Leading Rail Operator Increases Operational Efficiency

About the Client
The client is a Information and communication technology service provider for a leading rail operator in Europe.

The Challenge

Decentralized Testing
Client faced critical business issues and operational IT issues, affecting the consistent quality across the organization. Testing effort duplication, lack of coordination and non-conformance of testing timelines were some of the common concerns faced by the customer. Hence, there was a need to restructure QA/test practices.

Lack of Proper Governance
Lack of accountability and clarity of responsibilities, poor product documentation, absence of defined processes, lack of transparency in measurements, and inability to consolidate the reports were some of the key governance challenges faced by the customer.

Spiraling QA Cost
The client was incurring high IT QA cost and did not have clarity on RoI and faced various quality issues. Besides that the customer could not leverage the benefits of reusability of certain business functionalities due to the decentralized team structure. Hence, test automation and centralized testing team structure was proposed to optimize the effort and reduce the cost.

Multiple Tools
The company had multiple testing tool sets to cater to the project needs and they were used in silos. Hence, there was a need for one integrated tool.

Value Delivered

Quantitative Benefits
- 80% reduction in effort in running the regression cycle
- 25% reduction in effort involved in performance test script preparation
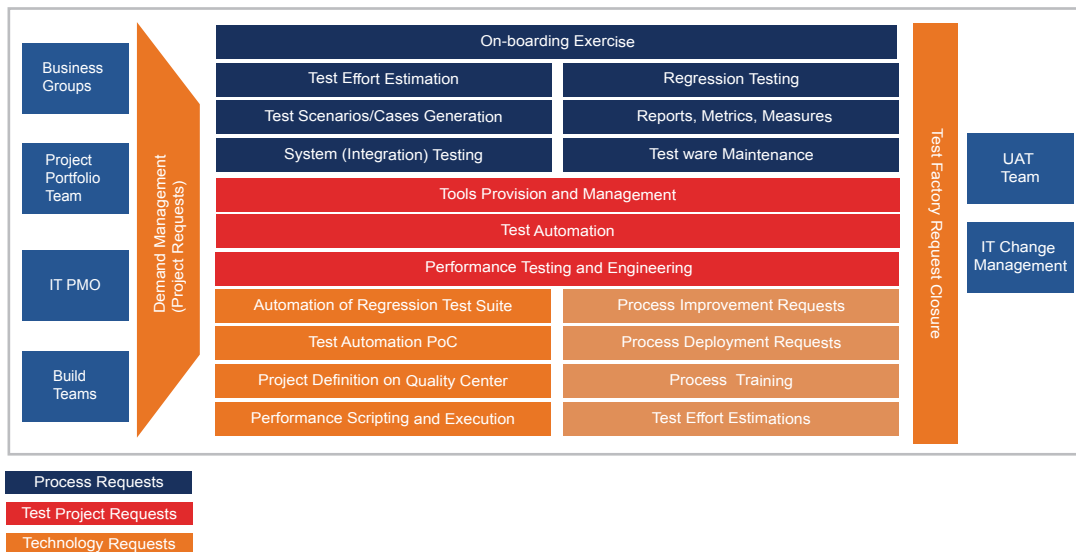
Business Assurance
- One-stop shop for testing; functional, automation, performance, SOA, and management
- Enhanced test coverage through standardized processes
- Metrics framework to enable effective and efficient governance
- Performance gains through rigorous testing and application fine tuning

Operational Efficiency
- Automation tool optimization using Hexaware ONE Adapter helped reduce the tools license cost
- Effective usage of various tools across projects
- Optimized resource utilization because the centralized testing function enabled resource sharing between projects
- Reusable artifacts, knowledge assets, processes and customer language training helped to improve team productivity

The Solution

Diagram legend:
- Business Groups
- Project Portfolio Team
- IT PMO
- Build Teams

Demand Management (Project Requests)

On-boarding Exercise	
Test Effort Estimation	Regression Testing
Test Scenarios/Cases Generation	Reports, Metrics, Measures
System (Integration) Testing	Test ware Maintenance

Tools Provision and Management
Test Automation
Performance Testing and Engineering

Automation of Regression Test Suite	Process Improvement Requests
Test Automation PoC	Process Deployment Requests
Project Definition on Quality Center	Process Training
Performance Scripting and Execution	Test Effort Estimations

Test Factory Request Closure

- UAT Team
- IT Change Management

Legend:
- Process Requests
- Test Project Requests
- Technology Requests

Testing Transformation

- The initiative was started off by Hexaware's Test Advisory and Consulting Council (TACC) evaluating and assessing the end-to-end QA capabilities through structured reviews workshops and discussions
- Hexaware TACC recommended a 24-month transformation roadmap characterized by service centralization, tool rationalization, test automation, improved operational model, metrics driven framework and process harmonization
- Established a Test Factory with TACC as a mentor and a test delivery team with travel domain, test management, automation tools and performance tool expertise with flexibility of quick ramp up and ramp down
- Hexaware deployed translators to translate the artifacts from multiple languages to English
- Clear RACI matrix (roles and responsibilities) was defined and implemented
- Robust communication model for defect management, change management and test management was established
- Test factory team reviewed the challenges and issues after each project and conducted periodic surveys with business teams and refined the testing process.

Performance Engineering and Optimization

- Provided Performance Engineering Solution for WebLogic Server monitoring, implemented various monitors to help identify and diagnose performance bottlenecks and optimize performance.

Improve Efficiency

- Started with a vision of enterprise test automation and have succeeded in automating 98% of the regression tests using the Hexaware framework and automation tools
- Provisioned and administered test management tool for 3000 projects and developed execution export and import utility to minimize the usage of the tool
- Hexaware developed an adapter to integrate various testing tools to enable test scenario design and execution from one tool
- SOA testing using the Hexaware Automation Framework to test SOA architecture and assure the quality.

About Hexaware

Hexaware is one of the leading, global providers of IT, Application, Infrastructure, BPO and Digital services. Our business philosophy of Shrink IT, Grow Digital allows customers to significantly shrink commodity IT spend while partnering with them to embrace digitalization. The Company focuses on key domains such as Banking, Financial Services, Capital Market, Healthcare, Insurance, Manufacturing, Retail, Education, Telecom, Travel, Transportation and Logistics. Hexaware focuses on delivering business results and leveraging technology solutions by specializing in services like; Application support, development and maintenance, Enterprise Solutions, Human Capital Management, Business Intelligence & Analytics, Digital Assurance (Testing), Infrastructure Management Services, Digital and Business Process Services. Founded in 1990, Hexaware has a well-established global delivery model armed with proprietary tools and methodologies, skilled human capital and SEI CMMI-Level 5 certification. For additional information logon to: www.hexaware.com