



Case Study: UAT Support for a Global CRM Development Program

1. BACKGROUND

The client, world's leading market intelligence and technology provider to the financial industry, was implementing a global unified platform for the customer administration process and as part of the process had to go through UAT process.

- ▶ Project was delivered by multiple teams: both internal and external providers, distributed around the world
- ▶ The key customers of the platform included Sales, Customer Order Management and Customer Support business streams and were distributed geographically in multiple locations

Allied Testing team has been previously involved in system testing and possessed system knowledge and understanding of the business groups structure. The client has historically managed UAT testing.

2. CHALLENGE

Project size, complexity, number of groups involved and geographical distribution of teams led to a serious challenge on organizing efficient UAT process. Among them were:

- ▶ Most of the business analysts involved on projects were in fact external consultants only engaged in the short term, and the involvement of actual business users was very limited
- ▶ The organization lacked staff with cross-business stream knowledge, which meant that the business could not test the system end-to-end
- ▶ Each business stream used its own approach to UAT, and in many cases the processes were not documented or formalized
- ▶ Business users grouped in relatively independent teams spread all over the world (The Americas, Europe, Asia Pacific regions) with little communication between each other and limited communication with the Delivery team
- ▶ Time Zone differences
- ▶ Due to every day activities Business had limited ability to provide resources for updating test scenarios and testing which affected the project timeframes.



3. RESOLUTION

Allied specialists started by establishing communications with business representatives and by studying the business processes involved in the customer administration process. Sessions with business along with previous experience in the system (coming from system testing) led to SME and good understanding of end-to-end business processes.

Along with the knowledge acquisition, our specialists reviewed the organizational part, existing process and approach to UAT. The following issues were highlighted as areas for improvement:

- ▶ Insufficient quality by the time the product gets out of development: UAT entry criteria not met and by the time UAT starts system was still unstable
 - Many functional defects discovered by business users, that distract them from their main purpose of validating system end-to-end and increase length of testing and number of re-tests.
- ▶ Absence of an efficient communication process between Environment support team and business testers
 - Time losses due to environmental issues
 - Issues with defects management (confusion between environmental issues and system defects) and corresponding losses on investigations both from Business and Delivery teams
- ▶ Poor communication between Delivery Team, Business Analysts and Business Community and corresponding miscommunication / lack of visibility on functional scope of the projects
 - Invalid defects submitted due to
 - Misunderstanding of the requirements
 - Miscommunication on the scope of the functionality that has been delivered all leading to time losses on investigation both from Delivery team, Business Analysts and Business testers
 - As users training program was separate from UAT, business users were not enough trained to do UAT
 - General issue with quality of defect descriptions (as business users are not trained to document defects)
- ▶ Unstructured approach to UAT
 - Little or no scope and coverage analysis, system interdependencies
 - Unstructured and non transparent test scripts library leading to effort duplication on re-creating scenarios and issues with scope definition
- ▶ Poor coordination of the teams
 - Issues with schedule planning and coordination of testing between geographically distributed locations

All together these resulted with delays to production, frequent overspendings due to necessity to re-run test cycles and repeatedly use expensive Business Users Team resources and even issues slipping to production.

To overcome the issues of the existing process Allied Testing came with a proposition to introduce a number of strategic changes:

Allocate a dedicated UAT Support Team

Allied provides a dedicated UAT Support Team for Business Change Implementation group. This Support Team is able to cover testing of all product/system parts and, if needed, effects of system on all Client programs. The team possesses the required business knowledge, is able to increase resources temporarily at a short notice, is able to manage the testing tools and perform regression, functional, performance testing (if required) and coordinate testing done by other groups.



Improve UAT Test Management

Allied provides a dedicated team of qualified and experienced Test Managers, that are allocated to Business change management stream with the following primary responsibilities:

Defining UAT Test Approach/Strategy

Test Script Development and Maintenance

UAT Test Management, coordination and support incl. logistics and travel arrangements

QA and Quality Control

Deployment and Warranty Support

Allied UAT Support Team technically prepares business validation tests along with the SMEs and key end-users and also conducts testing from the regression point of view executing selected business processes agreed with the business.

UAT Support Team performs analyses of production issues raised after release implementation and controls assignment of these to relevant teams (development, OPS and etc)

Team is responsible for top business issues management, overview of functionality change and retaining of knowledge and nature of the changes for subsequent projects.

Assuming several streams distributed in regions involving 5-8 Business testers, suggested team structure was

- UAT manager from Allied Testing side full time from day 1. 20%:80% of on-site to off-shore ratio
- UAT support team provided by Allied with 20%:80% of on-site to off-shore ratio
 - 3-5 full time persons from day 1
 - 1-2 Defect managers to control defect tracking system and process
- extendable off-shore team for UAT regression execution / maintenance tasks when needed

4. RESULTS

As the proposition was approved and implemented, following benefits from the changes were achieved:

Greatly increasing efficiency of Business Users involvement by minimizing their efforts on secondary tasks that can be done outsourced / done by cheaper resources and making them concentrate on business process testing

- ▶ Using dedicated Allied Support Team to run pre-UAT tests and system deployment test to check system readiness and ensure that valuable Business Users time is spent on business process UAT, rather than re-running cycles of system functional tests
- ▶ Using Allied Support Team to prepare test data, ensure environment readiness and perform daily environment health checks so that when Business Users are allocated to testing they don't encounter infrastructure issues
- ▶ Making Allied Support Team a single interface that is responsible for coordination and on-going issues resolution for quick turnaround. Having practically 24x7 support, Allied team was able to communicate issues between geographically distributed teams and resolve issues by the time Business Users get to work
- ▶ Constant involvement of Allied UAT Support Team in the project allowed "info" channel to communicate latest changes in scope/ functionality to Business Users for visibility and traceability of the requirements to end business process.
- ▶ Extendable off-shore group allowed outsourcing repeatable and routine testing tasks

Leveraging UAT process

- ▶ Availability of a constant dedicated UAT Support Team allowed structured and efficient approach to test scripts library:



- Ability to re-use
- Easy update/maintenance
- Structured repository to ease test scope analysis and definition
- ▶ Using trained testers to support Business Users gives advantage in
 - Methodological approach to tests cases creation
 - Detailed defects descriptions along with defects analysis based on technical knowledge of the whole platform saves Delivery team time on investigation and resolution
 - Coordination between the teams helps distinguish duplicates and environmental issues and ease defects management
- ▶ Unlike Business Users that are allocated to testing on a temporary basis with limited visibility of the product changes, Allied is able to perform analysis of the changes and interdependencies to ensure right coverage and advice test scope

Overall concept has proved itself as a success and led to establishment of a long-term relationship between Business and UAT Support team.