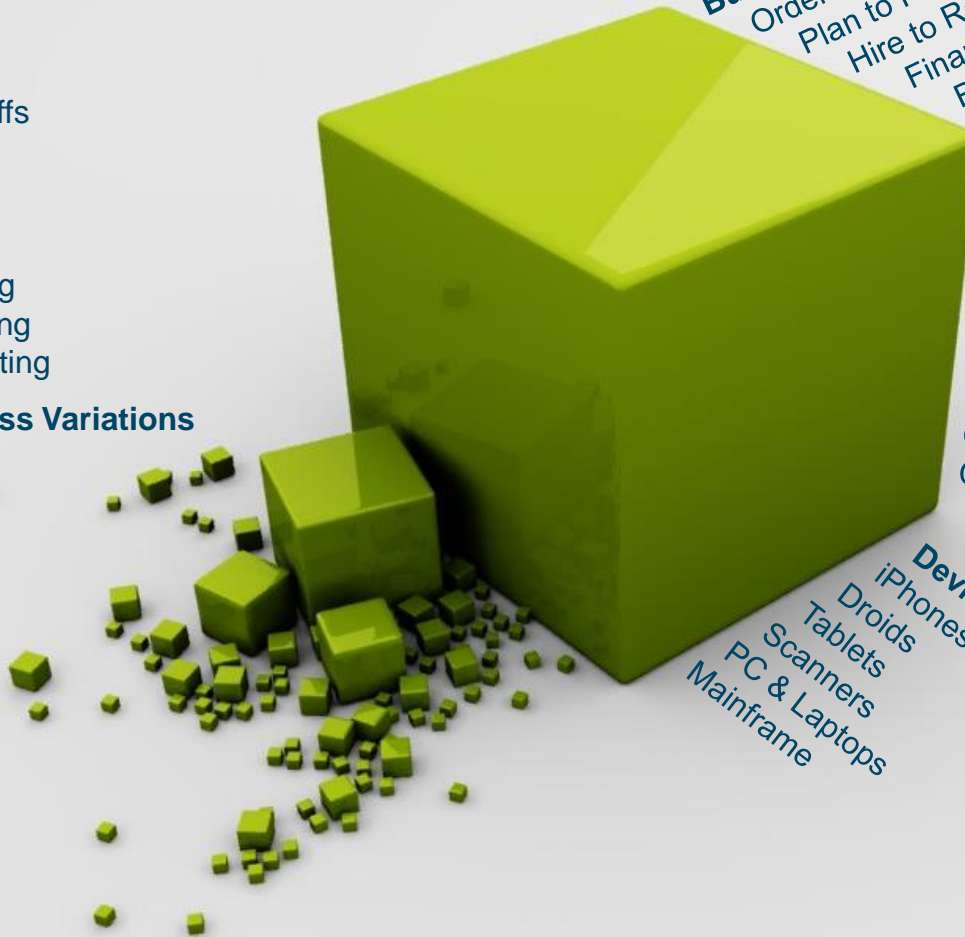
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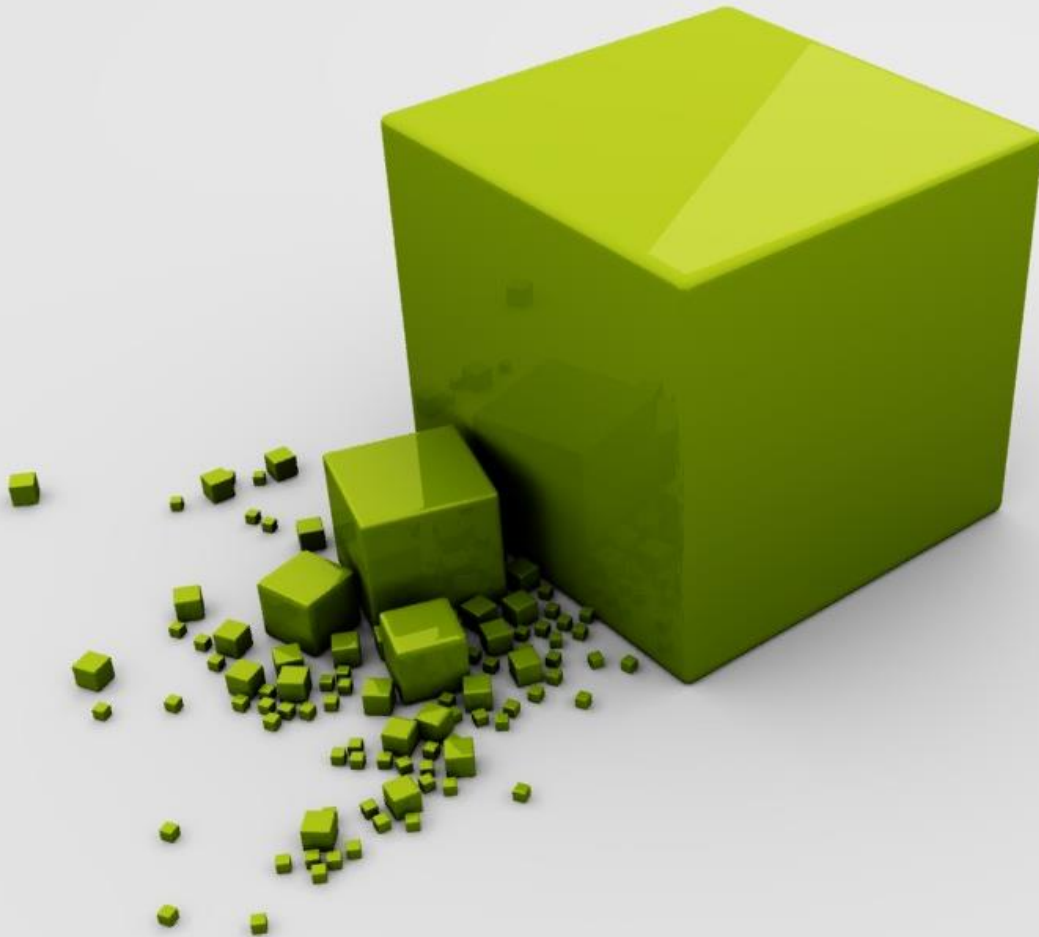
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Highly Automated Testing

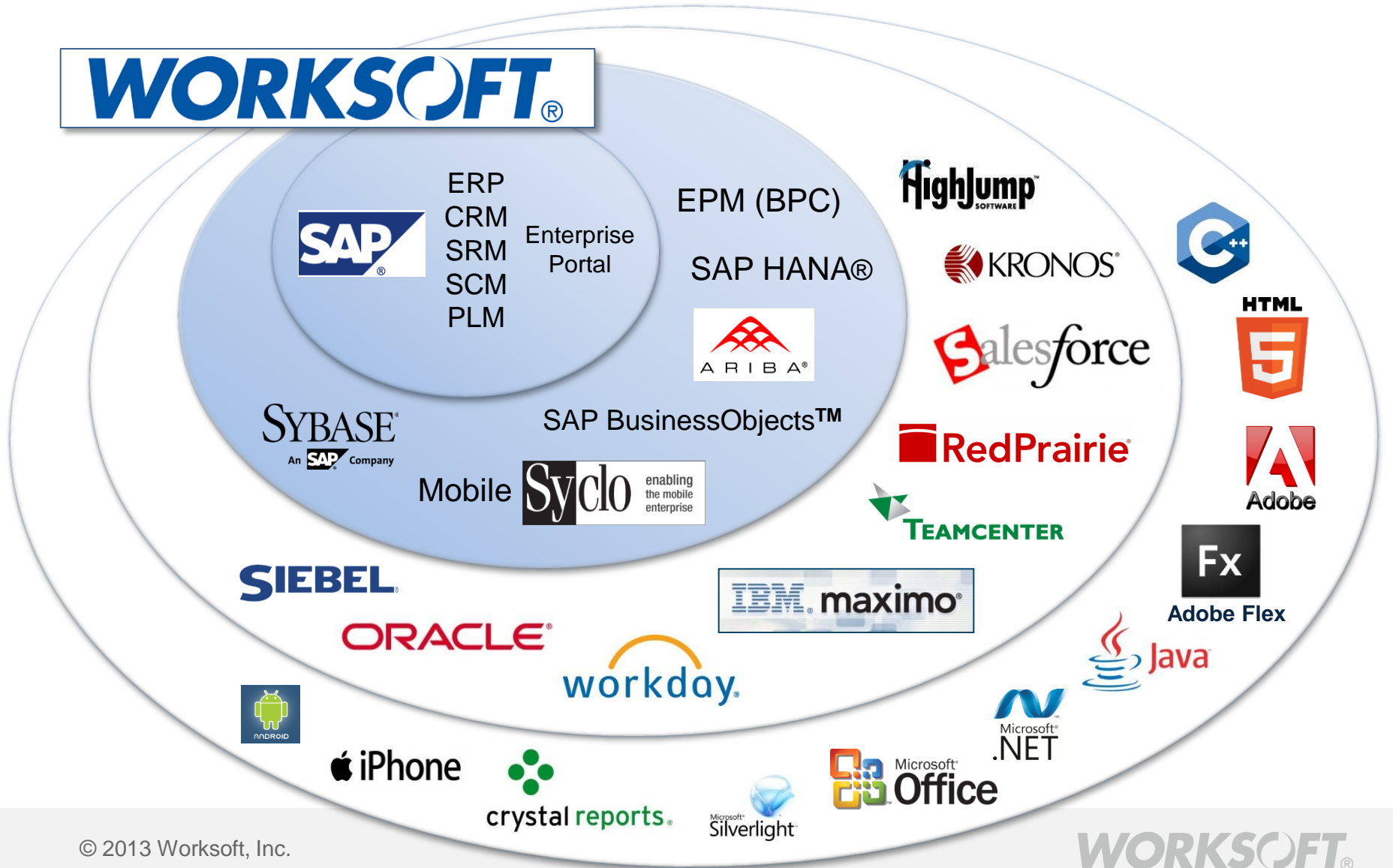
A “Must Have” to Ensure Business Process Quality



High Coverage
Less Technology Risk
Higher Quality
Greater Staff Efficiency
Faster Projects
Lower Costs

End-to-End Business Process Validation

WORKSOFT®



The Worksoft Difference

Simple

Can be used by business users
No programming skills required

Fast

Automate 60-70% of core
business processes in 90 days or less

Run lights out regression tests
daily or weekly

Resilient

When underlying applications change,
automated tests continue to work

Simple test maintenance

Complete

True end to end business process validation
covering all major technologies and platforms

Functional testing, performance testing,
role-based and risk-based testing

Thank you...



Q&A



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