Practical applications of analytics

Macquarie University gives students essential real-world experience
“There are many positives, but one of the main reasons I chose Qlik is the support and help we get from its dedicated team.”

Dr. Hamed Jafarzadeh, Senior Lecturer, Macquarie University Department of Actuarial Studies and Business Analytics

**Powering Australia’s graduates with market-ready skills**

A critical demand in Australia’s higher education sector is ensuring that graduates are market-ready and equipped with employable skillsets. Requirements for data science and business analytics are growing rapidly in the business world, and educators are eager to meet this demand.

Macquarie University in Sydney educates more than 44,000 students a year, offering more than 140 courses across a range of study areas. Part of the university’s strategy to drive recruitment and enrolment is to ensure that students benefit from a complete learning experience. The key to enabling this is the university’s flagship work-integrated learning program - PACE (Professional and Community Engagement) - which applies to all undergraduate and many postgraduate degrees across the university.

Macquarie University also recognizes the value of commercial applications, so curriculums are designed with the support of industry partners to provide hands-on experience of commercial software.

This is an important driver of the teaching philosophy of Dr. Hamed Jafarzadeh, Senior Lecturer at the university’s Department of Actuarial Studies and Business Analytics. He believes firmly in the importance of applying real-world tools to allow students to identify and respond to scenarios more effectively and efficiently than just looking at the theory, or just through verbal or written explanations.

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**Solution Overview**

- **Customer Name**: Macquarie University
- **Industry**: Public Sector
- **Geography**: Sydney, Australia

**Challenges**
- Find relevant academic learning data analytic tools to produce market-ready graduates
- Support students on their journey to a successful academic conclusion
- Expand relevant learning data analytics software and training for wider student use

**Solution**
Deployed Qlik Academic Program as part of an undergraduate and master degree to equip students with data analytics skills.

**Results**
- Collaborative support from Qlik support helps academic staff to deliver industry experience
- Relevant and easy-to-learn solution makes students market-ready
- Positive feedback from the university lecturers and students
“We don’t want to leave the student with just a theoretical understanding. It might happen in some places, but I don’t like it,” he explains. “At Macquarie University, the focus is on making sure students are ready for the job market.”

**Strong support and user-friendliness of commercial data analytics tools**

Dr. Jafarzadeh’s past academic experience with Qlik drew him to the Qlik Academic Program, which provides universities with free access to Qlik Sense® software, training, qualifications, certifications and other learning resources.

The Qlik Academic Program’s collaborative approach was instrumental in getting its software and learning materials into Dr. Jafarzadeh’s classrooms. Under PACE, Qlik solutions were among many BI tools available to undergraduate and postgraduate business analytics students to undertake analytics projects in a 13-week capstone course.

Dr. Jafarzadeh says that having hands-on experience of the tool rather than just “talking about it” has boosted the students’ learning curve.

“Qlik provides great results in terms of the look and feel, user experience and UX experience,” he adds. “The advantages that Qlik delivers have been reflected strongly in the students’ experience.”

Dr. Jafarzadeh’s students were tasked to understand real-world data from an industry partner participating in the course using data analytical tools of their choice. The industry partner was one of the major players in building commercial and residential properties in Australia and was also involved in running the course and evaluating students’ assessments.

Students had to analyze shopping mall visitation data, weather trends and macroeconomic conditions such as inflation figures and interest rates to build a better understanding of economic situations.

A significant proportion of the students included Qlik in their applications due to its intuitive and user-friendly nature. Using Qlik, dashboards and smart graphs made it easier for students to analyze raw data and develop meaningful insights.

**Practical applications heighten learning aptitudes**

Students in Dr. Jafarzadeh’s class have the option to choose the tools for undertaking their analytics projects. While students are already introduced to many analytics tools during their degree at Macquarie before coming to Dr. Jafarzadeh’s class, the ease of using Qlik puts it ahead of rival technological tools for some of the students. Being part of the Qlik Academic Program also helps students to create easy-to-understand managerial and visualization dashboards.

In addition, students attended a guest lecture and an engaging, interactive three-hour workshop run by the Qlik team – an experience Dr. Jafarzadeh believes motivated some of them to select Qlik for their project. Most students could comfortably grasp Qlik’s basic functions and dashboard capabilities after the short learning sessions.

And while both student and academic feedback found Qlik’s data visualization to be an effective means of identifying and responding to factors impacting the business world, one factor in particular set it apart.

“It’s the support and willingness of the people at Qlik. They are open to collaboration and making resources available,” says Dr. Jafarzadeh. “The Qlik team is very welcoming and dedicated and values collaboration with the university. That is a great plus for me.”

Macquarie University now recognizes that mastering data analytics is a key differentiator for graduates in an increasingly competitive landscape. It plans to expand the use of software and learning resources from the Qlik Academic Program in similar capstone modules for practical learning next year and extend the collaboration with Qlik to faculty members’ research.
“The more students familiarize themselves with a wide range of tools, techniques and platforms, the more employable they become in a competitive market.”

Dr. Hamed Jafarzadeh, Senior Lecturer, Macquarie University Department of Actuarial Studies and Business Analytics