"...only PenBay Solutions could truly walk the walk to integrate ARCHIBUS with GIS the way we envisioned it..."

Case Study



Curtin University uses PenBay facilities GIS software to help plan and save money now and into the future.

Curtin University is Western Australia's largest university, with more than 50,000 students attending a total of 16 locations, including campuses in Australia, Singapore and East Malaysia. Heeding the philosophy of its namesake, former Australian prime minister, John Curtin, who said, "The great university... should look ever forward; for it the past should be but a preparation for the greater days to be," Curtin University is a beacon for positive change. It embraces the challenges and opportunities of current times to advance understanding and change lives for the better.

The Challenge

The Curtin philosophy goes well beyond the classroom. As the University embarked on its master plan project – a visionary planning project for the next 100 years of campus growth and development – it was realized that better data and better tools were needed to properly inform the planning process.



"We needed a platform on which we could build our plan, but we just did not have the appropriate tools in place," said Andy Sharp, Director of Campus Development, Curtin University. "ARCHIBUS facility management software currently provides us floor plans, but it does not capture external infrastructure data for underground services. From a planning perspective, we need to have this kind of information available."

From the facility management perspective, one of Curtin's goals was to become more operationally efficient by gaining access to real-time information from maintenance and support operations. Using ARCHIBUS®, they could view a single floor and other key views within buildings – but the team also needed to see where everything was located, with visual reference to the entire campus.

"Space equals dollars," said Roslyn Gray, Business and Technology Solutions Program Manager at Curtin University. "We needed to be able to visualize vacancy opportunity by undertaking real-time queries and looking at efficiency models to ensure we were making the best use of available space."

The University also wanted to improve its wayfinding capabilities and marketing opportunities for the general population on campus – be it prospective students, campus visitors or the general staff and student population.



The Solution

To begin achieving its objectives, Curtin University worked with implementation partner, BRG (www.brg.com), to augment its ARCHIBUS facility management software with PenBay Solutions InVision FMSM facilities GIS technology.

"We went to the Esri GIS conference in 2012 and many of the vendors showed more flash than they could actually perform," said Sharp. "By the end of the day, only PenBay Solutions could truly walk the walk to integrate ARCHIBUS with GIS in the way we envisioned it – so we were excited to start work together."

Based on Esri® ArcGIS®, PenBay InVision FM gives facility managers a better understanding of their facilities through a rich spatial representation and map-based visualization of their assets, spaces and buildings across a campus, region or portfolio.

"ARCHIBUS is our repository for all things physical and assetbased – our building and space information," said Gray. "Coupled with our CAD drawings and campus planning data, all this information will be the foundation of the PenBay InVision FM facilities GIS solution that will help us achieve our vision."



Ultimately, Curtin's vision is to provide an enterprise GIS solution that will enable:

- Moving the facilities team from a labor-intensive, paperbased work environment to an efficient system where they can be working out in the field with mobile smart devices offering access to everything they need, from equipment manuals to infrastructure drawings and survey plans
- Campus planning support with sophisticated data and analysis tools that allow visualization of University buildings and campus-wide assets, together in a complete picture
- Students and visitors to quickly and easily find their classrooms and other campus locations.

Saving Time & Money Through Informed Decision-making

EFFICIENTLY MANAGE SPACE AND OPERATIONS

With InVision FM, Curtin University can now visualize space use at the campus level. University assets are better leveraged when facility managers are better informed about location information for spaces and employees.

"From staffing to offices, all the way to labs and research facilities, we'll be able to more easily visualize the campus and better coordinate our programs and people," said Norion Ubechel, Campus Planning Manager, Curtin University. "I think we'll see big savings with InVision FM as it helps us better manage our spaces and assets."

Even executive leadership is beginning to see how the InVision FM facilities GIS system will pay for itself through better space utilization at the University. "Let me give you a quantifiable example", said Sharp. "If we were to employ contemporary, open office plan designs, we could create 2,800 square meters of space in a building by removing the walls and wasted circulation spaces that make up individual offices. Hypothetically, if we did that across the campus, we might not have to build a new building to accommodate increasing staff numbers. A new building can cost up to \$30 million; by having the dataset available and the right tools to interrogate the information, we can make a more informed decision between building new facilities and remodeling existing. The potential cost savings are obvious."

OPTIMIZE WORK REQUESTS

It is important for Curtin's facilities staff to be able to roll up information from ARCHIBUS – primarily work requests – so they can interrogate the data to determine information like year-to-date work requests normalized by square meter inside a building and analyze work requests by trade (for example, electrical, plumbing, fire-safety). Using InVision FM, personnel are able to access this information in an intuitive, visual map-based interface.

"Using InVision FM, we are able to visualize our data on a map and achieve a more detailed workflow-driven view inside ARCHIBUS," said Gray. "We can now easily determine how much money we've spent on work requests on buildings across the campus and see if there are any outliers that have demanded more than their average share of maintenance. In short, we can make better informed decisions about how to address issues on a comprehensive scale."

CONSOLIDATE DATA

"Data continuity between our consultants is key," said Sharp. "These professionals are doing planning, design and survey work, as well as subsurface infrastructure mapping. We're able to take all those datasets and put them into a repository where they can be stored, viewed, accessed and visualized across a broad range of stakeholders. This helps ensure that we don't duplicate efforts in an expensive consulting market. Our InVision FM facilities GIS system will vastly improve our ability to make good decisions about our built environment, indoors and out, as we move forward."

"The more people we engage in our facilities GIS solution, the more opportunities we're made aware of," added Gray. "The opportunities are seemingly endless."



Implementation Partner: BRG (www.brg.com)

Learn more about how an InVision facilities GIS solution can benefit your organization! Contact PenBay Solutions at info@penbaysolutions.com or call +1 207.230.0182.

www.penbaysolutions.com

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