LTM

CASE STUDY

Independent Quality Assurance for a Leading Energy & Manufacturing-Driven Exploration and Production Company



Client

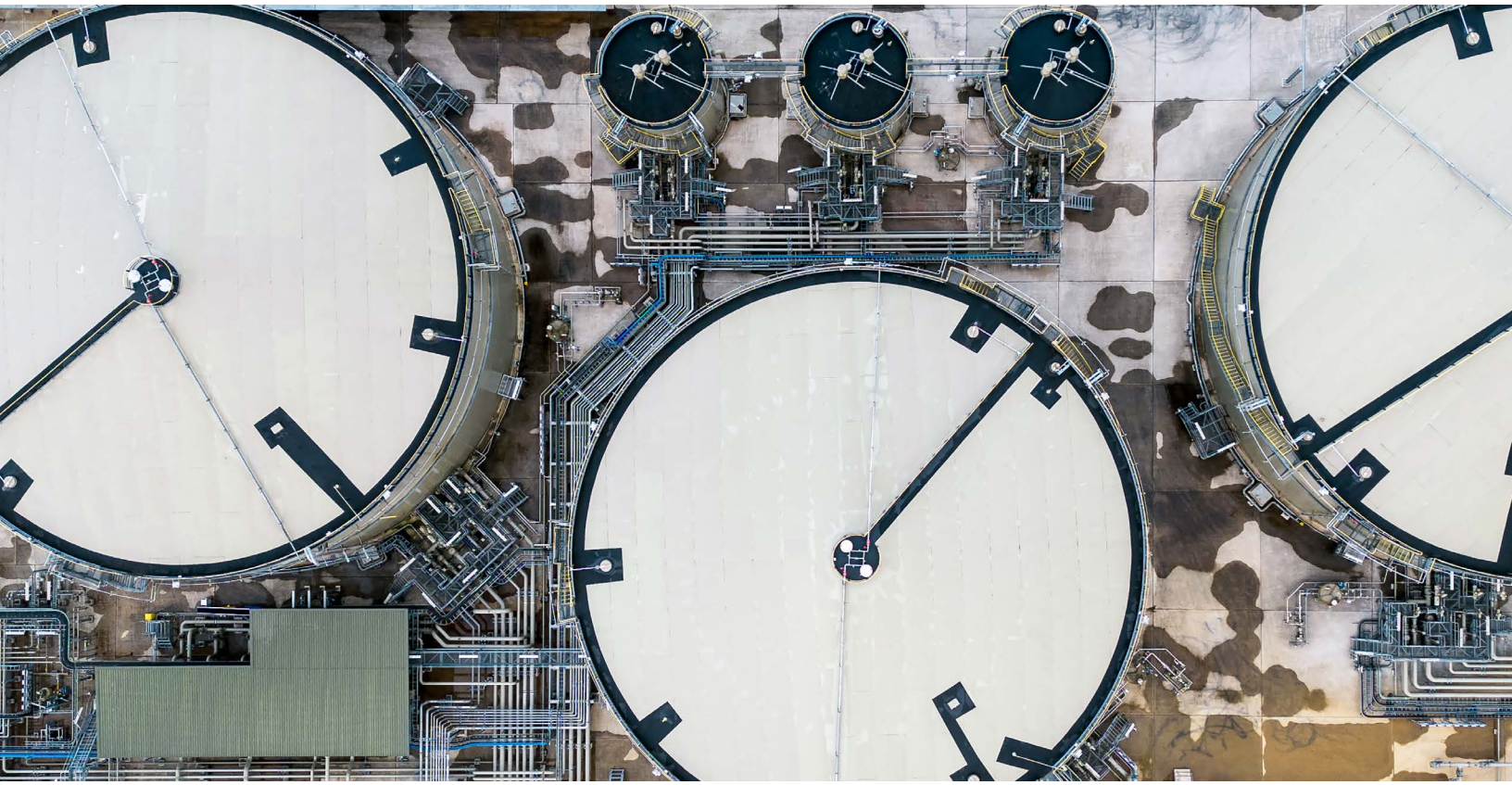
Client is an American multinational consumer goods corporation with operations in over **13 countries**, produces approximately **1.9 million barrels of oil equivalent per day**. As a global leader, the company is committed to **innovation, sustainability, and operational excellence**, leveraging innovative solutions and strategic partnerships to enhance efficiency and performance across diverse markets.

Tech stack: SAP Applications - S/4HANA, GTS, APO, GRC, SuccessFactors, Ariba, S/4HANA Bluefield, Tricentis TOSCA, Tosca-DI, Jira TestFlo

Market Dynamics

Staying on legacy SAP systems amplifies critical risks, including the end of mainstream support by 2027, which raises maintenance costs and increases system vulnerabilities. These outdated systems lead to inefficiencies like slow processes, data silos, and limited innovation, making businesses less agile and putting them at a competitive disadvantage. They lack integration with modern technologies such as AI and IoT and leave organizations prone to heightened security and regulatory risks, which can result in penalties and reputational damage.

Test automation plays a vital role here, ensuring smooth migration by identifying vulnerabilities early, validating system performance, and mitigating data integrity risks. Without automated testing, enterprises face a higher risk of costly disruptions and inefficiencies during or after migration. Adopting testing automation not only secures the transition to SAP S/4HANA but also helps sustain operational resilience and long-term success.



Challenges

Minimizing Business Disruption During Complex Migration

The customer needed to migrate from SAP ECC to S/4HANA without interrupting critical business operations, requiring careful planning and execution.

Managing Complex System Integrations and Ensuring Regression Stability

With multiple tightly integrated systems, the customer had to conduct extensive regression testing to maintain seamless operations and prevent disruptions to existing processes

Crafting a Robust S/4HANA Bluefield Test Strategy

To de-risk the migration, the customer had to design and implement a comprehensive test strategy that ensured functional integrity and sustained performance across the transition

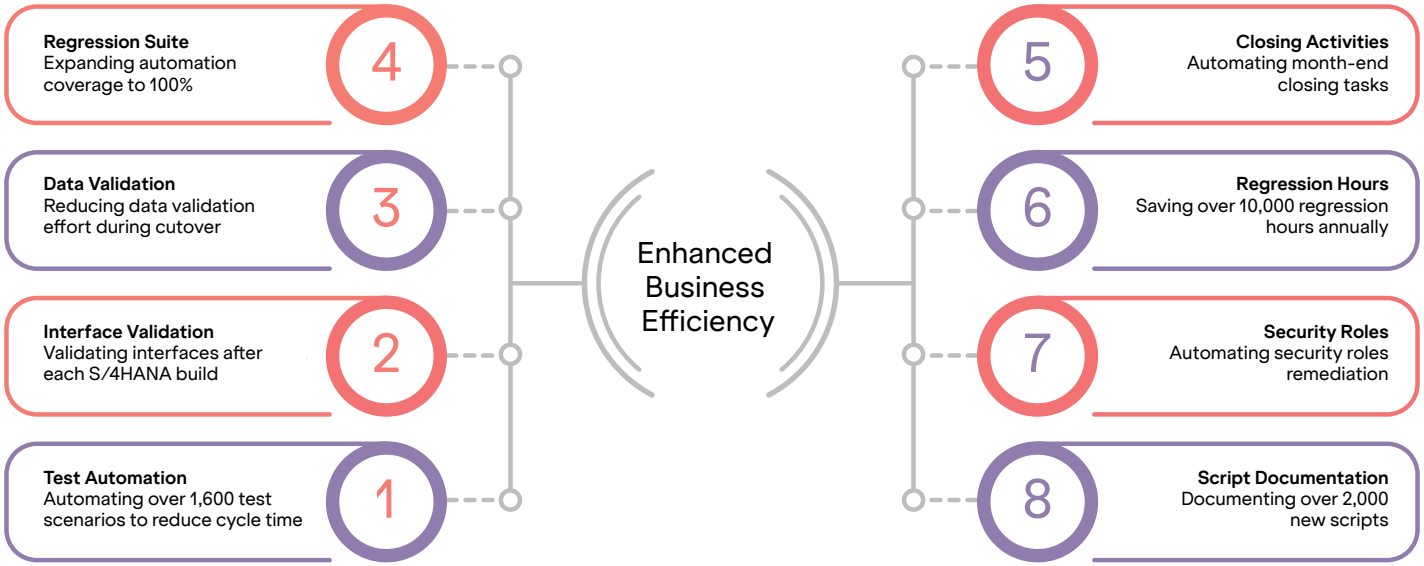
Solution

The need for unbiased validation and risk mitigation led the customer to seek a trusted external testing partner.

- Multiple system integration testing and regression cycles were supposed to be conducted to ensure existing business processes were intact
- Experts from LTM created a business process hierarchy providing end-to-end visibility & better requirement traceability
- Built end-to-end testing scripts involving SAP & non-SAP Applications (GEP, Workday, etc.)
- Leveraged RELY.AI framework based on Tricentis tools to reuse the existing standard business processes, manual and automated test cases
- Conducted over 35 Proof of Concepts (PoC) for different applications
- Automated scripts were used in multiple environments like QA, and Pre-Prod with minimal changes
- LTM's ART (Part of RELY.AI framework) tool was used to generate custom automation reports for easier and faster SME signoff
- Demonstrated the concept of TDM and paved the path of successful implementation for effective test data management for Automation scripts
- Implemented Tosca Data Integrity to validate data reconciliation between Snowflake and Teradata

Business Benefits

Automation Achievements Leading to Business Efficiency



- Automated 1600+ functional test scenarios to shorten the test cycle from 2 weeks to 3 days
- Automated validation of interfaces after each build of S/4HANA system
- Reduction in data validation effort during cutover from 12 hours to 4 hours
- Improved automation coverage from 0 to 100% in last one year by automating 1500+ test scripts using Tosca and maintaining existing 1500 Test Scripts to make a comprehensive regression suite of 3000
- Automated month end closing activities and complex capital spend scenarios which is saving 170hrs/month of manual effort from Business users
- 10,000+ Regression hours saved every year
- Automated finding of security roles remediation and authorization issues
- 2000+ new scripts documented
- 100+ utility scripts created for faster test environment readiness

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Conclusion

In today's fast-moving market, where quick SAP transformations are crucial, our partnership with this customer has been a game-changer for over 18 months. Since 2022, we have focused on SAP test automation, playing a key role in their S/4HANA migration and supporting their broader SAP landscape.

Our comprehensive test strategy ensured seamless validation of selective data transitions, mandatory changes, and security aspects while integrating agile and waterfall methodologies for efficient test delivery. By leveraging automation—from data validation with automation tools to environment setup and interface testing—we streamlined execution, minimized risks, and accelerated time-to-value.

The intelligent testing dashboard provided deep visibility into authorization changes, enhancing compliance and governance. With end-to-end test management in Jira and robust automation, we enabled a scalable, high-quality, and future-ready testing framework.

Internal Quote

The dedication and expertise of our team have been instrumental in the success of the Proseware project. By setting up a robust independent quality assurance framework, we have achieved significant milestones. These include end-to-end test coverage in S/4HANA and integrated applications, reducing cycle time with automation by around 80%, supporting two global releases with six regression cycles, and realizing cost savings of approximately $250K in the year 2023. These accomplishments underscore our commitment to delivering high-quality solutions and driving efficiency for our client.

Anandkumar NC | Delivery Head

LTM — a Larsen & Toubro Group Company — is an AI-centric global technology services company and the Business Creativity partner to the world's largest enterprises. We bring human insights and intelligent systems together to help clients create greater value at the intersection of technology and domain expertise. Our capabilities span integrated operations, transformation, and business AI — enabling new ways of working, new productivity paradigms, and new roads to value. Together with over 87,000 employees across 40 countries and our global network of partners, LTM owns outcomes for our clients, helping them not just outperform the market, but Outcreate it.

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