SAP Test Automation Center of Excellence

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Agenda

- Introduction to Kraft foods
- Challenges that lead to SAP Automation
- Path to SAP Automation Center of Excellence
- Automation Journey
- Benefits
- Future state
- Partnership with Infosys
Introduction to Kraft foods

- Our people are passionate about food
- We have twelve $1 billion dollar-plus brands
- Seventy $100 million dollar-plus brands
- Operations in more than 75 countries worldwide
- Sales in approximately 170 countries
- 127,000 employees worldwide
- 223 manufacturing and processing facilities around the world
- 15 research and development centers
- $49.2 billion in revenue
- We’re traded on the New York Stock Exchange – KFT
- Part of the Dow Jones Industrial Average, Standard & Poor’s 500
- Dow Jones Sustainability Index and Ethibel Sustainability Index listed
- Our global headquarters is in Northfield, Illinois, US

Visit us http://www.kraftfoodscompany.com/welcome.aspx
Challenges that lead to SAP Automation

1. Challenge to meet the demand for multiple regression testing for project releases
2. Minor releases (Enhancements/ hot fixes) deployed in production (support releases) without effective regression testing due to lack of time and dedicated resources
3. People rolling of the project (Knowledge gap)
4. Lack of Transactional data volume for financial closure activity

1. Increase in significance of regression for shared SAP instances
2. Critical defects found during hypercare and Production due to lack of comprehensive test scripts
3. Comprehensive testing for all critical master data set for core business process
4. Long cycle times with minimum Test Automation
5. Limited reusability of test scripts

1. Dependency on various Process team to test E2E business process
2. Availability of business team/SMEs for test execution during the regression test cycle

Multiple Releases and mitigate the support releases
Test Maturity/Quality Management
Interdependency
Path to SAP Automation Center of Excellence

- Define and Establish the right Governance and metrics Model.
- Demonstrate cost and effort benefit to the end customer.
- Improve and innovate.

**Vision**
- Deliver superior and consistent product to the end customers
- Increase quality with comprehensive and efficient testing
- Standardized Robust Global Framework for automation.
- Reduction of production incidents/defects
- Increased value to business units (Reduced cost)

**Execution**
- Centralized Test tool management ownership
- Global Resource model
- Progressive Automation
- Standardized HP tool suite
  - Quality Center
  - Quick Test Professional
  - Load runner
  - Business Process Test

**Roadmap**
- Tactical implementation: Getting started
- 1 year maturity roadmap for NA
- 2 years scope expansion roadmap across geography (APAC, EMEA and LATAM)

**Kraft Foods North America (KF-NA)**
- Worldwide HQ: Northfield, Illinois

**Kraft Foods Europe (KF-EMEA)**
- Latin America Region (LA)

**Asia Pacific Region (APAC)**

**Information Systems**
## Vision for SAP Automation Testing COE

### Test Delivery Excellence

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Quality</th>
<th>Productivity</th>
<th>Client Satisfaction</th>
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<tbody>
<tr>
<td>• Standardized test model across geography</td>
<td>• Reduction of production incidents/defects</td>
<td>• Speed-to-market</td>
<td>• Increased value to business units</td>
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<tr>
<td>• Single point of Automation test Process ownership</td>
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<td>• Reduced Rework</td>
<td>• Better client experience</td>
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<td>• Increase level of testing Automation</td>
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### Key Drivers

- People: One organization responsible for Regression and Automation testing
- Process: Standardize automation framework, process and methodology across the geography
- Tools: One set of standard test management tools across the geography

### Key Objectives

- Delivery Superior release to our client and end customers
- Keep production system stable: Critical/High defects discovered before go live
- Delivery predictable and consistent results that delights our teammates and clients
- Build comprehensive test suite that covers 100% core business functionally
- Leverage Automation across the testing landscape
- Minimize the dependency of the Business team for regression testing: Automate 60 to 70% of regression scripts
Automation Journey

**Global Automation Framework**

- Development of Robust Global Automation Framework
- Implementation of Automation Framework in APAC, EMEA and LA

**One Stop shop for testing**

- Generated transactional data for effective unit testing
- Leverage automation for integration testing (multiple master data) – Reduced cycle time.
- Leverage automation for regression testing – Ensure production system stability.
- Leverage automation for production support regression testing – Ensure production system stability.
- Leverage automation to validate TDMS refresh effectiveness.
- Leverage automation to generate transactional data for financial closures (MEC).
- Leverage automation for test bed and test data creation for performance testing.

**Comprehensive coverage and Reporting**

- E2E test cases for complete test coverage
- Non ambiguous, easily readable XML report

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**Phase I**

**Set Direction**

- Assess, Envision & Roadmap

**Phase II**

**Design**

- Architect, Validate & Design

**Phase III**

**Make it Happen**

- Build, Test & Integrate

**Phase IV**

**Run and Reuse**

- Stabilize, Improve and reuse
Benefits of Automation

- **80-90% Test Coverage of core business process**
- **60-70% Automated Tests for Regression testing**
- **30 – 40 % Base Cost reduction for Automation of regression scripts in new geography**
- **>6% Defects captured due to comprehensive regression testing**
- Testing for multiple master data set
- Successful monthly package regression testing
- Leveraging automation to validate the TDMS refresh effectiveness

**Cost reduction:**
- NA - $1,950K
- EMEA - $424K
- APAC - $285K
- LA (Brazil) - $35K

**Fixed Cycle time:**
- NA - 3 weeks
- EMEA - 3 weeks
- APAC - 3 weeks
- LA (Brazil) - 3 weeks

**Optimal Workforce:**
- Automation (Manual) NA - 6 (~50)
- EMEA - 10 (~73)
- APAC - 7 (~40)
- LA (Brazil) - 2 (~10)

**Reliability:**
- Zero defect detection in production

**Testing Comprehensiveness:**
- NA - 400 Test cases
- EMEA - 945 Test cases
- APAC - 180 Test cases
- LA (Brazil) - 100 Test cases

**Savings through Automation Testing**

- NA: 1,950
- EMEA: 424
- APAC: 285
- LA (Brazil): 35

**Regions / Geography**

- **Risk Management**
- **Regulation**
- **Richer Customer Experience**
- **ROI**
Future and where we want to be..

Global Test Center of Excellence (2012)
Integration Testing; Performance Testing (2010-2011)
Automation Testing; Regression Testing (2009)

TCoE Governance

Automation Testing Competency Center
Integration Testing competency Center
Performance Testing competency Center

SAP Functional expertise, Knowledge Management Framework, Global Test Process Management

Measures and Metrics
Test efficiency, Cost of testing, Test Coverage, Defect removal efficiency

NA | EMEA | APAC | LA
Infosys Testing organization is driven by the values to continuously deliver better and faster results at a cheaper cost while keeping itself scalable.

- Strong Leadership skills / experience leading large transformational programs
- Specialized independent testing group with the right mix of business, functional & technical skills
- Automation trained and certified resources

- Proven track record / strong partnership at Kraft
- Knowledge of Kraft business processes.
- Existing partner in multiple initiatives.

- Automated regression suites for 60 to 70% of SAP business process
- Improved onsite ratio to 10% thereby reducing total cost of ownership
- Reduction of regression testing cost by almost 30%
- Implemented world class Automation approach, processes, methodology and framework
- Built comprehensive regression test suite covering 100% of core business process
- Developed reusable test scenarios for SAP business processes resulting in
- Leveraging Synergy with Legacy and support team to reduce testing turnaround time.
- 100% Defect detection for regression testing

- Strong Automation expertise
- Strategic alliance with HP and SAP
- Proven tools and accelerators
- Infosys intellectual property:
  - Reusable artifacts
  - Standard proprietary XML test results
Infosys - Kraft Global Partnership

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Kraft Foods Europe
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Asia Pacific Region (APAC)

Infosys – Kraft’s Global testing partner since Jan 2009

Evolution of SAP Testing Practice in Kraft

- Test Management
- Integration testing
- Regression Testing
- Automation
- Performance testing

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