

ANALYTICS

# University shapes strategy with insight

Weber State University deploys Qlik to guide students through graduation and beyond





## CUSTOMER STORY

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Heather Chapman, Director of Academic Analytics, Weber State University

### A dual-mission institution

Located in the foothills of the Wasatch Mountains and overlooking the Great Salt Lake, Weber State University (WSU) combines its status as Utah’s first comprehensive regional university with a firm commitment to its community college mission. It offers more than 250 certificate and degree programs to around 29,000 undergraduate and 1,000 postgraduate students.

Students come from a range of demographics – both local and commuters living within driving distance. “We’re an open-enrollment institution,” explains Heather Chapman, Director of Academic Analytics at WSU. “We take anyone that comes to us and we do our best to mentor them through their course.”

### Wanting to help, needing to compete

WSU will always, justifiably, insist that its main priority is helping students through their programs to graduation and into the wider world, but this ambition doesn’t exist in isolation. To achieve this, WSU has to be attractive to students and compete with other institutions.

Its open-enrollment policy also means student retention can be a challenge – either through drop-outs or through students taking up what they perceive to be more attractive offers elsewhere. Chapman says: “We want to identify the students that are less likely to complete their course. We want to build up our graduation rates. We want to help our students succeed.”

#### Solution Overview

##### Customer Name

Weber State University

##### Industry

Public Sector

##### Geography

Utah, USA

##### Function

HR, Finance, IT

##### Business Value Driver

Reimagined Processes

##### Challenges

- Improve student retention to enable more to graduate
- Make WSU more competitive and attractive to students
- Identify key factors that influence enrollment, performance and graduation rates

##### Solution

Having identified enrollment, persistence and graduation as three primary success factors, WSU used Qlik AutoML as a solution to establish trends and actionable conclusions quickly and reliably.

##### Results

- Greater visibility into factors that affect student retention and graduation
- Access accurate and reliable data to deliver insights and shape strategy
- New capabilities enable WSU to help more students through college education and into the workplace

Chapman realized that data analytics could play a critical role in shaping WSU's strategy on student enrollment, performance and graduation but she didn't have the time to devote to assembling and building the necessary data code. She needed a quicker solution. "I have always known the power of statistics and what it can do; it's my bread and butter," she explains. "But without a solution it was just so time-consuming."

## Stories that need to be told

Qlik AutoML provides automated machine learning for analytics teams. It enables them to generate models, make future predictions and test what-if scenarios with full explainability data.

Chapman came across Qlik AutoML just as COVID-19 landed in 2020 and quickly understood its potential. "I used the time during the pandemic to build a case for why WSU needed this," she recalls. "I ran a couple of different models, visualized them for people and showed my executive leadership groups what Qlik AutoML does." The result was rapid: more licenses were agreed.

Chapman identified three key areas where she could use Qlik AutoML to power a variety of predictive analytics projects. Looking at persistence, WSU wanted to identify which students would return for the next term and what were the primary characteristics of these students?

The university wanted to look into graduation, predicting which students were most likely to graduate and what factors had the greatest effect on those that did graduate.

Finally, accreditation. Why are the degrees that WSU issues valuable and meaningful? How do they affect students' prospects when they finish at the university?

Chapman realized that she could then use these insights to develop performance improvement strategies to build the university's reputation, deliver its mission to lower the skills gap and provide valuable metrics to ensure funding and future growth. As well as being a highly powerful solution in its own right, one of the main things that attracted Chapman was the adaptability of Qlik AutoML. The largely device-agnostic software was interoperable with other platforms that Chapman used, creating a formidable suite of functionality.

"I build out the models, then I build out the visualizations to go with them," explains Chapman. "From there I can figure out what stories really need to be told. There is no way I could have done that before Qlik AutoML."

## Seeing the lightbulb moments

Chapman can now update analysis models on the fly, add new files and produce new working versions in around a quarter of the time it took previously. More importantly, she can provide useful information to those who need it. "I found out very quickly that while it's great to do all these fancy things, nobody actually cares. They just want to see the bottom line and Qlik AutoML enables that."

Chapman recalls that running the very first model delivered some key discoveries: first was the increased likelihood of persistence and graduation for students with an on-campus job. Second was that regardless of amount, one of the biggest predictors of student success is gift aid. "Financial aid that a student doesn't repay," she explains. "We worked out that as little as \$250 has a dramatic impact on enrollment and course progression. Taking it to \$1,000 delivers even more remarkable improvements."

Chapman has since assembled a formidable collection of success indicators that Qlik AutoML has helped to identify. She can isolate primary factors that influence student performance and can present findings with, what for her are, unprecedented levels of confidence. "I'm a statistician; I usually deliver results with a bunch of caveats," she says. "The accuracy of Qlik AutoML means I don't worry. I can just present findings to end users and see the lightbulb moments happening in front of me."

## Turning data into strategy

WSU is now looking to become even more creative in the way it enrolls, who it enrolls and how it can continue to grow its enrollments. To this end, Chapman is turning raw data into actionable insights, which in turn are informing top-level strategy – and Qlik AutoML is enabling her to do it quickly, independently and accurately. "As things get more and more competitive, this is our way to be strategic and competitive in every area," notes Chapman. More importantly, the positive impacts on students are now just starting to show. "I've never been this excited about something," Chapman adds. "I can pull a whole series of threads together and create a full picture. And you don't have to be a machine learning engineer or data scientist to do it."

The next step is to capitalize on the insights currently being delivered, and then take Qlik AutoML even further. In particular, Chapman is now focusing on how to "democratize" the data-led insight process. She concludes: "How do I get this everywhere? How do I get people thinking like this? I really want to enable more analysts to do more of this."

## The keys to success



**29k**

students, including  
1,000 postgraduates



**6,772**

students expected to  
graduate in 2021-22

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### 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.

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