

DATA ANALYTICS

CUSTOMER STORY

Penn State builds strong partnership

Qlik Academic Program helps prepare students for data analytics careers





CUSTOMER STORY

“The Qlik Academic Program is helping us to equip students with skills that will only strengthen them when they graduate, making them much more prepared when they go into industry.”

Raghu Sangwan, Professor-in-Charge, Software Engineering and Director, Big Data Lab – IoT, Analytics and AI, Pennsylvania State University

Career-focused curriculum

Pennsylvania State University (Penn State) is a major research institution that specializes in teaching, research and public service. Its student body includes undergraduate, graduate, professional and continuing education students, with courses delivered either in person, online or increasingly, as a hybrid. Overall, it teaches around 100,000 students distributed over 24 campuses.

Penn State’s Great Valley campus in Malvern, southeast Pennsylvania focuses on postgraduate study and professional development, with a total student body of around 3,000. Its career-focused curriculum is built around ever-changing industry needs, taught by industry experts to a diverse population composed predominantly of full- and part-time working adults.

A dynamic new raw material

Industry’s raw materials of choice once included iron, cotton and oil. In a new era of digital transformation, however, the most valuable asset is data – and like its predecessors, data in its raw form needs to be processed and refined to achieve its full value.

“Digital transformation and data-driven decision-making are happening everywhere, reaching out to customers by learning from their habits,” explains Raghu Sangwan, Professor-in-Charge, Software Engineering and Director, Big Data Lab – IoT, Analytics and Artificial Intelligence (AI) for Pennsylvania State University. “There’s huge demand and lots of different problems to solve in manufacturing, logistics, construction – you name it.”

Solution Overview

Customer Name

Pennsylvania State University

Industry

Public Sector

Geography

Pennsylvania, USA

Challenges

- Provide graduate students with core skills in data analytics
- Advance the data analytics master’s program to increase student enrollment and engagement
- Address the needs of local industry for students with data analytics skills
- Increase the educational benefits of direct collaboration with industry experts

Solution

Penn State’s data analytics master’s program aims to meet industry demand. It is used by working adults, enabled by the Qlik Academic Program’s contributions of software, training and other learning resources.

Results

- Students gain professional software and high-quality training from industry experts
- Supports local industry needs by providing students with data analytics skills
- Broadens the university’s educational offering and student involvement

Penn State realized a dedicated master's program in data analytics was essential to continue its mission of forecasting and adapting to contemporary working patterns and commercial demand. And in a sector where speed, expertise and agility are essential, this would be an important challenge. Equally important was finding an industry partner to help develop the program, provide vital industry expertise and share in its successes.

"We're helping to create jobs in positions that don't even exist yet and may not exist for another five years in some industries," says Erica McLeod, Director of Campus Development, Penn State Great Valley. "It's incredibly exciting."

The ideal partner for collaboration

External collaborations are a core part of Penn State's postgraduate programs, boosted by the campus's proximity to Qlik's global headquarters. It soon became clear that the Qlik Academic Program would be the ideal partner to support and develop Penn State's objectives for the master's program.

The [Qlik Academic Program](#) provides qualified university educators, students and researchers with free Qlik software and resources to help in the training of data analytics. Online learning resources, including instructional videos, lecture notes, handouts and real-world interactive business use cases are made available through the program's online learning platform, Qlik Continuous Classroom. Students can also take Qlik Sense Business Analyst and Data Architect Qualification exams to earn a printed certificate and digital badge they can add to their resume or social media sites.

Four years after the first data analytics students graduated, the program is now one of the Great Valley campus's largest and most successful. A total of around 300 students are currently enrolled, and Qlik's involvement is growing every year.

"Students coming into our program typically have a few years of industry experience, but not so much in data analytics," Sangwan says. "Many parts of the corporate world are trying to catch up to this digital transformation, and are saying 'okay, we have all this data. What can we do with it?' This is where the Qlik Academic Program really comes into play."

An integral contribution to learning

The Qlik Academic Program has been instrumental in helping Penn State advance the data analytics curriculum – so much so that Qlik is now integral to the master's program introduction.

"It has become a given for us to kick off the new academic year with a workshop with Qlik. The students come in and we tell them to just get their brains wrapped around the data – and what better way to do that than through exploratory analysis?" says Sangwan. "Qlik is one of those tools that gives you the ability to just pull in the data and start peeking and poking around."

Sangwan continues: "The guys from Qlik come in and their hands are full. Our students come from industry, so they have experience, they have more confidence and they know the use cases. The Qlik guys answer questions left and right; it's a good workout for them."

As well as contributing to the data analytics curriculum, the Qlik Academic Program has also become an integral part of other areas of Penn State's work, including becoming a leading contributor to the university's Giving Society and providing Qlik Sense in the research lab, where all data aggregation, exploratory analysis and dashboards are now created in Qlik.

Just the beginning

The data analytics course's growing reputation – and Qlik Academic Program's contribution – are gaining industry attention. "We are looking to enhance student experiences outside the classroom, and that is one way we can attract high-level talent. It's been wonderful to see the relationship with Qlik come full circle," says McLeod.

Penn State's role is increasingly about determining how data analytics can be applied in areas where it hasn't previously been present, and the course's growing reputation means many organizations approach the university directly for help. This gives students and staff invaluable opportunities to implement Qlik in real-world situations.

"The Qlik Academic Program is helping us to equip students with skills that will only strengthen them when they graduate, making them much more prepared when they go back into industry," says Sangwan.

McLeod concludes: "It's been really exciting from my perspective, seeing how we've developed and strengthened. The Qlik Academic Program has been a vital partner for us. We've really just started, and I'm looking forward to many more years."

The keys to success



60 in-person students



300 students in total currently enrolled

“We are looking to enhance student experiences outside the classroom, and that is one way we can attract high-level talent. It’s been wonderful to see the relationship with Qlik come full circle.”

Erica McLeod, Director of Campus Development, Penn State Great Valley



About Qlik

Qlik’s vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Our cloud-based Qlik Active Intelligence Platform delivers end-to-end, real-time data integration and analytics cloud solutions to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 38,000 active customers around the world.

[qlik.com](https://www.qlik.com)