

Successful Delivery Of A Complex Dynamics ERP System Integration Project

Ten10

Client: A nationwide retail company

Industry: Retail

Technologies: Dynamics AX

Ten10 Services: Quality and Test Strategy Consultancy, Managed Test Services: Agile Testing

The client has been a UK mainstay since the 1960's, specialising in furniture and 'in house items'. It was acquired by another large UK retailer to become part of their wider retail group. It trades both through a small number of London stores and over the web. Following acquisition by the larger retailer, a process of integration was required to bring our client organisation's back-end systems into line with those of the parent company.

What We Did

The emphasis for the project was to bring the acquired company's existing retail landscape into the Dynamics AX ERP application. In particular, the client had to move away from its legacy SAP enterprise resource planning (ERP) system to a Microsoft Dynamics AX ERP system. This required the integration of external applications including their Magento e-commerce platform, postcode lookup (PCA Predict), DataCash and Bottomline payment platforms, K&N and Rapier accounting applications and Yodel and DHL Homeshmart warehouse integrations.



Ten10's objective was the systems integration-level testing of these applications prior to formal validation by the business teams.

It was recognised that the project's success would depend on our ability to get up-to-speed with solution designs, discover the most important areas of complexity from a testing point of view and to help the development team implement improved project management in order to structure build processes and delivery.



Goals

This project required an intense period of solution up-skilling, scripting and execution, as well as ensuring best practices were followed with regards to defect, release and change management.

We recommended the development teams split build delivery into iterative releases, to allow functionality to be delivered earlier and move away from the waterfall style of code delivery they had been employing.

Challenges

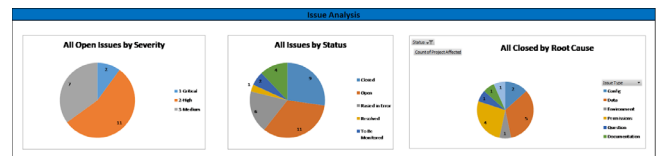
The main challenges were the limited time available and that development was performed by an external company rather than the retailer's own IT resource. The external company was also challenged with respect to planning and delivery of builds for testing which often resulted in the testing team not receiving what was expected. This led to our plans having to be dynamic, and the teams often needing to split and change focus to ensure productive QA against available builds.

Success Story

In a short time, Ten10's team of one consultant and one analyst were able to up-skill on the solution and create effective scenarios to ensure validation covered the required functionality. This was achieved through continuous communication with the client's development team. Ten10 also implemented a risk-based test approach to allow prioritisation of applications and ensure a suitable test coverage of application was agreed before execution started. This was achieved through the use of a risk weighting where the business impact of change and technical complexity were analysed to define which application required what level of testing.

Application	Impact	Complexity	Score	Weight
Requirement 1	1.3	1.4	1.82	29.49%
Requirement 2	1.5	1.5	2.25	36.47%
Requirement 3	1.4	1.5	2.1	34.04%
			6.17	100%

We embedded a defined reporting and quality assurance structure for execution progress and defect reporting. This utilised daily pass, fail, progress against plan and key blocking defects to provide a graphical representative status summary. This continues to be utilised by the client.



Benefits

This project demonstrates Ten10's ability to think quickly and react swiftly in challenging conditions, to be creative in imagining and delivering solutions, and to provide help and support above and beyond the contract terms and conditions.

Ten10's success on this project lead to follow up work to support a Click and Collect roll out, change request QA validation and ongoing web regression testing and compatibility testing.