QUALITEST™

Qualitest Improves Productivity by 70% Through Optimized Testing for Leading Telecom Company

Challenges

Rigorous testing was needed to handle the vast and complex application's operations and integration.

End-user training required a smooth user experience and the ability to handle abnormalities in real time.

Solutions

Provided an explicit test approach to handle complexity and delivery on time.

Each build's release timelines were prioritized to accommodate testing and end user trainings.

Results

Test deliverables time was reduced by 50% and test efficiency time was increased by 70%.

End-user training was scheduled operationally across multiple regions.

Client overview

Our Client is a well-established telecom tower infrastructure company that owns and operates telecommunication towers across high-growth African and Middle East markets. They provide the necessary infrastructure to mobile network operators represented as tenants of their towers on sharing basis.

With increasing demand of their supply chain department for new materials/assets to maintain its 10,500 towers globally, the Client needed to shift from a manual end-to-end process of updating stocks to a new SaaS asset management system.

Managing and juggling multiple processes and workflows for maximum output

There were numerous intricate processes and workflows to manage while moving the Client's material management protocols, based on SharePoint forms, to a SaaS solution in order to track them as well as to support their overall asset maintenance.

In addition, any solution provided would need to accommodate integrations with telecom-specific software as well as cloud ERP software. These applications were integrated with each other to fulfil our Client's needs:

- Infor EAM
- Siterra
- SAP By Design
- ServiceNow

Infor EAM was the major key player due to its critical features of asset management and digitalizing operations to pertain maximum efficiency of operational

activities, therefore it was the main application that was used.

A specialized telecom site management software, such as Siterra, was needed to track tower site activities because our Client operates in multiple geographical locations. ServiceNow, a cloud-based ERP software, was connected for monitoring procurement, supply chain, risk management, and mitigation operations.

Infor EAM integrates with Siterra to receive site and asset data for each Operational Region which is used to facilitate site material requests, dispatches and returns, and stock adjustments from/to warehouse by integrating with SAP By Design. For material requests raised through Infor EAM, purchase orders are generated which are approved from SAP By Design. ServiceNow further integrates with Siterra to receive site data to maintain and operate site work orders and handle site level issues.

Finally, to successfully on-board skilful personnel for facilitating un-delayed services, SAP Success Factors, a cloud based human resource management software was used. As these complex processes must operate smoothly to carry out uninterrupted supply chain activities, Qualitest was chosen to deliver well-maintained high-quality testing services.

Hiring the right personnel: creating an automated approach and removing manual processes

To reduce the efforts put into the manual approach of hiring talented personnel with the assistance of third-party recruitment agencies, SAP

Success Factors was chosen which also helped in reducing the time and expenditures. It has several modules:

- Job Requirement posting
- Screening the Candidates
- Interview scheduling to Candidates
- Sending Offer letters to Candidates

These modules can be accessed via the web and have a hierarchy of roles which requires approvals at each level to complete the hiring process. Users were required to go through a certain workflow to adhere to hiring standards.

The objective of all these integrations was to enable the following:

- Transparent supply chain system for auditing and reporting asset movements.
- Provide visibility of forecast and demand to the warehouse.
- Improve the inventory & warehousing process.
- Capture the asset lifecycle process within a system for tracking and recording all equipment/material movements.
- Integrations that are well-maintained to ensure a smooth workflow/process for their tenants.
- Transparent recruiting procedure to hire the best team to deliver its services and tower maintenance.
- To aid quick screening and shortlisting of applicants throughout the Operating countries.

End user training was also provided which was a key requirement for our Client and enabled them carry on with their tasks with no delays through the provision of interactive on-screen guidance and support to end users. This went across different geographical locations to resolve issues in a timely manner.

Providing end-to-end testing that went the extra mile to ensure quality deliverables

Qualitest devised an iterative strategy for implementing module-based testing considering the complexity of the applications.

Each module focused on the following:

- Workflow verification
- User role-based security testing
- Integration testing

These modules defined the functionalities/features and outlines the capabilities that included integrations for specialised end-to-end testing. Due to our Client's challenge of implementing the new system in a very short time frame, the Qualitest team proposed an approach that covered all applications being tested at once, ensuring that the integrations worked properly from every aspect of the application. This was achieved by allocating a specialised team of telecom focused Quality Engineers who would go that extra mile to ensure quality deliverables.

As integrations played a significant part in this system, a test approach was developed to first cover each intricate workflow before connecting all minor nodes to create a system that incorporates their primary key roles for their approval processes. To simplify the existing QA process, Qualitest identified, proposed, and implemented a set of new tools which helped the team to work faster and more efficiently, achieving their desired outcome and increasing their productivity.

Key benefits

- Improved productivity by 70% and accuracy by reducing system usage errors to 20% by providing robust role-based training to end-users across nine geographical locations and functions.
- Ensured end users could carry on with their tasks with no delays through the provision of interactive on-screen guidance and support to end users across different geographical locations to resolve issues in a timely manner.
- Reduced the team's time and effort spent on manual preparation by 30 days through the provision of shared user documentation/instruction manuals which helped end users understand the application and gain clear information about our Client's products.
- Achieved 100% on time production releases through the implementation of a module-based strategy to reduce the time spent on the testing phase which benefitted the development team via bug fixing.
- Reduced production bugs by 30% through the provision of real-world scenarios as part of UAT testing which identified gaps in the workflows and provided key insights.

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> **Qualitest provided end-to-end testing that went the extra mile to ensure quality deliverables, which increased our productivity by 70%. We are very happy with the results.**