

Accelerating The Time To Degree & Increasing Student Satisfaction



client

Premier Public University
United States of America
36,000 students
130 academic departments
\$2.4 billion revenue

solution

Student enrollment analysis
Curriculum planning & management
Cloud-based application
\$1 million annual savings

technology

Oracle BI 11g
Informatica
Oracle Database 11g R2
Student Data Warehouse
Student Enrollment System
IBM Mainframe
IBM DB2
Single Sign-On (SSO)

Using Oracle BI To Change The Way Higher Education Thinks About Curriculum Planning & Management

About the University

The world's premier public university occupies a 1,232-acre campus. From this home its academic community makes key contributions to the economic and social well being of the state, and the nation. The National Research Council has ranked 48 of the university's 52 doctoral programs in the top 10 nationwide.

Business Drivers

The university sought to replace an aging student enrollment system with a cloud-based application for student enrollment and analysis. Additional detailed objectives included:

1. Providing planning staff and faculty with timely information about class enrollment dynamics that included course utilization, resource utilization, overbooking, wait list management, rejects, and grade distribution.
2. Enforce business rules automatically.
3. Leverage a reporting solution that allows for advance identification, notification, and correction of issues prior to instructional periods.

Solution

This project was the largest implementation of student enrollment related information at the university in 40 years. The Office of Planning and Analysis aimed to bring the entire campus together with one centralized source of information. This step in the university's technological evolution was an enhanced system for student curriculum analytics.

The final cloud-based application creates decision support to inform and transform the way the university analyzes, supports, communicates, and plans curriculum. The system uses the Oracle Business Intelligence platform to analyze custom data sources containing student, faculty, and institutional information.

The new Student Curriculum Analytics application provides the Office of Planning and Analysis with visibility into weekly enrollment trend analysis, ability to quickly identify of enrollment issues, gain better insight into student demographics, and conduct ongoing capacity management including identification of room-shares and cross-listed classes.



“This is the really important stuff that positively impacts the university.”

- Vice Chancellor & CFO

Success Criteria

The university required a single consolidated global view of their student enrollment picture. A successful implementation would involve high levels of user adoption by the Office of Planning and Analysis and facilitation of campus-wide reporting

The other main set of key success criteria included the empowering of educational departments to provide better access to critical courses, thereby facilitating accelerated time to degree, reducing student frustration, and increasing the student satisfaction rating.

Weekly Enrollment Management

These reports allow you to track classes offered, enrollment counts and limits, wait list counts and limits, percentage of classes filled, and more during the registration period. Updated on a weekly basis, you can use them to monitor the curriculum and make timely decisions about teaching support or how many classes to offer based on where you see growing demand or capacity before the semester starts.

Curriculum Long-Term Planning

These reports feature course offerings, enrollments, average class size, and student credit hours for any course over time.

Intelligent Campus

With the implementation of Oracle Business Intelligence, the campus is now empowered with single digit report and dashboard response times into millions of records that have been built to improve the overall student experience.

Cross-Subject Area Analytics

The design integrated student curriculum facts with the existing conforming dimensions on student financials and registered student products, which allowed for cross-subject area analytical capabilities.

Single-Digit Response Time Into Millions Of Records

The sub 5-second reporting performance on multi-million record data sets has been achieved by strategic planning and implementing of the aggregated facts populated by the extract-transform-load (ETL) process and modeled into Oracle Business Intelligence Enterprise Edition metadata.

Duration

The effort was launched with a KPI Partners Vision Workshop that brought together all the key stakeholders within the university's technology team, project sponsors, functional & subject matter experts, and the business intelligence project team. After a 4-month project, the student curriculum analysis system was deployed as Phase 1 of a larger initiative to connect the campus through the use of Oracle products.

“This will change the way higher education thinks about curriculum planning and management.”

- Executive Director

Accelerating The Time To Degree & Increasing Student Satisfaction

Although the application has been in production for only a short period, the university is already seeing the benefits in their deployment of Oracle Business Intelligence across the campus.

The initial set of power users primarily consists of the Office of Planning and Analysis with analytical capabilities provided across the entire campus. The project is aiding numerous other constituencies:

1. Departments will be able to provide better access to critical courses, thereby facilitating time to degree and reducing student frustration.
2. Advisors will be able to better support students by integrating information on enrollment patterns, current course availability, degree requirements, and student course history.
3. Deans and Chairs will be better enabled to review curricular needs, evaluate their instructional staffing strategy, and consider other options on mounting the curriculum.
4. Campus leadership will be able to better access information on how enrollment patterns impact course enrollments, offerings, and demand.

Return On Investment (ROI)

Through an investment into this project as part of the institution's Operational Excellence Initiative, the university projects an annual savings of over \$1 million.

Consolidation of Systems

Time consuming and error prone offline Microsoft Access Databases can be decommissioned as a result of this project. Currently, users across the campus can obtain the same enrollment answers to their business questions through a cloud-based application on a browser.

Headcount & Productivity

The new Student Curriculum application allows Information Technology Department team members and the Office of Planning and Analysis to free up resources from a life of routine manual data processing that has been a drain on productivity until now.

Lead Time

The information available on the interactive dashboards delivered in the Student Curriculum application has not been available before or, if available, required a lengthy process of writing a custom extract program on the mainframe by an IT Developer. The report development process would also involve analysts from the university's Office of Planning and Analysis manually massaging and aggregating the extracted detailed data in MS Excel before publishing.

In some areas, report lead-time has been reduced from involving multiple human resources over several days to a sub-5 second response time through a cloud-based portal..

Adoption

User adoption within the university's Administration and Office of Planning has been very high. The system currently supports users across the entire campus that experience response times ranging from 0-5 seconds.

Was Oracle Chosen?

The university's objective was to sunset a 40 year old student enrollment system based on IBM mainframe/DB2 technology. The higher education institution sought a scalable enterprise-quality solution with a centralized model that could be shared across all internal organizational units as well as an external audience. The Oracle solution fulfilled this need.

Why Was KPI Partners Chosen?

After experiencing a failed implementation cycle with another systems implementation partner, university representatives revisited KPI Partners as a potential option to assist with their student enrollment system replacement. University reps participated in many events within KPI's Monthly Webinar Series to gain a further sense of comfort with KPI's expertise in the area.

As the most experienced systems implementation partner focused on Oracle BI & EPM, KPI partners was chosen because of their expertise within Oracle BI and related technology. KPI Partners has successfully implemented the most complex deployments of Oracle BI in the world and the project at this higher education institution was a significant investment for one of the most prestigious educational institutions in the world.

KPI Partners also offered global delivery capabilities that leverage a blended-shore model with a combination of high-value on-site experts and lower cost offshore resources.

