

Case study

# Tackling the challenge of testing automation for SAP at a leading car manufacturer



# The client

The client for this project is the South American subsidiary of a top ten ranked multinational automotive company in terms of production. In Argentina, since being established in the late 1990s, it has gone on to become one of the most reliable names in the industry and has manufactured over 1,500,000 vehicles.

With over 5,000 staff, some 131,000 units per year are produced at its Argentinian plants alone. In recent years it has become the sales market leader in the South American country, now exporting over 80% of its output.



# The challenge

The client implemented SAP S/4HANA in 2019 and drew up an ambitious roadmap for the evolution of their entire SAP landscape, with several projects under way at any one time.

Testing automation was a vital requirement to reduce time-consuming activities and bottlenecks of business and IT resources during regression testing.

The client had no testing automation tools for SAP, and they were testing all projects or alterations on an individual basis, and doing so manually, with the users doing the testing. This is a very time-consuming process, and in practice it made the testing of all end-to-end scenarios impossible. The client lacked both the resources to carry out all the required testing activities, and the expertise to implement all testing scenarios for each case. They required a solution to speed up testing and reduce the number of users involved.

The challenge was to devise a Proof of Concept that would demonstrate the feasibility, efficiency and efficacy of the testing suite suggested by the vendor. As such, this PoC aimed to prove the use of Tricentis Test Automation within the client's SAP environment, to demonstrate the viability and facility of automated testing in an evolving SAP architecture.



# The solution

NTT DATA assembled a team of experts in Testing Automation, Tricentis and SAP. The project plan comprised installing the tools, preparing the environment, and guiding the client through running different test methods to compare the most effective and efficient ones.

The team presented the client with a solution using SAP Solution Manager (SolMan) native alongside Tricentis Testing Automation (TTA), a subset of Tricentis Tosca that has recently been integrated into SAP Solutions Manager. With this configuration, SolMan provide for end-to-end management of both manual and automated testing as part of the standard Enterprise Support license.

A testing automation framework was selected, and some example processes were chosen to demonstrate the application's lifecycle from end to end in those scenarios. This proposed solution tested the entire lifecycle using SAP SolMan test suite components such as Test Plan Management, Test Repository, Test Configurations, Test Scripts, Test Execution and TTA alongside each other to ascertain the optimal outcome.

Test scripts were built for the chosen processes to validate the end-to-end scenarios. The results were then compiled, conclusions drafted, and the Testing Automation roadmap was delivered to the client.



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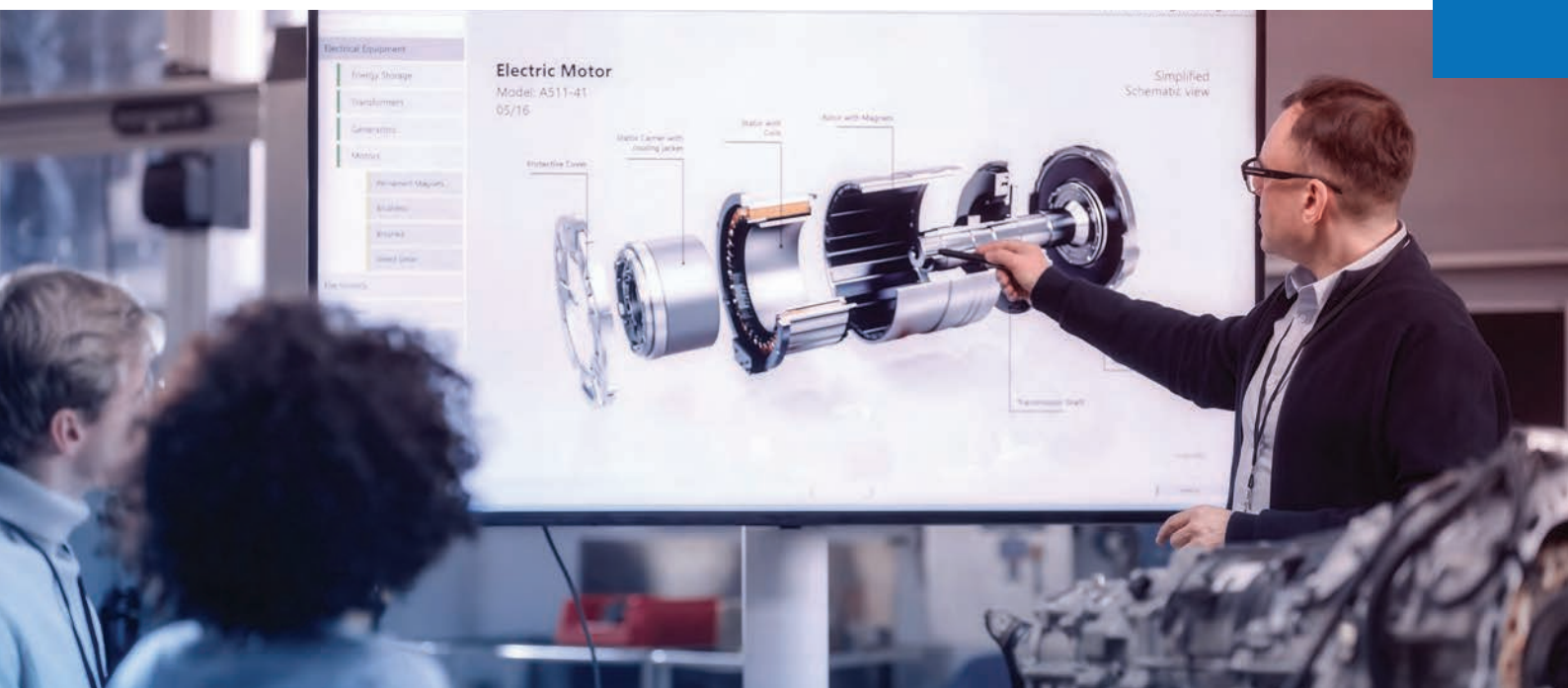
# The result

The objective to help the client understand the tool's potential was achieved. With this POC, NTT DATA increased the client's knowledge of SAP, testing tools and best practices which empowered the client to:

- Create high-quality and reliable tests for its businesses.
- Develop end-to-end user test scripts.
- Reduce risks and simplify testing processes.
- Develop scalable and repeatable processes to capture bugs in real-time.
- Accelerate projects and improved quality.
- Leverage Codeless Automation, a business-friendly tool that reduces human error and costs.

NTT DATA recommended the client to adopt TTA and move forward with the entire testing automation of their SAP landscape, evaluating benefits and ROI given the improved efficiency, quality and delivery speed of automated testing.

Adopting this solution is the first step towards migrating all assets to Tricentis with no additional effort, if at any time a the scope of automated testing is extended to non-SAP applications.



# Why NTT DATA

The client appointed NTT DATA to oversee this project for a broad range of reasons, not least their deep understanding of the client's needs and expertise to handle the challenges presented by their complex and evolving SAP roadmap.

NTT DATA has positioned itself as an end-to-end SAP partner for the client, enabling new technologies across all areas. Furthermore, they boast extensive experience in the Latin American region, particularly in the testing automation domain.

Ultimately, as SAP consultants with not only with the required technical knowledge but also with a vision of global business processes, NTT DATA combined a deep understanding of SAP and testing with world-class technical expertise. This was the backbone of successfully converting a complex Application Lifecycle Management (ALM) platform into a full-scale, end-to-end solution.

**NTT DATA is a leading expert in SAP solutions, with over 25 years of experience providing SAP consulting services.**



## What's next

Having proven the solution through this PoC, the partnership is expected to continue into the implementation phase. In the short term, NTT DATA will be the client's SAP advisor on testing automation and SAP Application Lifecycle Management (ALM).

The successful collaboration also places NTT DATA in pole position regarding the development and implementation of the Testing Automation Program for the client across Latin America and the Caribbean. Demonstrating our expertise and value with this project should help NTT DATA spearhead the deployment of similar solutions in Argentina and across the Latin-American region.



