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## Bringing facilities management at Bentley College into the 21st century

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Bentley College prides itself on being a national leader in business education, with a strong focus on technology. When I joined facilities in 2003, I found an organization that functioned more like the 19th century than the 21st. So I set about transforming outmoded procedures by implementing technology and encouraging collaboration across departments.

Bentley College, located on 163 acres in Waltham, Mass., comprises 1,642,000 s/f across 46 buildings. The facilities management department oversees the buildings and ground with the goal of a well-maintained campus infrastructure and the highest quality service to its customers, notably the students, faculty, staff, and outside clients. When I arrived, the manual, labor-intensive systems used to administer facilities work were impeding those goals.

Originally, this department was mired in manual processing across all functions. Each year, the department manually inspected over 5,600 dorm rooms to identify damage. The paper method involved preparing building-specific book-size lists, noting dorm conditions during walk-throughs, entering hand-written data into the limited administrative software, correcting errors created by the manual process, then providing the information to the residence life staff that processed it and generated the exiting student's bill.

The work order process was equally laborious. Managers walked through buildings looking for problems, which they recorded on a notepad. Facilities management staff might receive a request by phone call, on a form, through an email, or on a note. The 25,000 work orders each year then required staff to perform the data entry step, which was regularly backlogged, as was the resulting work. Meeting and conference services generated an additional 12,000 requests proceeding from events booked for paying clients. All that paper could sit in piles and generate confused priorities.

I partnered with Bentley's IT department. IT understood that technology had largely bypassed the facilities department and jumped in suggesting Infor's Enterprise Asset Management (EAM) system, a complex, high-end system that could revolutionize the facilities management process for Bentley. Infor EAM functionality would allow the department to automate across their functions, but was quite costly. So proving that it increased efficiency and effectiveness became a crucial part of the job.

IT and facilities management devoted themselves to revolutionizing the antiquated processes. They focused on implementing the new technology for dorm inspections and work order process automation. Infor was so impressed they presented Bentley with an Operational Excellence Award in 2007. We were all dedicated and focused on this project. We are not happy just reaching one goal, we always seek continuous improvement.

The consequences were not only impressive, but revolutionary. Facilities and IT automated the dorm inspection process so that inspectors now record the condition of over 120,000 inspection points on handheld devices. The automated system organizes the inspections by specific room type

(apartment, suite, or residence hall) and provides the data to software that can create work orders, track costs, and provide results directly to residence life's billing system. This process reduced staff time by over 800 hours. It also increased quality by eliminating data entry errors.

The work order process advanced even more radically into a self-service procedure. Customers now log directly into the work order system using their unique Bentley ID. The system provides the client's name, location, phone, email, and cost center. The client simply selects the problem from a defined list, and types additional comments or details. The request automatically loads into the Facilities database. No one has to key in the 25,000 work requests, reducing data entry staff dramatically. Clients can now view their work request status online, also reducing the call volume to facilities.

In addition web-based event planning allows meeting and conference services to generate their facilities work orders automatically when they confirm a booking and to streamline paperwork and custodial management hours. A purchase order decreased from 3 paper pages to a 7-item electronic form. Bar-coded equipment and materials allow automatic work order creation and inspection report generation in the field through hand-held devices. Inventory control is synchronized with work orders to track depleted stock based on what is used. Managers are using the system pro-actively to track the condition of facilities and assets, instituting repair and replacement procedures before a client calls with a problem. Bentley's newest endeavor is tying sustainability to their Infor EAM system to help reduce energy costs.

The facilities management organization has experienced a cultural evolution, with a 24% productivity increase.

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