

Information Technology Services

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Information Technology Services Goals for 2019-2020

Wesleyan 2020 Goals:

1. Energize Wesleyan’s distinctive educational experience
2. Enhance recognition of Wesleyan as an extraordinary institution
3. Work within a sustainable economic model while retaining core values

Major goals for the coming year are outlined below, together with their alignment to the three overarching goals detailed in the “Wesleyan 2020” framework for strategic planning (see above). Goals/objectives are grouped in the following three areas:

- Enterprise Risk Management
- Continuous Service Improvement
- Building Future Capabilities

Major Goals and Initiatives (narrative on following pages)

Enterprise Risk Management	Continuous Service Improvement	Building Future Capabilities
CTW Security Audit by 1/1/20	Expand/Merge Helpdesk by 10/1/19	Plan Technology for New Construction Projects by 5/1/20
IT Services → Cloud (ongoing)	Develop Service Metrics by 6/1/20	Develop cloud storage capabilities to enable the retirement of WesFiles by 12/31/19
Workforce Management System by 6/1/20	Expand Employee Training by 10/1/19	Implement Figshare (Science data publication) by 1/1/20
Campus Phone System (legacy --> VoIP) Plan by 6/1/20	Publish ITS Service Catalog by 6/30/20	Explore Cloud research storage (e.g. Astronomy) by TBD
Multifactor Authentication Pilot by 5/1/20	Expand Follow-Me Printing by 9/1/19	Data Analytics - Phase 3 (Finance) by 6/1/20
	Technology Purchasing w/ CTW OneSource by 12/1/19	Explore Human Capital Management in Cloud by 5/1/20
	Modernize HR Forms by 10/1/19	Explore Data Integration Solutions (IPaaS) by 5/1/20

Enterprise Risk Management

Enterprise Risk comes in many forms, with cybersecurity being perhaps the most obvious. University systems are relied upon 24x7x365, so robust infrastructure provided by cloud computing reduces our dependence on the campus data center and personnel. Business continuity is also enhanced by retiring old technology (e.g. analog phone systems), while flexible communication tools (e.g. videoconferencing) enable Wesleyans to be connected around the globe.

CTW Security Audit (Ties to goal 3): Connecticut College, Trinity College, and Wesleyan have hired an external security firm to conduct three independent audits in Fall 2019. Scope includes campus interviews to assess security awareness, policies, and procedures; vulnerability assessments of campus network and server infrastructure; and penetration testing of networks and applications.

Moving Selected IT Services to the Cloud (Ties to goals 1, 3): In an effort to reduce dependency on Wesleyan's data center to provide critical network services, we have adopted a "cloud first" approach, gradually migrating critical services from on-premises to the cloud (e.g. Amazon Web Services (AWS), Google, Microsoft). As of Summer 2019, we utilize Google for student and alumni email, Office365 for faculty and staff email, and both Google and Microsoft's cloud storage solutions for document sharing. The Wesleyan website is hosted on AWS, and we are in the process of moving network authentication services to Microsoft's Azure Cloud environment. Admissions and Advancement systems are also cloud hosted.

Workforce Management System (Ties to goals 1, 3): We are replacing multiple home-grown solutions for tracking time and labor for all exempt, non-exempt, and student workers. Current processes are inadequate for capturing and recording information required for compliance with state and federal regulations.

Campus Phone System (Legacy --> VOIP) (Ties to goal 3): Our campus analog phone system is 25+ years old. Modern "Voice Over Internet Protocol" (VOIP) systems provide phone, voicemail, instant messaging, videoconferencing, and even document sharing. Recent moves of staff in Finance and Administration and the Office of Advancement to 291 Main Street required that we implement a modern (VOIP) phone system, together with a temporary bridge to tie back to Wesleyan's analog system. We will prepare and submit a Request for Proposal to several vendors with the intention to bring our campus communications systems up to modern-day capabilities. The result will be improved functionality, redundancy, and reduced risk of hardware failure and lost productivity.

Multi-Factor Authentication (Ties to goals 1, 3): ITS routinely receives notifications about compromised Wesleyan user credentials discovered in data breaches that occur in non-Wesleyan systems. Phishing scams are sent to our users daily, and if successful can lead to stolen usernames and passwords. These credentials can then make it easier for hackers to compromise Wesleyan's network. The standard defense against these tactics is Multi-Factor Authentication (MFA) in which a second means of identification is required to access a given system. This would require a hacker to have both your username/password and your phone (for example) in order to successfully impersonate you on the network. ITS has been pilot testing this solution since June 2019 and will enable users to opt-in beginning in Fall 2019. Access to systems containing restricted data may require MFA beginning in Spring 2020.

Continuous Service Improvement

ITS is committed to providing Wesleyan faculty, staff, and students with facilities, technologies, and expertise that energize the distinctive educational experience. Regular in-person consultations, technology training classes, and communication of current projects via the monthly CIO Newsletter (see <https://www.wesleyan.edu/its/about/CIO-Newsletter.html>) contribute to a responsive support environment that activates the potential of the Wesleyan community.

Expand/Merge Helpdesk (Ties to goals 1, 3): Beginning in Fall 2019, ITS will offer HelpDesk phone service to faculty and staff. In addition to calling the Desktop Support Team during regular business hours, the highly trained student helpdesk team will be available to answer calls and log requests for service until 10pm most weekdays.

Develop Desktop Support Metrics (Ties to goals 1, 3): Striving for consistent quality service and decreased first response time and time to resolution, our new Director of User Services will develop Key Performance Indicators to drive and monitor the success of the expanded Helpdesk and the Desktop Support team.

Expand Employee Training/Outreach (Ties to goals 1, 2): In collaboration with Human Resources, ITS staff from User Services, Academic Technology and Administrative Systems will develop and promote technology training as needed to support faculty, staff, and students.

Publish ITS Service Catalog (Ties to goals 1, 3): To better inform the campus community about the services ITS delivers and how to take advantage of them, we will publish a service catalog, utilizing a module within ServiceNow. This will include a catalog of licensed software available to the community and eventually reduce the effort required to maintain the ITS web site.

Follow-Me Printing (Ties to goal 3): In collaboration with Finance, the User Services team will expand the use of shared, multi-function scanner/copier/printers across campus. This will reduce the number of individual printers, improving sustainability and saving money on supplies and maintenance. This effort follows successful pilot programs of these services in the libraries and ITS.

Technology Purchasing w/ CTW OneSource (Ties to goal 3): In collaboration with Purchasing, ITS will enable its major technology vendors in the new OneSource purchasing portal. This will streamline the purchasing process, eliminate the need for multiple redundant approvals, encumber funds upon purchase, and ensure the best pricing through group contracts.

Modernize HR Forms (Ties to goals 1, 3): Completing many required HR forms requires downloading, printing, and filling them out by hand, followed by either sending through campus mail or scanning and emailing the completed form to another party who may have to repeat the process. ITS is improving this tedious workflow by replicating most of the common forms as self-serve applications in both the PeopleSoft Human Resources System and WesPortal. This will enable online form completion and automatic routing to approvers, improving efficiency and sustainability.

Building Future Capabilities

Information Technology Services is always looking forward, preparing now for the University's needs five to ten years from now. This can mean retiring old systems (reducing support costs) while exploring new capabilities with cloud storage and Software as a Service (SaaS). As we plan for new facilities to support the academic enterprise, we are designing the technology infrastructure to support the next generation of Wesleyan faculty, staff, and students.

Plan Technology for New Construction Projects (Ties to goals 1,2, 3): As Wesleyan begins an era of new building construction and renovation, ITS will engage with all major projects to plan, install, and maintain the technology needed to support the academic program.

Migrate Wesfiles --> Cloud (Ties to goals 1, 3): Continuing a project that is well underway, ITS is working with academic and administrative departments, faculty, and staff to transition from Wesfiles (which runs on software no longer supported by the industry) to modern solutions, including Office365, Google Docs, and the like.

Implement Figshare (science data publication) (Ties to goals 1,2, 3): Federally funded research grants require data management plans and platforms to ensure access to the research beyond the life of the grant. Wesleyan faculty also require a platform in which to store copies of their scholarly work. Following an extensive evaluation of available solutions by ITS staff, librarians, and faculty, Figshare was chosen and will be implemented in Fall 2019.

Explore AWS, Google Cloud and Microsoft Azure Cloud for research storage (e.g. Astronomy) (Ties to goals 1,2, 3): In recent years, data storage needs in many academic disciplines have grown to exceed our ability to provide local storage, and the pace of that growth is accelerating. We are partnering with faculty in the natural sciences to explore cloud research storage as a solution.

Data Analytics - Phase 3 (Finance) (Ties to goal 3): Following the delivery in Spring 2018, of Academic Data dashboards to Provosts, Deans, and Faculty Chairs, ITS delivered Employee Data dashboards (demographics, duration of employment, turnover rate, etc.) to the Office of Equity and Inclusion in Spring 2019. Implementation of the last module (Finance) will begin in FY2020. Ultimately, these data sets, individually and combined, will be used to support data-driven decision making across the university.

Explore Human Capital Management in the Cloud (Ties to goals 1, 3): Since 1998, we have run Oracle's PeopleSoft software from Wesleyan's own data center (on-premise) for our enterprise systems which hold all university data including admissions statistics, student records, financial ledgers, payroll information, etc. These systems are known as Enterprise, Resource, and Planning (ERP) systems and Wesleyan runs three separate, though integrated, PeopleSoft systems: Human Capital Management (HR/Payroll & Benefits), Student, and Finance.

Today, the leaders in the ERP arena are moving to cloud-based Software as a Service (SaaS) systems that provide flexible software solutions which allow institutions to focus on and adopt streamlined, proven (widely-accepted) processes, improve data access, and avoid the overhead of server maintenance, in-house managed application upgrades, software customizations – all while simplifying disaster recovery planning. Wesleyan has already begun this migration to SaaS cloud-based systems with Admission's Slate system and Advancement's Affinaquest system. As we consider moving our PeopleSoft ERP systems to a cloud-hosted SaaS environment, Human Capital Management is the likely first piece to consider -- with Workday and Oracle's cloud product being the leading contenders.

Explore Data Integration Solutions (IPaaS) (Ties to goals 1, 3): As mentioned above, ERP Systems are migrating from on-premise systems to cloud-based SaaS systems. In addition, the needs (and aspirations) of Wesleyan's offices cannot always be met with an ERP based solution – they require a more specialized "boutique" solution built with an inherent understanding of the required processes and interactions. A few examples of these specialized systems are: Slate, PowerFaid, and Via TRM used in the Admission, Financial Aid and Study Abroad offices respectively. The ERP migration and the need for specialized systems is common across Higher Ed and has created the need for new easy, reliable integration tools called Integration Platform as a Service (IPaaS). Consequently, we are investigating IPaaS solutions and developing the required expertise in order to support future development.