Simpson Associates

The University of Nottingham: Management Information Hub

Case Study: Business Intelligence

Client Overview

The University of Nottingham is a world-class University. The University is ranked in the UK top 10, the European top 30 and in the top one per cent of all universities worldwide. The University has 34,000 students in the UK and has campuses in both Malaysia and China which are still growing but already educating a further 8,700 students. Its stated mission is to 'Improve life for individuals and societies worldwide. By bold innovation and excellence in all that we do, we make both knowledge and discoveries matter.'

Client Response

"The MI Hub has allowed us to produce high quality, timely management information with no manual intervention. This information is being used more than ever before to support institutional decision making."

Key Benefits

- Information can now be accessed by all university staff worldwide.
- Cross-campus integration and BI maturity increase in a completely transparent manner.
- A foundation is in place for developing good strategy and making informed decisions.
- The MI Hub has delivered against the less obvious goal of supporting deeper organisational change to enable future success.

Supporting the University Strategic Plan

The University needed to have reliable, accurate and timely management information to make the best decisions, to monitor progress, and to inform strategy and planning at all levels.

The MI Hub was designed to create an institutional level capability to provide this functionality across all core activities (the student population, taught provision, student quality and experience, league tables, research, finance, etc.) and for all staff. Of course the Key Performance Indicators (KPIs) defined in the University Plan 2010-2015 were included, but alongside and underlying those are many other reports and measures which shed greater light on overall performance and support diagnostics where needed.

The subsequent inclusion of Leading Performance Indicators (LPIs) ensured that the MI Hub would have relevance, for everyone from front-line academic and administrative staff to the Executive Board.

Staged Approach

A project of this scale requires a significant amount of ground work to ensure that the objectives are clear, the benefits are understood and the stakeholders are informed.

Simpson Associates were already a trusted partner that had successfully worked with the University on an advanced student number and income forecasting system, so he turned to them again. The approach was to build the MI Hub in a series of stages, each one designed to deliver a progression of Key Performance Indicators and supporting reports into a live, online environment for the University's MI consumers.

The second stage released a dashboard providing comprehensive coverage of all aspects of performance relating to taught provision down to individual course level. The design of these dashboards was strongly influenced by the work of leading data visualisation expert Stephen Few. All this was used to expand usage and familiarity and to begin to embed a management culture informed by robust, up to date, authoritative metrics.The next stage applied all the same principles to research activity.

A broadening range of reports

The MI Hub reports cover a number of key subject areas and are broadening all the time. The reports provided so far address:

1. Applications and Admissions: Weekly snapshots from core business systems fuel reports providing running figures on applications and registrations (both UG and PG), from University to School to Course level, with comparisons to the same point in previous years' cycles, predicted final position and financial impacts of gaps between targets and actuals.

2. League Tables: These reports incorporate data on every measure for all of the main UK league tables for the last six years – for every UK University. Reports automatically flag up the 'top 30' and 'rapid risers' for every measure, and can be explored in a wide variety of ways.

3. National Survey of Students (NSS): Nottingham staff can explore NSS data for every question, from every UK university, at institution or subject level, for the last 5 years of the NSS, and even to select custom comparison groups. The reports automatically flag up any year-on-year declines and the high, low and average responses across the Russell Group and the sector. Users can see complete results for any or all subjects, at any University - with just a few clicks.

4. Student Census Data: It is always important to be sure of and understand the basic facts of your own operation. Reports based on student census data provide figures on current student numbers (and trends) by University, Faculty, School and course, for all levels of study, and report domicile, widening participation status, degree outcomes, employment status and tariff scores – and where relevant with drill-down to individual student data (with security controls).

5. World Changing Research: These reports include research income and margin, new award values and success rates, project budgets, with annual trend, year-to-date and gap analyses, from University to School to Project level reporting, including individual researchers. In addition to the many set interactive reports, a custom query report lets academic researchers instantly find, for example, any colleague who has successfully won a grant of a certain size, from a certain funding body, in a particular research area.

"Dashboards are now being developed to cover financial sustainability, including productivity and surplus generation, business engagement and knowledge transfer, alumni relations and philanthropy and environmental issues. Balanced scorecards which may eventually cover all levels, from University to individual staff members, are also being prototyped."

Dr Tom Loya
Director of Strategy, Planning and Performance

"We created a team that combined our staff with project team members from Simpson Associates. Our team handled the wider stakeholder relationships and project management, confirmed the objectives of each stage, provided the deep knowledge of the meaning of core data and its visualisation, and ensured we realised the benefits.

We gave Simpson Associates responsibility for the architecture of the solution, providing guidance on our approach, developing and supporting the data warehouse and initial MI dashboards and reports and to help us to build our own knowledge and skills in parallel all at the same time. And they did. The whole team contributed and every stage of the project was delivered on time."

Dr Tom Loya
Director of Strategy, Planning and Performance

The Solution

The MI Hub can be accessed by all University staff, from the Executive Board to all teaching and administrative staff (about 4,000 potential users) and reinforces the link between strategy at all levels and reporting and against performance objectives in a completely transparent manner.

All dashboards are available to staff at the campuses in Malaysia and China, which helps to increase cross- campus integration, BI maturity and an expanded sense of belonging. Many are accessing the MI Hub using their iPads, and the team makes increasing use of targeted report 'bursting' to ensure business intelligence is pushed to the right people, at the right time. The MI Hub also generates reports for the University governing body (Council).

"Our aim is to achieve a reciprocal alignment of institutional strategy and BI development to ensure that the University 'thinks differently' about the way that it uses and analyses information."

Professor Karen Cox
Deputy Vice-Chancellor

The Benefits

Even though much work remains to be done, there is ample evidence the project has delivered against both its stated objectives – delivering authoritative MI reports across the University – and its less obvious goal of supporting deeper organisational change to enable greater future success.

By carefully monitoring usage, the team knows that reports are being delivered successfully by the hundreds across every part of the University, every day. So they know people increasingly 'get' the big picture about how the University is doing, what matters most now, as well as how their own School, Research Centre, course or student population experience contributes to realising strategic objectives.

As the University approaches work on its 2020 Strategy, the MI Hub and the management information capabilities that have been developed provide a far stronger foundation than in the past, in that it is essential for developing good strategy to understand where one is so that you can make good informed decisions about where one might go. And once institutional leaders have made those decisions, they also know they will be able to track their progress and, most importantly, know when they succeed.

Support from Simpson Associates

Simpson Associates are specialists in defining, building and implementing information management solutions, which provide better business understanding and improved business management performance.

Our considerable skills and experience enable long-standing relationships with our clients and we have principal partnerships with Microsoft, IBM Cognos and BOARD.

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Rob Johnson
Head of Research Operations

Contact us

Should you have any questions or require any further information, the team at Simpson Associates will be happy to help you with your request.

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