

La Trobe University

Transforming data analytics education



La Trobe University and Fujitsu's partnership provides Master of Data Analytics students with real-world projects. It develops data visualisation, modeling, and predictive analytics skills and cultivates consulting expertise, preparing graduates for the demands of the industry.

Challenge

Students from the Masters of Data Analytics course at the La Trobe Business School wanted to further improve their academic learning by applying it to solve real-world business challenges.

Solution

Fujitsu consultants provide lectures, workshops, and hands-on guidance to contribute to talent development by developing technical and professional skills.

Outcomes

- Students tackle authentic challenges and analyse data ranging from environmental research to sales pipelines
- The program has expanded from two student groups in 2021 to about 20 students each semester

"For the students, it is a terrific opportunity to learn and receive feedback from people who have worked in this industry for many years."

Petrus Usmanij, Senior Lecturer, La Trobe University





20 students participate each semester

Hands-on data analytics experience

La Trobe University's collaboration with Fujitsu Data & AI began in 2021 as part of Fujitsu's Corporate Social Responsibility efforts. "One of the objectives we set ourselves was to make sure that we were giving something back to the community of data professionals," said Adam Smith, Director of Customer Success at Fujitsu Data & AI. "That is why we looked for a tertiary institution to partner with, and La Trobe University was an ideal fit."

Students from the Masters of Data Analytics course at the La Trobe Business School in the program apply their academic learning to solve real-world business challenges Fujitsu presents. In the past, these projects have included diverse opportunities, such as exploring commercial applications for kangaroo population data and working with Fujitsu's own sales pipeline data.

In one project for the Queensland Department of the Environment, Tourism, Science and Innovation (DETSI), one of Fujitsu Data & Al's clients, the students analysed data sets related to fish health in the Queensland river system.

The data sets contained information on the fish's otoliths (ear bones). Just like the rings in a tree trunk, the otoliths can provide insights into the growth and environmental conditions the fish have experienced over time. The data included measurements of factors like the growth rate of the fish, the mineral content found in the otoliths and other indicators of the fish's health and the health of the river ecosystem.

The goal for the students was to help the scientists at the DETSI better visualise and analyse this data. The students worked on developing different ways to present the information in a more insightful and actionable way for the department.

These projects span two semesters, with groups of three or four students applying their data analytics skills to design and develop a solution to a specific real-world challenge.

Students gain practical data visualisation, modelling, and predictive analytics skills through these projects. But beyond the technical expertise, they experience the intricacies of professional consulting

Transforming careers through authentic learning

The partnership creates opportunities for all involved.

For Fujitsu, this collaboration is a chance to contribute to developing future professionals while gaining fresh insights from students. Fujitsu consultants who mentor the students benefit too, as it sharpens their skills in presenting and teaching complex concepts. "One of our consultants, who has about four or five years of experience in the industry, took the opportunity to stand in front of a group of students and explain to them what she knows about data cleansing and how to structure a Power BI data set," Mr Smith said. "While she was a little intimidated initially, she has really enjoyed the experience, and I've seen her grow and develop communication skills during the course of the program."

Industry: Public sector / **Education**

People: 2,500+

Location: Melbourne

Website:

www.latrobe.edu.au

About the customer

La Trobe University is a university located in Melbourne, Victoria, Australia and has other locations in Bendigo, Albury-Wodonga, Mildura, Shepparton and Sydney. It was founded in 1967 and offers the faculties of Education, Health Sciences, Humanities and Social Sciences, Law and Management, Natural Sciences and Engineering, and Technology.

For La Trobe University, working with organisations like Fujitsu is about creating authentic learning experiences. Students are introduced to the pace and demands of professional environments, where they develop skills that extend beyond the classroom. Fujitsu's consultants play an integral role in this process, offering technical workshops, reviewing project drafts, and providing feedback to guide students as they refine their solutions. "For the students, it is a terrific opportunity to learn and receive feedback from people who have worked in this industry for many years," said Petrus Usmanij, Senior Lecturer for the Master of Business Information Systems program at La Trobe University.

This hands-on approach helps students build confidence. They learn to manage projects efficiently, communicate effectively with clients, and work collaboratively in teams. "This is very important, and it's eye-opening for them," Mr Usmanij said.

Preparing students for the demands of professional consulting

Participating in the program allows students to step out of the academic world and into a simulated professional setting. They learn to navigate the challenges of typical data projects, such as working with incomplete data and managing client expectations. The experience equips them with a balanced set of technical and soft skills, ensuring that they are well prepared to enter the workforce. "This is a life-changing opportunity for our students," Mr Usmanij said. "They have to know what's happening out there, on the other side of the bench, outside the university."

The collaboration between La Trobe University and Fujitsu Data & AI exemplifies how academia and industry can work together to create transformative educational experiences. "We feel that we are achieving our intent to help the next generation of data professionals with this partnership," Mr Smith said. "There is also the potential to identify talented graduates from the program who could work for us, which is a win-win situation for everybody."