Middlesex University sees “A huge improvement in the delivery and clarity of data” using Tableau

Middlesex University employs more than 1700 staff, and is focused on creating a legacy of a ‘world-class centre for education’ for both its students and employees. Having the right policies, procedures, and practices in place plays a big part in the creation of this legacy. The Planning Department - responsible for supporting decision making across the University - found that sharing reports internally was inefficient and time consuming. A change was needed, and after implementing Tableau they've seen considerable improvements with:

- Ease of access to data
- Accessibility of reports amongst team
- Clarity and presentation of results
- Improved communication amongst University staff

“The output which Tableau creates for us is a huge step forward, compared to what we are used to.”

Luke Stoughton, Planning Manager
The Planning Department
University of Middlesex

5 new users added every week.

90 Tableau licenses in total.

The number of users has doubled since the start of the project.
A world class education institution

Founded in 1878, and originally named St. Katherine’s College, Middlesex University has evolved from a former polytechnic based in Tottenham to an established university with international credentials. With 40,000 students enrolled on courses around the world and campuses in - London, Dubai, Mauritius and Malta - the University has a vision of becoming ‘a leading university of choice, recognised internationally for all we do’.

The achievement of this vision will reinforce a renewed emphasis on academic and research leadership, continuing to provide an outstanding student experience and maintaining excellence in teaching, research and knowledge transfer.

Key to achieving this is the adoption, by both staff and students, of its core values. These include: striving for excellence, putting student’s first, promoting diversity and inclusiveness, freedom of academic enquiry and professionalism.
A department with challenging requirements

The Planning Department - responsible for supporting decision making across the university with analysis and strategic guidance - plays a significant part in driving adoption of these core values. Its work in the areas of business planning and data analysis helps senior management to set and review a broad range of University wide targets and enables academic colleagues and professional services to understand and interact with their data.

“Our objective is to provide information for our colleagues that can be understood clearly” says Luke Stoughton, Planning Manager at the University.

One of the department’s key responsibilities is analysing and reporting on the wealth of student data the University has access to. Luke explains:

“The reports we produce are designed to allow our teams to see trends, monitor statistics and better understand student numbers. It is this data - such as the number of applicants for a certain course in certain year - that enables the university to set long and short term goals”.

The Planning Department has been able to create and develop the right data models, but has been struggling to present its data in the right way. As a result the reporting has been very static and flat.

Distribution of reports to colleagues has also been problematic. To share reports the team had been spending a lot of their time manually uploading and attaching extremely large files to emails. The sheer size of files and volume of recipients meant email was a particularly flawed means of distribution.
Potential to do more

“The end to end process became very frustrating and limited the amount of work we could usefully get done. There was no SharePoint or equivalent tool that we could use as a central data repository. So we were sending these large emails out to multiple recipients” explains Stoughton.

“When you are producing and distributing reports manually, the possibility for human error and misinterpretation increases. Our workflow was simply unsustainable”.

Whilst the eventual output of the data was perfectly acceptable, the overall process wasn't in keeping with the University’s ethos of ‘striving for excellence’. The reports didn't inspire their intended audience.

“The raw information was there, but we wanted to do more with it” says Stoughton.

A better way of working

Luke had looked at a number of potential solutions to the problems the department were experiencing. He knew of Tableau from a previous role with another organisation.

“I had used Tableau in several previous jobs. I knew all about what it could do and how it could help us not only for analysis and data visualisation, but also for report distribution. We looked at other tools, but Tableau stood out as the solution to many of our problems.”

Luke suggested running a trial within the department to see if Tableau could really
deliver on their requirements.

“We designed up a few basic dashboards to see what Tableau could offer. We thought focusing on a real piece of work would be a good idea. So we used Tableau to help us through the latter stages of the student application cycle”.

The results were good and feedback from others was extremely positive. The trial reinforced the need for a more permanent Management Information solution to reporting at the University. Towards the end of 2013 a proposal was approved to kick off an University-wide reporting project, covering MI and Operational reporting.

The solution presented itself

At the planning stage of this wider project it was agreed that an interim reporting solution was needed to maintain, create and disseminate applications reporting. A fifty user Tableau server license was acquired, along with two full desktop licenses.

Whilst the overall reporting project was getting off the ground, the team made good use of the Tableau licenses and delivered the full range of admissions/applications MI in a matter of weeks.
“We started by creating new Admissions reports, both at School and Programme level, for our own purposes. Then we had a request from our Marketing team, so we also created a worldwide data view based on the domiciles of the students. This was well received.”

The Planning Department continued using Tableau for a greater and greater volume of interim reports. As the number of users grew, more licenses where required. The Library & Student Support Service then bought twelve server licenses and one desktop license, and subsequently created their own dedicated site for creating reports.

The Marketing and Quality Departments were next. They bought an additional twenty four server licenses which meant a total of eighty six licenses were now in use across the University.

With the increase in licenses, the growing number of users, and the outputs being produced it was clear that the MI strand of the overall reporting project was being delivered effectively.

“By this stage Tableau’s reach had spread so far and wide” explains Stoughton, “The next logical step was to get a site wide license, so we could easily make the tool easily available to all of our staff”.

**A range of Management Information benefits**

Tableau has improved both the presentation of data, and its means of delivery to staff. The clarity of reports now being produced is something that has made a real impact at all levels of the University.

Ian O’Donnell, Deputy Academic Registrar at Middlesex explains “Tableau has
made a huge difference to how we work, its ease of use and transparency in how data is displayed has greatly benefited our staff”.

Across departments and teams Tableau has made a significant impact on a number of areas:

- **Clarity of information has directly improved productivity.** The Planning team previously had complex workflows to produce the results they needed in Excel. Considerable time was spent before, after, and during meetings with other team deciphering figures and explaining findings. They are now able to produce reports analysis that has a much greater level of clarity.

  “The output which Tableau creates is a huge step forward for us” explains Stoughton, “We can meet with other teams, show them what we have produced and make positive decisions quickly. The data is so easy to understand, it means we all have more time to complete other tasks”.

  The benefits have also been felt outside of the Planning department. As a direct result of Tableau the Marketing team have been able to better tailor their efforts for recruitment campaigns. Reports produced on application numbers highlighted course and demographic links, helping to better target campaigns and in turn improve the return on investment.

- **Access to data has never been so easy.** No longer restricted to when and where they can view data, Tableau has enabled staff to access important reports and specific analysis with complete ease.

  With Tableau dashboards information comes perfectly formatted, and reports are easy to interact with. Most importantly data is now accessible from one place. This has vastly improved efficiency and productivity for many
staff at the university.

“It may seem obvious, but having a central repository where multiple files and reports are located, has really impacted how people deal with the reporting we create.” said Luke.

The university discovered an added benefit of this ‘central store’ - remote working. Previously hindered by technology, staff couldn’t access data offsite. Tableau has made ‘out of the office working’ possible for many of those involved in data analysis. The Tableau iPad app has also contributed to this style of working, giving users on the move a very simple and effective means to access their work.

- **Enhanced communication between teams.** Stoughton believes that Tableau has struck the perfect cord with how data is stored and displayed. He believes this has really improved how teams and departments work with each other.

- **Tableau has helped make use of the underlying data held by Middlesex and has been a conduit to provide insights through customised datasets to answer specific questions.** It’s ability to run custom, self-refreshing reports against a central Oracle database using custom SQL statements has been pivotal in the increased productivity of the department and increased scope of reporting.

“People connect better with visual graphics than they do with data in a spreadsheet. This shift alone has changed how different teams interact with each other. It has been really refreshing to see.”