

Infosys and Tricentis improve time-to-market, reduce test execution effort by 60% and increase risk coverage for a global financial services company



About the client

The client is one of the world's largest banking and financial services organizations, serving millions of customers worldwide.

Challenges

In today's hyper-connected world, establishing a local presence in a diversified market spread across various geographies is a necessity for providing modern and market-leading banking solutions. However, from an HR perspective, it can be challenging to maintain personnel data and process payrolls according to country-specific taxations and bylaws.

The client embarked on a journey of migrating their HR functions from Oracle PeopleSoft to SAP SuccessFactors, a new HR-Direct Portal (ServiceNow), and People Insights over the course of five releases. This transformation required a stringent level of quality assurance whereby the business process testing had to ensure sufficient coverage, high accuracy and a smooth go-live.

Previously, the client's regression testing was a mixture of unit-level test automation scripts and manual testing. The test suite had a high level of redundancy, making it difficult to maintain testing and determine its scope. Additionally, the legacy test platform required a specialized skill set. To minimize risk, accelerate turnaround time and reduce the cost of quality (COQ), the client needed to re-imagine their regression testing approach.

In response, they decided to automate business process testing with a tool that would help them run regression tests more frequently so they could align testing with SAP upgrades and any project-specific needs.

At a glance



Goal

Execute the regression test suite within a four-week window for quarterly releases to achieve a lower COQ and high testing accuracy.



Strategy

Automate critical business processes using automation best practices developed by Infosys for Tricentis Tosca.



Outcomes

- Reduced test execution effort by 60%
- Leveraged functional testers to automate testing through scriptless automation capabilities
- Reduced test redundancy with risk-based test case design
- Identified, fixed and tested defects for critical processes earlier on, averting go-live delays
- Improved risk coverage
- Improved test data consistency

A culture of automation

In 2017, the client's software engineering division created a business case to reduce the cost burden in application support and maintenance while embracing agile, DevOps and the latest automation techniques. One component of the business case involved introducing reliable and cost-effective automation for business process testing.

The client had several redundant and duplicate test artifacts that needed sanitization. They also had to ensure that the core business processes were properly validated for each release. After evaluating multiple automation testing solutions, they chose Tricentis Tosca as the best-fit tool for their requirements.

The implementation team for the HR transformation program was using a script-based automation tool which required a dedicated team for automation. Further, this script-based automation tool was not a strategic tool at the organizational level.

The client approached Infosys, its independent testing partner for their HR transformation program, to do a proof of concept (POC) for SAP SuccessFactors using Tricentis Tosca. Tricentis Tosca is a scriptless automation tool built to enable functional consultants without any automation/scripting experience to create end-to-end automated tests that are applicable across multiple applications and platforms. Tricentis Tosca's ability to automate SuccessFactors and enable scriptless testing made it the ideal tool for the client's business as usual (BAU) team since it did not require a specialized skill set.

Infosys completed the POC on time and created a roadmap for the strategic automation of the critical regression suite across various releases. Following approval from the client,

Infosys began automating the business processes. So far, 78% (exceeding the automation benchmark of 75%) of the SAP SuccessFactors regression inventory has already been automated for the waves that have gone live. The plan is to automate subsequent waves and extend testing to ServiceNow.

From the available test inventory, Infosys identified the regression candidates related to the most critical business process areas. Then, they used their best practices with Tricentis Tosca to implement the subset of critical regression tests that were suitable for automation. These best practices included:

- Model-based test automation
- End-to-end automation including any pre-requisites
- Recovery scenarios
- Structural test case design sheets
- Naming conventions
- Test configuration parameter usage
- Libraries to promote test artifact reuse

Tricentis Tosca offers end-to-end business process testing across the enterprise SAP and non-SAP application landscape with seamless integration, reduced maintenance needs and better usability. This landscape comprises Employee Central, performance and goal management, succession management, payroll processing, and learning management. Tricentis Tosca also helped automate the regression test suite creation, risk analysis and large-scale test execution in a multi-user test environment. This helped the client achieve continuous integration and deployment as well as easy integration with HPE/Micro Focus ALM for test management and execution (in progress). Additionally, Infosys re-tasked the functional consultants to increase the automation percentage during lean periods, thereby eliminating the need for a separate automation team and helping the client reduce costs.

“With this global HR transformation program, our organization embraced enormous change with respect to our HR systems, processes, and organizational realignment. These changes also brought a daunting amount of configuration and integration requirements that mandated that we automated as much as possible of the corresponding testing that went with those requirements. It became clear that we had to partner with an organization that not only had experience with our global software vendors (SAP, ServiceNow, Peak) but also with the testing tools (Tricentis Tosca, Quality Center) that would become part of our standard suite for the future. Infosys was selected as that valued partner and by doing so we were able to contain our testing costs and improve our testing efficiency and effectiveness using their experienced resources.”

Senior Director from the Client

Reducing cycle time with a risk-based testing approach

SAP SuccessFactors has 4 quarterly releases every year and this requires testing all the modules in a limited time window of 2-3 weeks. The client's key requirement was to execute all the critical process areas within the first week of the available regression test window in order to identify any issues arising from the upgrade. Since there is always a difference in the underlying objects in various environments, a certain amount of automated script modification was expected. Tricentis Tosca kept the required modifications to a minimum.

Apart from the quarterly releases, the client also wanted regression testing to be conducted across projects to ensure that existing functionalities were not affected. Automated tests proved beneficial here as well. These reduced test execution efforts by 60% and improved test coverage and accuracy. In the most recent quarterly release, Infosys completed regression testing for a majority of the modules two weeks ahead of schedule thanks to the robust test automation suite, thereby slashing total cycle time by 50%.

The client chose Infosys to conduct an automation POC for its SuccessFactors transformation program. Leveraging over 12 years of experience in SAP HR testing and proven expertise with various automation tools, Infosys completed the POC and subsequently automated 78% of the regression suite using Tricentis Tosca (to date).

Infosys' partnership with Tricentis and SAP has proven to be the right choice for the client by enabling comprehensive end-to-end testing for all of its business processes. The client can now run its entire regression suite in a way that increases coverage and boosts confidence in its software quality assurance processes

Automation using Tricentis Tosca helps the client find defects early and reduce cycle time and lower cost



Tricentis Tosca is an industry-leading test automation tool for packaged enterprise applications. It enables end-to-end testing of mission-critical applications including SAP, Salesforce, Oracle, SAP SuccessFactors, ServiceNow, and more.



Infosys is a global leader in next-generation digital services and consulting. We enable clients in 45 countries to navigate their digital transformation. With over three decades of experience in managing the systems and workings of global enterprises, we expertly steer our clients through their digital journey. We do it by enabling the enterprise with an AI-powered core that helps prioritize the execution of change. We also empower the business with agile digital at scale to deliver unprecedented levels of performance and customer delight. Our always-on learning agenda drives their continuous improvement through building and transferring digital skills, expertise, and ideas from our innovation ecosystem.

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About Tricentis

With the industry's #1 Continuous Testing platform, Tricentis is recognized for reinventing software testing for DevOps. Through risk-based testing, scriptless end-to-end test automation, and the industry's most extensive technology support, Tricentis breaks through the barriers experienced with conventional software testing methods. Our innovative technologies simplify testing for even the most complex enterprise applications—transforming testing from a roadblock to a catalyst for innovation.