Continuous Change requires End-To-End Quality Assurance incl. Test Management

Roman Zednik, Tricentis
The continuous testing market leader with agile test management and advanced test automation optimized to support over 160+ technologies.

**Results**
- 10X Faster Testing
- 50% Lower Costs
- 90% Risk Coverage

**Tech Alliances**
- Atlassian
- Microsoft
- SAP

**Partners**
- Accenture
- Capgemini
- Cognizant
- Wipro
- Infosys
- IBM

**Timeline**
- 2007: Founded
- 2016: Insight Venture Partners Investment
- 2018: QASymphony Test Management
- 2019: LiveCompare Acquisition Impact Analysis
- 2020: Launch SAP OEM & SolEx Transformational partnership
- 2021: Neotys Acquisition Performance Testing

**Customers**
- Greater than 1,800+ Customers Worldwide

**Analyst Recognition**
- Gartner
- Forrester

**Insight Venture Partners**
- Investment 2016
- Acquisition 2019
- Launch SAP OEM & SolEx 2020
- Neotys Acquisition 2021
Business Transformation Requires Continuous Innovation and Continuous Testing

“staying Fit”
Wherever you are (ECC/S4)
Business Process
Optimization Testing
Support Packs

“getting ready”
Key Upgrades
Consolidate systems
Streamlining integration points

“making the move”
New innovations (BTP)
Lift & Shift + Migration
Intelligent Enterprise
The Business Reality of Testing

IT Budgets Allocated to QA
- 23-28%

What Impedes Software Delivery?
- Design & Dev: 49%
- Deployment: 14%
- Planning: 8%
- Testing: 6%

Test Execution Rates?
- Rapid, Automated Deployments
- Test Automation Effort: <20%

Source: Capgemini, World Quality Report 2019
Continuous Application Testing

Does it work?

Does it scale?

What to test?

Deploy

Design & Build

Change Impact Analysis

APP Performance

Continuous Test Automation
What to Test? Does it Work? Does it Scale?

- SAP Transport (Impacted Capabilities)
- Change Impact Analysis
- Most-at-risk Capabilities
- Usage Data
- Test Automation
- Performance Validation

Changes

Dev

Prod

Test

Most-at-risk Test Hits & Gaps

- Execution
  - Execution Lists
  - Exploratory Testing
  - Interactive Testing
- LiveCompare_2019-07-09 16:15:23

- Java, compare
- Order2Cash
DevOps Delivery Pipeline

- SAP Application Change
  - SAP CIA / LiveCompare
- Change Impact Analysis
  - SAP CIA / LiveCompare
- Automated Testing
  - SAP ECT / Tosca
- Test Audit
  - SAP CIA / LiveCompare
- Zero Defects

Steps:
- Code Quality
- Test Scope Identification
- Test Coverage
- Test Automation
- Test Validation
Impact Analyse → Test Automation
### Willkommen bei ARA
Der Automation Recording Assistent von Tricentis!

![Automation Recording Assistent](image)

**Recorded Testcases**

<table>
<thead>
<tr>
<th>Name</th>
<th>Image</th>
<th>Value</th>
<th>ActionMode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Easy Access</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Command Field</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Inquiry Field: Initial Screen</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Inquiry Type</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Sales Organization</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Distribution</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Division</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
<tr>
<td>Sales Office</td>
<td>![Image]</td>
<td>![Value]</td>
<td>![ActionMode]</td>
</tr>
</tbody>
</table>

**Create Spectra Inquiry: Overview**

| Sold-To-Party | ![Image] | ![Value] | ![ActionMode] |
| Spectra Mel Cust / 570 Bourke Street / Melbourne VIC 2000 | ![Image] | ![Value] | ![ActionMode] |
| Spectra Inquiry 10001044 has been saved | ![Image] | ![Value] | ![ActionMode] |
| Command Field | ![Image] | ![Value] | ![ActionMode] |
| Spectra Inquiry | ![Image] | ![Value] | ![ActionMode] |

**VA11 - Create Inquiry**

- ![Image] | ![Value] | ![ActionMode] |
Impact Analyse → Test Automation

Smart Impact Analysis Dashboard

Analysis Date: 2021-09-06
Analysis System: SAP50
Performance History: ISAP37-EN6
Test Repository: Tosca_SAP_Demo

Used, Impacted & Most-at-risk

Chaining Object Summary

Most-at-risk & Test Coverage by Type

Most-at-risk & Test Coverage

Test Case Hits from LiveCompare Most-at-Risk Coverage:
- Modules
- Requirements
- LiveCompare_CIA_Most-at-risk_Gaps 2021-09-06 11:54:43
- Test Case Design
- Test Cases

LiveCompare_ARA→Tosca
- Automation Recording Assistant (ARA)
- Execution
  - Execution Lists
  - Exploratory Testing
  - Interactive Testing
- LiveCompare_CIA_2021-09-06 13:54:29
- Test Case Hits from LiveCompare Most-at-Risk Coverage

LiveCompare_CIA_2021-09-06 13:54:29
- ActualLog
- MD04 - Stock/Requirements List
- MB12 - Warehouse Stock
- IE83 - Display
- MM8E - General
- VT01N - Display
- MB58 - Stock for Posting Data
- CV03N - Display
- A500 - Asis
t- MM05 - Immediately
- ME28 - Collective Release
- ME2K - General
- MI24 - Physical Inventory List
- MR8R - Release Blocked Invoices
- Order2Cash - WinGUI
- VF10 - Create
- VA01 - Create Sales Order - EMEA
- VA01 - Create Sales Order - APAC
- VA01 - Create Sales Order - US

Tricentis
HITS ➔ Test Automation (Regression)
Enterprise Continuous Performance Testing

One Test Definition
ECT – End2End Testing
You need to Test End2End, also outside SAP

> 160 technology specific adapters

codeless automation across any technology!
## Sample – Compare GUI with PDF

### 04 Export to PDF and Validate
- **Save Quote**
- **Sync on PDF Print**
- **Verify PDF**

<table>
<thead>
<tr>
<th><strong>Sold-To-Party</strong></th>
<th>570 Bourke Street</th>
<th>MELBOURNE VIC 3000</th>
<th>AUSTRALIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ship-To-Party</strong></td>
<td>*570 Bourke Street</td>
<td>MELBOURNE VIC 3000</td>
<td>AUSTRALIA</td>
</tr>
</tbody>
</table>

### Invoice

<table>
<thead>
<tr>
<th><strong>Bill-To-Party</strong></th>
<th>Mr. Sample</th>
<th>Melbourne</th>
<th>570 Bourke Street</th>
<th>Melbourne VIC 3000</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information</strong></td>
<td>Invoice No.</td>
<td>99044685</td>
<td>Invoice Date</td>
<td>29/05/2021</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delivery No. (Date)</td>
<td>80002237</td>
<td>Ref Sales Order No. (Date)</td>
<td>52885</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer PO No. (Date)</td>
<td>Test (27.05.2021)</td>
<td>Customer No.</td>
<td>1000000040</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Currency</td>
<td>AUD</td>
<td>Form of Payment</td>
<td>Net</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inco Terms</td>
<td>EXW F.O.B. From plant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Weight</td>
<td>2 KG</td>
<td>Net Weight</td>
<td>2 KG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Volume</td>
<td>3.200 M3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Item Details

<table>
<thead>
<tr>
<th><strong>Item</strong></th>
<th><strong>Material Description</strong></th>
<th><strong>Quantity</strong></th>
<th><strong>Unit Price</strong></th>
<th><strong>Value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>SPECTRA CHEESE</td>
<td>2 EA</td>
<td>30.00</td>
<td>60.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>G.S.T.</strong></th>
<th>10.00%</th>
<th><strong>Total Before Tax</strong></th>
<th>60.00</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Tax</strong></td>
<td>6.00</td>
<td><strong>Total Tax</strong></td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Amount (AUD)</strong></td>
<td>66.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Test Management – Test Planning
Test Management – Test Plannung
Different Test Data Combinations
Different Test Data Combinations (Instances and Users)
ECT – Test Data Service

Order2Cash

<table>
<thead>
<tr>
<th>OrderID</th>
<th>Status</th>
<th>Delivery number</th>
<th>Document number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2144</td>
<td>Invoiced order</td>
<td>80001068</td>
<td>90000951</td>
</tr>
<tr>
<td>2145</td>
<td>Invoiced order</td>
<td>80001069</td>
<td>90000952</td>
</tr>
<tr>
<td>2146</td>
<td>Invoiced order</td>
<td>80001071</td>
<td>90000954</td>
</tr>
<tr>
<td>2148</td>
<td>Invoiced order</td>
<td>80001072</td>
<td>90000955</td>
</tr>
<tr>
<td>2149</td>
<td>Invoiced order</td>
<td>80001077</td>
<td>90000960</td>
</tr>
<tr>
<td>2154</td>
<td>New order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2155</td>
<td>New order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2151</td>
<td>Delivered</td>
<td>80001074</td>
<td></td>
</tr>
</tbody>
</table>
Business Process Comparison and Validation in different Environments

<table>
<thead>
<tr>
<th>Details</th>
<th>Name</th>
<th>Frequency</th>
<th>Damage</th>
<th>Weight</th>
<th>Contribution (%)</th>
<th>Coverage Specified (%)</th>
<th>Execution State (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SAP Migration Plan - Business Process Validation</td>
<td>2</td>
<td>2</td>
<td>16</td>
<td>2.44</td>
<td>100</td>
<td>100</td>
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<tr>
<td></td>
<td>01. Order2Cash - ECC 6.0 WinGUI</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>02. Order2Cash - S/4 Hana WinGUI</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2.44</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>03. Order2Cash - S/4 Hana Fiori</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>78.05</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Order2Cash - ECC 6.0 WinGUI - AS IS</td>
<td>5</td>
<td>4</td>
<td>512</td>
<td>78.05</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>01. Order2Cash - WinGUI</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>78.05</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>02. Order2Cash - S/4 Hana WinGUI</td>
<td>3</td>
<td>3</td>
<td>128</td>
<td>19.51</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>03. Order2Cash - S/4 Hana Fiori</td>
<td>1</td>
<td>1</td>
<td>19.51</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Why SAP Chose Tricentis as Its Official Testing Solution?

The Global Leader in Enterprise Testing Solutions
- Leader in Gartner Magic Quadrant
- Proven Results in the World’s Biggest Brands
- Versatile Platform for Customers at Any Stage of SAP Modernization

Enterprise-Grade Platform for SAP Testing and Beyond
- Model-Based Automation for Resiliency and Scalability
- Risk-Based Approach That Minimizes Business Downtime
- Seamless Integrations for SAP and Non-SAP Testing

Modern, AI-Driven Technology for Easy Adoption
- AI-driven Impact Analysis for Fast, Safe Changes
- Cloud-Supported Architecture
- No-Code, Business Friendly Platform for Easy Adoption
Questions & Answers

Thank you!

Roman Zednik, Tricentis
Backup
What we provide
Deliver higher quality software faster with the Tricentis Continuous Testing Platform

Tricentis Continuous Testing Platform
Supports 160+ enterprise applications and technologies

- **Tricentis LiveCompare**
  Smart impact analysis

- **Tricentis Tosca**
  Intelligent test automation

- **Tricentis NeoLoad**
  Enterprise performance

- **Tricentis Data Integrity**
  End-to-end data testing

**Tricentis qTest**
Unified test management and analytics

- Fully automated
- AI powered
- Completely codeless
- Cloud enabled
- Risk optimized
- Enterprise DevOps
- Open and extensible

**Tricentis Services**

- Business value roadmap
- Continuous maturity assessment
- Continuous testing framework
- Tricentis Academy
Supports All Cloud Solutions

SAP SuccessFactors

SAP Concur

SAP Hybris

SAP Ariba