Automated Testing of SAP at Kimberly-Clark

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Who is Kimberly-Clark Corporation?

- **Sales** - $20.8 billion in sales in 2011
- **Employees** - 57,000 working in 36 countries
- **Customers** - Global brands are a trusted part of the lives of nearly one-quarter of the world's population across more than 175 countries
Global Brands by Business

- **Consumer** - Kleenex, Scott, Huggies, Pull-Ups, Kotex, Poise/Depend
- **KCP** – Jackson Safety, Safeskin Gloves
- **HC** - Ballard Medical Devices, Pain Management (I-Flow)

**Brand Share** – Our Consumer business holds the No. 1 or No. 2 brand share in more than 80 countries
Kimberly-Clark Runs SAP®

- Four SAP® environments across the global regions

<table>
<thead>
<tr>
<th>North America</th>
<th>Asia-Pacific</th>
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<tbody>
<tr>
<td>Europe</td>
<td>Latin American Operations</td>
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- North America (United States and Canada)
  - SAP ECC 6.0

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<thead>
<tr>
<th>DTR</th>
<th>RTS</th>
<th>RTC</th>
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<tbody>
<tr>
<td>Design to Retire</td>
<td>Recruit to Separate</td>
<td>Requisition to Check</td>
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<tr>
<th>FTS</th>
<th>OTC</th>
<th>ATR</th>
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<tbody>
<tr>
<td>Forecast to Stock</td>
<td>Order to Cash</td>
<td>Accounting to Reporting</td>
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- Key Interfaces

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<tr>
<th>GATP</th>
<th>APO</th>
<th>CRM</th>
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<tr>
<td>Global Available to Promise</td>
<td>Advanced Planning Optimizer</td>
<td>Customer Relationship Management</td>
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<tr>
<th>VMI</th>
<th>BI</th>
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<tr>
<td>Vendor Managed Inventory</td>
<td>Business Intelligence</td>
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Kimberly-Clark Path to Test Automation
Manual Testing Lean Event (Kaizen)

- Document current testing process - find ways to eliminate waste
  - Identified areas for improvement: Impact Analysis, Data & Test execution via Automation
Executive Sponsorship

- Built Business Case for automation based upon historical testing costs and estimated ‘White Space’ creation
  - Saving expectations for automation
    - Conservative 25%
    - Expected 55%
    - Aggressive 75%

- Tied Test Automation whitespace savings to SAP ECC 6.0 project upgrade

- Designed Implementation Approach and Support Model
  - Focus on E2E tests crossing entire business process flow
  - Automated Testing COE

- With business case data in-hand, IT Leadership agreed to support the initiative with both resources and funding
Vendor Selection and Review process

- Leveraged Gartner and K-C Architecture services for preferred vendors
- Interviewed Midwest Peer companies (SCJ, Wrigley, General Mills) regarding current status with automated testing
- Completed onsite vendor demos and evaluations
  - Worksoft Certify endorsed by Infrastructure, Architecture and Project Management Office Teams
- Completed RFP and purchased software
# Project for SAP Automation

<table>
<thead>
<tr>
<th>Project Timeline</th>
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<tbody>
<tr>
<td><strong>Q4-2010</strong></td>
<td>• Project Resource Identification</td>
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<td></td>
<td>• E2E test Instances identified for Automation based upon Criticality and Usage</td>
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<tr>
<td><strong>Q1-2011</strong></td>
<td>• Project Kick-off</td>
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<td></td>
<td>• Certify Training</td>
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<td></td>
<td>• Individual test cases built into executable tests</td>
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<tr>
<td></td>
<td>• Integration with Business SME’s and design flow across SAP Workstreams <strong>lacking</strong></td>
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<td><strong>Q2-2011</strong></td>
<td>“<strong>The Big Shake-up</strong>”</td>
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<td></td>
<td>• Agile methodology introduced to Project team</td>
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<td></td>
<td>• Dedicated Resources – IT and Business SME’s</td>
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<td></td>
<td>• Increased focus on building standards and re-usability of test components</td>
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<td></td>
<td>• Increased visibility to E2E Process flow and Design elements</td>
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<tr>
<td><strong>Q3-2011 – mid Q4-2011</strong></td>
<td>• Automated Test Build – using Agile Cadences to minimize time impact to Business SME resources</td>
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<td>• Virtual Automated Testing COE resources identified</td>
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### Timeline

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<tr>
<th>Quarter</th>
<th>Activities</th>
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| Q1-2012 | - Preparation for SAP ECC 6.0 begins (remediation)  
- Automated Testing COE integrates Test Automation into Project Management Lifecycle |
| Q2-2012 | - Automation Tests executed as part of SAP ECC 6.0 Integration testing  
  - 25% of OTC Critical Test Cases executed via Automation  
  - Lights out Testing execution of Regression Test Suite integrated into SAP software release cycle – soft  
  - Automated Testing COE begins start-up activities for other SAP projects  
  - Business Case for A-P roll-out |
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<th>Description</th>
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</table>
| Q3-2012  | - Application Team Integration  
- Virtual COE = Virtually no resources  
  - Start-up Squad  
  - Identify resources & start training  
- Global Roll-out planning  
  - Infrastructure Landscape  
  - Business Case for LAO  
- Project Integration – new builds & Regression testing  
  - APO Upgrade  
  - Warehouse Management System upgrade |
| Q4-2012  | - Project Integration  
  - i2™ Upgrade  
  - Continued Regression test suite execution for projects  
- Automated Testing software as a ‘Robot’  
- Automated Testing infrastructure upgrade  
- Asia-Pacific Integration (Planned)  
- Integration into non-SAP Projects  
- Solidify 2013 Roadmap |
### 2013 Roadmap

- Budget Allocated for Automation builds within SAP application teams
- Automated Testing Software Upgrade (platform change)
  - Introducing Mobility
- Global Roll-out – LAO
- Build Automated Testing Expertise within Application teams (Functional and Technical)
- Build Start-up Squad capabilities within Application teams
  - Staffing available for 2-3 Start-up squads
  - Enable project integration for ‘Top 7’ 2013 projects
  - Enable Regression test execution for projects/enhancements
- Lights out Testing execution of Regression Test Suite integrated into SAP software release cycle – Hard
- Steering Committee
Kimberly-Clark Key Learnings

- IT Leadership Support is important – Business Leadership Buy-in is even more so!
  - You need your Business SME’s available and engaged to ensure success

- Test Cases do not translate into Automated Tests
  - What does “Make sure the screen looks right” really mean?

- Look for ways to tie Automation into projects and enhancements to create whitespace for your Business
  - Pro-bono work for quick wins will help with gaining funding for larger initiatives
  - Show the value and the Business resources on the ground will support you

- Not everything will be automated, nor should it be

- Advocates in IT Application teams will help to build the trust in Automation & ensure best practices are followed

- True IT resources need to be involved from the ground up in the overall design of Automated Tests
  - The tool is straightforward to use, but to get true benefit, use Functional Analysts from the application area and real Developers who know SAP to build the tests

- Be willing to ‘check and adjust’ and ask for help when you need it