

Manchester Metropolitan University
Digital Transformation Assurance

Case Study



nFocus
Testing

Digital Transformation Assurance MMU Case Study



Synopsis

Quality assurance is crucial and critical in any digital transformation journey. It is essential for organisations that are dealing with digital transformation to have an appropriate digital assurance strategy by identifying the right tools, methodologies to be used and measures to assure the highest customer experience possible. It is also important that the QA organisation is future proofed to ensure the right quality after Go Live.

This case study focused on Manchester Metropolitan University's Student Journey Digital Transformation Programme (SJTP). Supported by testing, the programme will deliver a range of benefits, one of which is securing business continuity. This will be achieved through the implementation of fit-for-purpose and future proofed business processes, flexible and modern applications that are focused around the student and aligned to the way students interact with the university in their day-to-day lives.

There was a need to provide consistency across all Go Live releases regardless of importance, size and complexity. Collaboration with suppliers, MMU and UAT teams was key to the success of the programme. Shifting left the quality as early in the project as possible to identify and resolve bugs early in the life-cycle was critical to the overall quality of the product and chances of successful delivery into production.

Andrew Kemp, Transformation Director of MMU

"nFocus have been our test partner throughout the journey. They adapted to the HE sector and its challenges and to the complexity and diversity of this large cross cutting initiative. They have supported us in all aspects of testing and felt like a true integrated partner and part of our team throughout the process as well as helping us enhance our quality assurance approach both during and post project. The team are highly motivated, and it has been a positive and enjoyable experience to partner with them on this programme."

nFocus are successfully delivering the testing services required as a managed service covering all areas of testing including functional testing, test automation and performance testing, with a separate focus on planning and monitoring user acceptance testing.

Student Journey Transformation Programme

Manchester Met University (MMU) is one of the largest universities in the UK with a community of over 38,000 students.

The university planned to deliver a large-scale digital transformation project that would enhance every area of its business administrative processes and improve the quality of service provided to students.

Digital Transformation Assurance MMU Case Study



This ambitious four-year project would replace all systems and technologies associated with their student journey and replace them with a more efficient and responsive system; improving the student journey from their very first touch point with the university all the way through to becoming a member of the alumni, and every step in-between.

The goals for the student journey transformation project included:

- Deliver and support non-standard provision such as continuing professional development, apprenticeships and transnational education
- Support student retention and progression through better information
- Improve both the way services are provided to students and student support
- Simplify and update student lifecycle processes and systems
- Deliver modern infrastructure to better enable MMU to compete in both the future and current market
- Deliver greater personalisation and service using devices and channels of choice

Implementation

MMU selected Unit4 as one of their software providers for the project and nFocus Testing as the quality assurance provider.

The project has been developed and rolled out in phases and to date is on-track to hit the delivery deadline of 2020. Go Live 1 and 2, which have already been rolled out, included interviews and auditions, open days and enquiry functionality enabling all UCAS and Initial Teacher Training applications to be received and processed through the Unit4 Student Management System.

The Role of nFocus and Quality Assurance

MMU selected nFocus as their testing partner of choice. nFocus is a pure-play independent software testing and quality management consultancy. They have been named multiple times in the Test Magazine's 20 Leading Testing Providers and are currently the only organisation to be two-time winners of the Leading Vendor category at the European Software Testing Awards (2016, 2019). They specialise exclusively in the provision of software application testing and test consultancy services.

nFocus are delivering the testing services required as a managed service covering all areas of testing including functional testing, test automation and performance testing, with a separate focus on planning and monitoring user acceptance testing.

Digital Transformation Assurance MMU Case Study



The test team used a risk-based testing (RBT) approach. RBT is a type of software testing that prioritises the tests of features and functions in software, based on the risk of failure, the function of their importance and likelihood or impact of failure. This allowed the programme to concentrate testing on areas of concern or importance. It allows the flexibility to extend or reducing testing effort accordingly. RBT uses risk assessments to steer all activities within the test process, i.e. test planning, test design, test implementation, test execution and test evaluation, across all test phase, i.e. system test, system integration test (SIT), UAT, non-functional test.

The key to successful delivery and reducing ongoing defects is always to ensure consistency across all test phases. Also, to follow the same process & procedures, along with making the best possible use of people & tools to enable on the button metrics and easy to trace defect triage. The first task for nFocus was to create the overarching test strategy for the SJTP which details the approach to testing across all Go Lives (GL) and the benefits.

nFocus provided testing and test preparation for each Go Live, with a strong team with an array of talent and system knowledge, they used best practice to both manually and automatically test the development deployed.

Collaboration was essential as the solution has an element of development via Unit4 and that development is not fully undertaken by MMU. There is a required level of test assurance required before that solution/product can be accepted into the MMU domain.

This assurance is to provide a number of benefits such as:

- Provide MMU with a known quality baseline prior to accepting solution/product
- Visibility of the testing performed by the supplier
- Input into supplier testing (ST)
- Visibility of observations and bugs
- Validation that supplier requirements have been met prior to acceptance
- Understand/identify any risks or issues that may influence MMU's own test approach
- Any observations raised are cheaper and easier to fix at this stage

Additionally, UAT collaboration helped engage the UAT team when designing the test scenarios and assisted them in risk workshops to assign priority and impact values on test scripts.

The UAT team was encouraged to witness testing during the SIT test phase to see the application under test and the testing progress.

Our proposed solution provided people with the required experience and knowledge to work as part of the MMU team to assure the delivery of specific test phases and how we define quality gates with entry and exit criteria to ensure deliverables are met both prior to the UAT execution phase and after.

Digital Transformation Assurance MMU Case Study



Our consultants are engaged on projects where they are responsible for understanding, questioning and refining business requirements. During these refinement sessions, they have an equal responsibility in developing the acceptance criteria to assist with the common understanding of the requirement. Their input and past experiences help them prioritise those requirements with the team, so they have a known set of tests with both priority and time to execute known. They are also key to developing the testing tasks and test estimation at the planning stage to help the team develop a consistent and predictable approach to testing.

Results

The outcome of working in collaboration with MMU was ultimately to align processes and procedures and working closely with suppliers to ensure both entry and exit criteria are met through each stage of testing. nFocus produced detailed test plans for each Go Live, outlining the activities and timeline associated with the testing for each project.

This overall test approach aligned to the test strategy and allowed MMU to achieve the following outcomes:

- Increased test productivity, capability, capacity and management efficiency
- Reduced cost of testing
- To create a set of flexible appropriate test processes, procedures and frameworks
- To create test suites for all business-critical applications and solutions
- Improved quality of service to all stakeholders
- Reduced IT and business risk
- Robust and useful test management information

Andrew Kemp, Transformation Director at MMU Student Journey Transformation Project explained: *"nFocus have been our test partner throughout the journey. They adapted to the HE sector and its challenges and to the complexity & diversity of this large cross cutting initiative. They have supported us in all aspects of testing and felt like a true integrated partner and part of our team throughout the process as well as helping us enhance our quality assurance approach, both during and post project. The team are highly motivated and it has been a positive, enjoyable experience to partner with them on this programme."*

nFocus' Managing Director added, *"I'd like to thank all the team at MMU for the opportunity to digitally assure their Student Journey Transformation Programme. I'm delighted with the results that have been achieved, from the initial setting up of the overarching test strategy to full coverage testing including functional, performance, automation and accessibility testing, thus providing quality assurance across the entirety of this important digital transformation programme. It's been a pleasure and honour to be part of their delivery team and we look forward to continuing to support their success in the future".*

Digital Transformation Assurance MMU Case Study



Digital Transformation Support

We can act as your testing partner in a multitude of ways. You can completely outsource the testing of the project, we can supplement your own team with the highest calibre testing resource, we can Health Check your existing testing approach to identify areas that need to be improved or act as your User Acceptance Team to ensure your development partners deliver what was promised.

If you would like to know more about digital transformation, automation and the cloud or any of the services that we provide and how testing integrates within the business journey then please call us, we would be glad to assist.



Need some help?

If you would like to know more about digital transformation, assurance, test automation or would like to understand how partnering with a testing partner can support your digital transformation journey, please get in touch with our friendly and knowledgeable team today:

 **0370 242 6235**

 **www.nfocus.co.uk**

 **info@nfocus.co.uk**