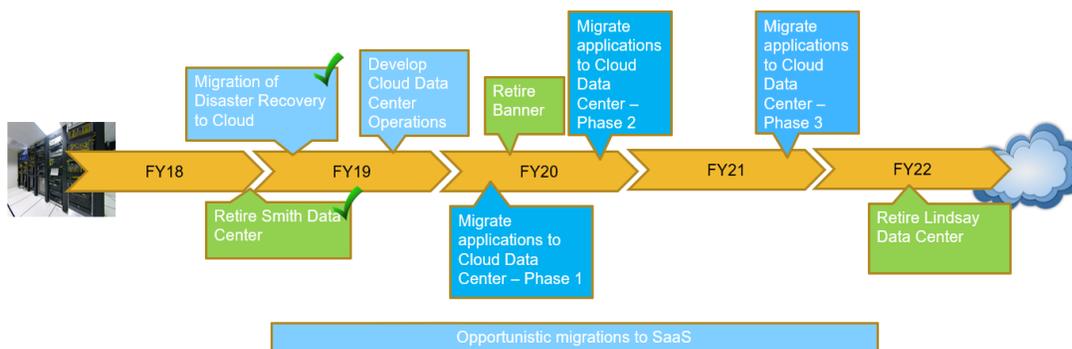


Bentley's Cloud Program

Bentley IT's Cloud strategy is to leverage these large-scale cloud services to provide flexible, secure, innovative and low-cost IT services to students, staff and faculty. In support of this strategy Bentley has a "Software as a Service first" strategy to implement modern, innovative, and flexible cloud-based services such as Workday for administration, Office 365 for collaboration, Slate for admissions, and Blackboard LMS and Zoom for teaching. To take advantage of secure and cost-effective public cloud offerings, Bentley has partnered with Microsoft to move many other on premise IT services and applications to a cloud data center over the next few years. On the road to reducing costs and becoming a more flexible services provider, Bentley IT already closed one on campus data center in 2018, and plans to close the remaining on campus data center in 2022.



What is the Cloud?

Cloud computing is a style of computing that uses scalable infrastructure, and technologies and services that are delivered as services. [Public cloud providers](#) such as Amazon Web Services, Microsoft and Google have created vast networks and data centers to deliver these technology services. Many vendors use these services, or build their own, to provide IT services, software and applications for running schools and businesses.



Bentley's Cloud Strategy

Bentley IT's Cloud strategy is to leverage these large-scale cloud services to provide flexible, secure, innovative and low-cost IT services to students, staff and faculty:

- **Flexibility:** unlike on-premise computing, cloud services do not require large upfront capital investments in infrastructure but are typically “pay as you go” or subscription services. This allows Bentley faculty, staff and students to explore innovative new services such as collaboration tools, data science tools or research and learning tools at relatively low cost.
- **Security:** cloud service providers typically provide physical security and controls to safeguard Bentley’s data, far beyond the capabilities of individual educational institutions. Cloud solution providers such as Microsoft’s Office 365 continually innovate around ways to safeguard your personal data and minimize malicious attacks or identity theft.
- **Low cost:** the scale of large public cloud providers reduces the cost of computing infrastructure and allows Bentley to pay for just the computing resources that are required when they are needed.



Use Cases for Cloud Computing

Some examples of Bentley’s use of Cloud Computing include:

- **Improved Security and Protection:** Bentley IT uses advanced features of Office 365 to identify email phishing attacks and to quarantine suspicious documents sent to students, faculty and staff. Public Cloud platforms, like Microsoft Azure have many constantly evolving threat protection and data security tools and dashboards to identify vulnerabilities and monitor and react to potential security events.
- **Managing Your Identity:** Bentley IT is investing in cloud platform identity management and authentication tools to reduce the number of required passwords and logins required to use university computer services and provide lifelong membership in the Bentley community.
- **Cost Savings:** by moving disaster recovery and backup operations to the Microsoft Azure Cloud, Bentley was able to retire one on campus data center and save \$200,000 on additional cooling equipment and backup generators. Bentley’s power costs for the building in which the data center was located were also reduced by 40%.
- **Teaching and Learning:** Bentley faculty uses the Cloud to host classroom labs that allow computing resources for Data Science and other classes to be scaled up or down as needed.

