



CUSTOMER SPOTLIGHT Penn State University



PennState

Pennsylvania State University improves business operations with custom Power BI implementation

CHALLENGE

Pennsylvania State University (Penn State) is a top-ranked research university founded with a mission of high-quality teaching, expert research and global service. When the Institutional Research (IR) division at Penn State adopted Power BI, other departments across the university quickly noticed. Realizing the transformative power of the insights delivered, Penn State needed a partner to help them establish a firm foundation in modern analytics throughout the university.

The Office of the Corporate Controller (OCC) and Auxiliary & Business Services (A&BS) divisions knew it was time to adopt a modern business intelligence tool when they could not answer critical business questions without significant time investment from IT and operational resources. A&BS could not easily determine where student housing contracts stood day-to-day. Their current process consisted of daily manual entry into spreadsheets, with varied counting methods and entry times and questions from leadership, often leading to several hours of additional manual entry or enhancement of the solution. The Housing, Food Service and Residence Life Team faced the challenge of managing data in many disparate systems. Without an enterprise data warehouse in place, it was difficult for the team to complete any advanced analysis or to combine disparate data to answer foundational business questions. With twelve campuses and 90K+ students, data plays a critical role in delivering streamlined, cost-efficient and effective services.

The OCC is responsible for the institution's fiscal integrity and viability. As the primary hub for serving financial user needs throughout the university, data availability, reliability and integration are essential. Inflexible legacy systems made it difficult to derive a comprehensive solution. Compliance was also of utmost importance. The financial systems team sought to implement a modern analytics platform that would achieve the university's financial goals and boost constituent's clarity and productivity.

↓ [SCROLL TO VIEW DETAILS ON THE 3CLOUD SOLUTION](#)



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SOLUTION

3Cloud engaged with Penn State leveraging Power BI to solve their challenges. The solution developed for the OCC was a time-sensitive reconciliation process and report. 3Cloud worked with the financial systems team to develop a strategy and solution that would meet compliance. Next, to enable fiscal integrity and self-service, a solution was developed for a secure purchasing card inventory system for all university financial officers. This will help solve the issue of when employee statuses and card limits changed, it was difficult to account for and track the 10,000 active purchase cards across the university. For Penn State A&BS, 3Cloud built a Power BI data model focused on student housing contracts and related student and residency attributes. Using the new data model, 3Cloud created two Power BI reports; one allowing analysts to monitor and compare housing contracts for current and previous terms, and a second report inventories residence applications for upcoming terms using the same attributes from the first report. For the Food Service analysts, working with Excel has been a pain point as they deal with millions of transaction records annually. 3Cloud developed a third report built upon the student data model which incorporates point of sales transactions from a separate system.

It was essential to Penn State OCC and A&BS leadership that their teams understand the Power BI ecosystem's technical and administrative components. 3Cloud conducted a series of training workshops covering Power BI Admin training, as well as Power BI Fundamentals training to ensure that both data modelers and report developers are equipped with the skills needed to build Power BI solutions. In addition, training of developers and analysts will empower them with the knowledge they need to continually grow and socialize Power BI and promote long term adoption success at Penn State.

Kim Thorpe, Programmer/Analyst, Penn State remarked, **"I have gained a lot of knowledge about row-level security, data modeling, visuals and DAX. I have learned a ton and am already sailing along with my own reports."**

↓ [SCROLL TO VIEW DETAILS ON THE RESULTS](#)



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RESULTS

3Cloud implemented a Power BI solution to ingest current and historical purchase card inventory insights. Row-level security gave financial officers, assistants and the controller’s office access to manage the catalog at each business and organizational level. This solution reduced the time OCC spent manually tracking purchase cards while encouraging site-wide Power BI adoption among all financial officers.

For Penn State A&BS, 3Cloud’s build of a new data model and reports gives them insight into the trends and decisions of students interested in living on campus over time with the ability to compare applications for an upcoming term against prior years. For the Food Service analysts, incorporating data into Power BI allows them to review and compare multiple years’ worth of point-of-sale data married to student housing and demographic information. Steve Focht, Systems Analyst at Penn State stated, **“This is insight into a lot of data that we’ve been struggling to make business decisions around easily. Your insight has helped us set up an environment that is solid going forward, and we won’t have to look back wishing we would’ve done something different. Your expertise has been awesome!”**

The modern analytics insights enabled through support, training and solution delivery for the Penn State OCC and A&BS divisions were impossible prior to their Power BI deployment. The data and analytics capabilities can provide leadership with fast, reliable decision support.

PENN STATE CLIENT PROFILE

Penn State is a top-ranked research university.
Employees: 17,000
Innovation Focus: Data & Analytics