WAYNE STATE UNIVERSITY

Computing & Information Technology

Strategic Plan

2016-2021

Computing & Information Technology (C&IT) is Wayne State University's central IT organization, which reports to the Provost as a unit within the Division of Academic Affairs. As a key academic and administrative support unit, C&IT is tightly integrated with the university's strategic directions.

Wayne State recently released an updated university-wide strategic plan, Distinctively Wayne State, and C&IT has aligned itself with the plan's core values and strategic focus areas:

Values

Collaboration
Integrity
Innovation
Excellence
Diversity & Inclusion

Strategic Focus Areas

Student Success
Teaching Excellence
Research
Diversity& Inclusion
Entrepreneurship
Community Engagement
Financial Sustainability
& Operational Excellence

Mission Statement

C&IT provides services and resources that support and enhance Wayne State's teaching, learning, research, and administrative activities. C&ITs primary goal is to provide technology services that enable the success of our students, faculty. C&IT strives to provide excellent customer service, to respond to the changing needs of the university community, and to make it easy and convenient for everyone to use technology at Wayne State.

C&IT management empowers employees, treats them with respect, and encourages innovation and open communication. C&IT continually seeks out and tries new ideas and recognizes employees for their efforts. The division also ensures that its management team not only has the technical qualifications for their roles, but also has excellent skills for collaboration, management and motivation.

Vision

- Be recognized among our peers for providing the best technology experience to students, faculty and staff.
- Build, enhance and maintain strong campus partnerships.
- Work together to continuously improve WSU.
- Support a collaborative, innovative and creative work culture.

Strategic Goals

- Transactional excellence resulting in reliable and responsive services.
- Operational efficiency emanating from quality data and data access.
- Student success.
- Robust cyber infrastructure and research support services.
- Secure computing environment and practices.

Strategic Planning Environment

As we look to the future, we are faced with significant internal and external challenges, and a complex set of themes:

- The public demands higher levels of institutional performance and outcomes, including four year degree attainment and parity in graduation rates across all demographics — yet state budget support is not keeping pace with inflation, and constituents' tolerance for greater fees is diminished — forcing the university and IT to do much more with less.
- University leaders expect and require that data be available in real time, using state-of-the-art analytical tools that are easy to learn and flexible.
- University financial stability is intertwined with enrollment. In order to ensure financial success, the university must grow its enrollment and increase efficiency simultaneously.
- An improved regional economy has resulted in a very competitive hiring market for IT employees.
- Rapidly-advancing preferred cloud and software-as-a-service solutions demand local expertise in stitching everything together seamlessly.
- Continued growth in Wi-Fi bandwidth demands – with no signs of abatement.
- The data center's electrical and HVAC capacity cannot be expanded; a new facility is needed to accommodate growing demand for highly secure computer room floor space.

Strategic Focus Areas

1. **Student Success**
   a. **WSU Goals**
      i. Cultivate a culture of student success.
      ii. Create clear academic pathways that support progressive student success.
      iii. Increase retention, progress to degree, and graduation rates for all students.
      iv. Enhance academic and career training for all graduate students.
   b. **C&IT Actions**
      i. Become an Apple Authorized Service Provider and provide a local Apple repair service for both university and personally owned equipment.
      ii. Implement a comprehensive enterprise-wide badge/micro-credential platform in coordination with the Office of the Provost.
      iii. Develop attendance system for Peer Assisted Learning programs.
      iv. Implement Educational Advisory Board (EAB) Student Success Initiative.
      v. Develop LMS business intelligence foundation.
      vi. Migrate Data Warehouse and Blackboard databases to VM environment from aging servers and storage.
      vii. Develop a system for delivering up-to-date and secure operating system images to technical partners on campus.
      viii. Fully Implement Slate for Undergraduate and Graduate admissions.
      ix. Increase faculty adoption of the learning management system (LMS), Canvas.
      x. Implement a comprehensive in-person and instructor led IT training program to fully leverage institutional investments in technology.
      xi. Implement next generation of lecture capture technology.
      xii. Implement Wayne Advantage cross-institutional credit management and financial aid system.
      xiii. Develop and deploy mobile app for students' unique journeys through university acceptance to graduation.
      xiv. Discover and implement new ways to promote adoption of Open Educational Resources.
      xv. Implement Predictive Analytics for Students in STARS 2.0.
      xvi. Expand the same security and privacy initiatives that are available for employees to students.
      xvii. Wireless internet network replacement project.
      xviii. Expand Student Success Call Center features to deliver improved, faster service.
      xix. Quadruple the size of the campus network backbone to allow for VDI classrooms and increased data sharing across campus

2. **Teaching Excellence**
   a. **WSU Goals**
      i. Enhance a culture that values teaching excellence.
      ii. Identify and encourage the adoption of best teaching practices and the improved delivery of learning outcomes campus-wide through the use of data.
      iii. Improve the quality of faculty-student relationships within the classroom and beyond.
      iv. Improve graduate student training and mentoring.
   b. **C&IT Actions**
      i. Learning management system review, selection and implementation.
      ii. Deploy new Student Evaluation of Teaching (SET) solution for online courses.

     iii. Enhance technology training opportunities for teaching faculty and graduate teaching assistants to better utilize university collaborative technology (Office 365).

3. Research
a. WSU Goals
     i. Nurture and expand the research and discovery mission.
     ii. Develop the infrastructure and processes necessary to support research, knowledge application and broad programmatic initiatives.
     iii. Grow research-based revenue.
b. C&IT Actions
     i. Provide MS/SQL database as a service; provide ID and disk space within a managed backed-up environment.
     ii. Implement Research Administration Application and the enhanced Researcher's Dashboard to interface with this application.
     iii. Expand usability of research computing by implementing GUI portal and creating virtual desktops for faculty.
     iv. Expand Science DMZ to more Wayne State research locations including Scott Hall and iBio.
     v. Increase usage of research computing by expanding documentation and providing one-on-one consulting.
     vi. Assist the College of Engineering to test 5G technology and update support procedures/documentation for campus.
     vii. Increase interaction between information security and research.
     viii. Create self-service request tool and process for grid services to enhance access for researchers.
     ix. Create a HIPAA aligned environment for downloading protected health care data from multiple sources, de-identifying, it and making it available for aggregation and controlled access by researchers.
     x. Develop an acceptable budget for research IT sustainability.
     xi. Partner with researchers to obtain grants to fund research IT.

4. Diversity & Inclusion
a. WSU Goals
     i. Leverage our diversity to create a diverse and inclusive campus where every group and individual feels valued.
b. C&IT Actions
     i. Support the Blackstone Hack-a-thon and Hacker Nights programs.
     ii. Automate faculty search and hiring process for Office of Equal Opportunity.

5. Entrepreneurship
a. WSU Goals
     i. Create a thriving culture where new ideas and new ventures are consistently developed and rewarded.
b. C&IT Action
     i. Support the Blackstone Hack-a-thon and Hacker Nights programs.

6. Financial Sustainability & Operational Excellence
a. WSU Goals
     i. Increase enrollment.
     ii. Achieve operational excellence in all processes.
     iii. Ensure environmental sustainability.

b. C&IT Actions

i. Develop a self-service tool which allows data consumers to find metadata on reports and data definitions.

ii. Separate employee and student email.

iii. Develop an interface that enables the upload of the personal data into Banner/Identity Management Application by Wayne State affiliated organizations.

iv. Implement Banner 9 platform for all Banner delivered modules.

v. Implement well-managed Mac program.

vi. Implement Microsoft DirectAccess for secure inbound and outbound communications to and from clients outside of the university network.

vii. Implement infrastructure changes to support Responsibility Center Management for Budgeting.

viii. Deploy PowerBI on Campus enterprise-wide.

ix. Develop Universal Data Request Workflow (single workflow on campus for anyone to request data).

x. Implement comprehensive IT renovations for alumni/advancement.

xi. Plan, develop and procure funding to replace the existing Data Center with a new annex adjacent to the existing C&IT Building.

xii. Evaluate Skype for Business technologies to improve collaboration from common meeting spaces.

xiii. Implement multi-factor authentication program to critical assets.

xiv. Develop recommended secure device configurations for most commonly used devices on campus.

xv. Implement secure standard desktops for system administrators available remotely.

xvi. Develop an Enterprise Storage replacement and upgrade roadmap.

xvii. Implement a service request and delivery system for IaaS service offerings (VM provisioning).

xviii. Expand the Enterprise FileShare hosting capabilities to support campus needs.

xix. Create self-service Guest AccessID process.

xx. Integrate telecommunications billing into existing purchasing process.

xxi. Collaborate to establish a standard way for WSU service centers to solicit feedback and measure customer satisfaction.

xxii. Develop service offerings related to desktop security and desktop management. Deliver tools that allow independent schools and colleges to utilize desktop management that includes App Locker, SCCM, patching, encryption and imaging.

xxiii. Develop a strategy for better utilization and/or consolidation of virtual resources.

xxiv. Provide instant access to systems for late hires.

xxv. Implement DUO two-factor authentication program.

xxvi. Replace SMARTI functionality.

xxvii. Replace all Oracle reports with other technology.

xxviii. Implement version control for all key application development.

xxix. Develop an automated testing platform with the inclusion of customers in the testing process.

xxx. Modify Policies and Procedures for procurement of enterprise applications to safeguard the institution against privacy and security concerns related to cloud services.

xxxi. Deploy a comprehensive, in-person and instructor led IT training program to fully leverage institutional investments in technology.

xxxii. Develop a new Data Warehouse and renovate ODS to support Data Lakes and Data Ponds.

xxxiii. Implement comprehensive IT renovations for alumni/advancement.

xxxiv. Re-engineer Student Census.

    xxxv. Implement two factor authentication for students.

    xxxvi. Further develop data cookbook (data dictionary).

    xxxvii. Implement infrastructure changes to support Responsibility Center Management for Budgeting.

    xxxviii. Make enterprise projects more transparent to customers.

    xxxix. Deploy Ellucian Ethos.

    xl. Create a coordinated and deliberate internal documentation expansion.

    xli. Develop a student internship program.

    xlii. Implement Help Desk 4 All customer service training for all employees.

    xliii. Provide common platform and processes for enterprise service management.

    xliv. Develop a comprehensive training and certification program for Enterprise Systems.

    xlv. Implement Banner 9 platform for all Banner delivered modules.

    xlvi. Provide ability to centrally onboard and offboard access to SaaS (cloud) based applications.

    xlvii. Create operational efficiencies by consolidating the number of firewall vendors used on campus.

    xlviii. Develop recommended secure device configurations for the most commonly used devices on campus.

    xlix. Plan, develop, and procure funding to transform the old data center space into a new training center to replace the training trailers located behind the C&IT building.

    l. Test and implement VoIP ACD.

    li. Get Apple Certified Macintosh Technician (ACMT) certification for all DeskTech Support and Help Desk staff.

    lii. Automate Edge network operations to provide more efficient service to customers.

    liii. Banner Reimplementation.

    liv. Create and maintain a C&IT project portfolio database.

7. Community Engagement

a. WSU Goals

    i. Continue to enhance our leadership in the revitalization of Detroit.

    ii. Develop innovative, meaningful, sustainable, and mutually beneficial community-based service-learning experiences.

    iii. Maintain and enhance the university's institutional reputation of high-quality community engagement.

8. C&IT Action

    i. Implement the C&IT Campus Warriors volunteer program, encouraging employees to volunteer at campus events that directly involve students or WSU community-based initiatives.

    ii. Support WSUPD in creating a new team to perform proactive video patrolling.

    iii. Increase participation from the entire security team at campus events for faculty, students and community members to promote information security and privacy awareness.

    iv. Create a shared secure wireless network in Midtown Detroit for major employers.