Infuse was engaged by the world's largest exhibitions company. Offering a wide range of events, this company runs over 500 exhibitions and conferences. It tailors these events to the seven million people per year who attend them.

The Situation:

The client has been growing significantly by expanding into new markets and through company acquisitions. As a burgeoning global company that operates in 17 countries, it needed to create a unified global culture that prioritises the business as a whole rather than the individual companies operating within the business.

Originally, much of the company's event organising and tracking was done on a couple of disparate bespoke platforms, with multiple manual tasks to ensure the completion and delivery of each exhibition and conference per Business Unit. The company embarked on a transformation project to modernise and computerise many of the tasks needed to allow the client to grow its revenue and profits at a faster rate than the market, and improve overall customer retention, with particular focus on retention of its first time customers.

The project involved multiple vendors and multiple systems, hosted on private and public clouds, including:

- Oracle E-Business Suite (HR, Finance, and Payroll)
- Oracle Business Intelligence Enterprise Edition (OBIEE)
- Hyperion Planning
- Oracle Eloqua
- Salesforce
- 16 other applications (including a CAD product and custom Content Management system)
- Integrated using Oracle Fusion Middleware

The Challenge:

The business was struggling to find an efficient and effective way to know what was happening across all of its 22 business units. Each business unit would use its own systems, whilst the core business relied on three systems that were poorly integrated. In order to provide the business with valuable information, multiple manual processes were required. The key challenges for the System Integration Test team were:

- Poorly defined requirements
- The architectural structure, particularly around integrations, had to evolve
- Siloed approach to development, with eight vendors involved in delivering different aspects of the system; the first time the systems would be integrated would be in the SIT environment.
- Lack of definition of test data
- Poor environment management
- The desire to test integrations from an end-to-end perspective

As a result, the organisation realised it needed a reliable and frequent way to perform tests and run regression tests against the system integrations as each system was delivered.

The Solution:

Infuse was engaged to deliver the solution to the problem faced, by leveraging its **useMango ™ Test Factory Solution.**

How we did it

By working with the organisation's BA team and architects, the test team designed and built a series of tests that could be executed against individual systems, business process flows, and/or test the interfaces between two or more linked systems. Testing was run manually to confirm behaviour. Exploratory testing was done to confirm the wider behaviour of the system. The end product was an automated regression suite of 70% of all of the System Integration tests, amounting to

465 tests that would test the end-to-end behaviours of integrations. A daily run of 95 tests was executed each night to run regression against the newest release of code and covered the following business areas:

- Event Operations
- Sales
- Marketing
- Finance
- Products and Services
- Customer Management
- Monitoring and Measuring
- Event Management
- Fulfilment

As the project moved through it various stages, the Infuse team not only provided automated testing but also were involved in Scrums to build and execute manual tests and deliver these where appropriate into the regression suite.

The Results & Benefits:

The results from the automated test runs identified code issues from the very start and continued to do so until the of the engagement. Over 1000 (P1, P2) defects were identified and passed back to the vendors or support organisations. The runs also identified issues beyond just code failures, which included:

- Incorrect system configuration
- Incorrect code release procedures
- Changed or missing requirements
- Defects missed by other test teams
- Incorrectly sized test environments
- Need to provision correctly sized environment for the test tools

The benefit to the organisation was that they were able to make to make sound, go-live judgements for its business transformation programme to deliver the customers first global, unified sales engine, based on accurate and current data provided by useMango Test FactoryTM thus enabling them to focus management attention on those areas in which further development or issue resolution was required.

The organisation's management team was also able to identify improvements required to the internal SDLC and support processes to ensure smoother development, testing and releases into test/production based on the non-code issues identified.

The reporting on progress of the tests and the identified problem areas also assisted in the management team's decision around when to go live with the project.

The go-live of the programme to the UK business showed that the integrated systems behaved as designed.

Business Realisation

The client's transformation programme, which leverages useMangoTM Test Factory, is expected to significantly help contribute to the company's 45% revenue growth outside of Western Europe, Japan and Australia, and to hit its organic revenue and profit targets for 2012 to 2016 (Compound Annual Growth Rate (CAGR) of 7.5 per cent and 12 per cent).

About Infuse Consulting

Since 2002, Infuse Consulting has been helping leading companies deliver their software projects more successfully.

We are an international company and leverages strategic consulting partners as well as its technology partners to deliver the best solution for you.

We are early adopters and industry leaders of Test Automation, DevOps, Agile & CI/CD Services.

Our teams joint skillsets rarely exist within one supplier. Infuse is a Gold Partner of Micro Focus and Oracle, and has a partner network including CA, Microsoft, AWS and SAP.