





# PennState

The Pennsylvania State University was founded in 1855 and is ranked among the top one percent of universities. With multiple campuses, Penn State's 100,000 students and 17,000 faculty know the real measure of success goes beyond the classroom – it's the positive impact made on communities around the world.

To further this impact, the university knew it was time to replace its homegrown, mainframe based IT system. Penn State had many shadow systems and external integrations, so the university wanted to organize an enterprise view of key business information and improve the use of data to achieve operational and strategic university goals.





## Overcoming obstacles

Penn State wanted to replace a 30 year old legacy financial system with more efficient applications using modern technologies and the latest in analytics architecture. The university was facing some key reporting challenges around data redundancy and data quality.

Data was stored across multiple environments and platforms leading to higher costs, islands of data, duplicate systems, and duplicate processes. Coupled with poor data quality, this meant significantly reduced productivity and increased inefficiencies, meaning staff had to accommodate mainframe and data warehouse challenges on a daily basis.

The university needed to harmonize systems and business practices, meet financial reporting needs, and provide superior planning and operational services, with an agile platform which could adapt to changing mandates. This included a user-friendly system with public sector specific functionalities. The goal was to build a platform, using SAP HANA as an enabler, to drive the university to a point where the data provides more connected and deeper insights in real-time.

## Driving change

invenioLSI and Penn State worked in close partnership to successfully implement SAP S/4HANA to replace the university's homegrown legacy systems. Penn State is now up and running with SIMBA - the System for Integrated Management, Budgeting, and Accounting. We implemented the latest SAP technology, including cutting edge embedded analytics modules.



Our experts identified the gaps between Penn State's requirements and the capabilities provided by the SAP system. Using this, we worked with university's data analytics and reporting team to complete a greenfield implementation of SAP S/4HANA and BW/4HANA, hosted on Azure. Together, we rolled out a total of 103 custom self-service reports across seventeen functional areas.

The new modules transitioned Penn State to a hybrid transaction/analytical processing model which has broken down barriers and delivers real-time reporting. The upgraded experience means that there's no more waiting, units can react without delay, and instantly deliver insights on what's happening.

SIMBA provides a modern, intuitive solution to effectively plan, budget, and manage assets and resources to meet the complex needs of internal and external stakeholders. The solution was designed to streamline inefficient business processes, create better business practices, and maximize robust S/4HANA

embedded analytics reporting tools to provide better data and insights. Our experts worked with Penn State to consolidate 32 complex mainframes (or 3,200%), using NextGen user interface SAP Fiori®, to successfully deliver a well-oiled and inter-connected IT landscape.

## Live insights and rapid decision-making

Penn State now exchanges and shares more information than ever before. Putting improved analytics tools in the hands of the end user has empowered the university to engage in collaborative activities with partners, accelerate business, and be more responsive.

The institution has seen huge improvements, with capabilities aggregating massive amounts of data. SIMBA provides instant insights on live data without data redundancy or latencies.

This means that the new in-memory HANA database produces reports, now consuming 10 million+ records in under 10 seconds – this was previously unheard of at Penn State.

SIMBA delivered on Penn State’s vision to enable data-driven decisions that add value to the university, while resulting in over \$1BN ROI – performance improvement and cost takeout of legacy renewals. The institution benefits from greater operational efficiency, better financial transparency, enhanced compliance, and access to reliable data for strategic decision-making – all in one platform, a single source of truth. The business can understand changes as they happen and react quickly, and with customized dashboards and reports, Penn State can easily drill into organizational data to answer queries and find new insights.

The university is a multi-campus, land grant, public research university that educates students from around the world and supports individuals and communities through integrated programs of teaching, research, and service. The new SAP landscape will keep Penn State’s mission at the center, supporting people throughout the university, and transforming how the organization operates moving forward.

