



# Strategic Plan

OVPUE IT

March 2016

## OVPUE IT STRATEGIC PLAN

---

OVPUE IT, hereinafter referred to as IT, is an extension of each unit that reports up to the Office of the Vice Provost for Undergraduate Education. Units include Adult Student Resources (ASR), Advance College Project (ACP), Advocates for Community Engagement (ACEs), Bloomington Assessment and Research (BAR), Bloomington Evaluation Services and Testing (BEST), Career Development Center (CDC), Center for Innovative Teaching and Learning (CITL), Engaged Learning, Explore Majors, Health Professions and Prelaw Center (HPPLC), Hutton Honors College, Indiana University High School (IUHS), Intensive Freshman Seminars (IFS), Leadership Bloomington-Monroe County (LBMC), Lifelong Learning, On-Campus Precollege Enrollment-Nondegree (OPEN), Student Academic Centers (SAC), University Division (UD), Wells Scholars Program, and Writing Tutorial Services (WTS).

IT provides comprehensive support in the areas of Application Services, Web Communications, User Support and Data Services. Through collaboration with unit staff, IT supports OVPUE operations, designs and develops new software tools, builds web presences, and harnesses the power of data for decision support and for responsiveness to the needs of undergraduate students, adult learners, pre-college students and faculty at IU Bloomington.

### OUR MISSION

---

The mission of IT is to provide comprehensive and responsive support, technological expertise, and ingenuity for OVPUE operations, through close collaboration with units. IT seeks to support each program in realizing its goals, and those of OVPUE and the Institution.

### STRATEGIC PLAN

---

Over the next two years IT will implement the OVPUE IT Strategic Plan (OITSP1), hereinafter referred to as the Plan. Action items of the Plan are categorized under the following recommendations.

---

#### RECOMMENDATION 1: IT GOVERNANCE

---

IT will adopt the OVPUE IT Governance Framework (OITGF1), hereinafter referred to as the Governance Framework, to optimize value of investment in information technology by aligning IT strategy with institutional objectives. Strategic objectives in this context include goals established at Institutional, Campus, Organizational and Unit level. Examples include the Bicentennial Strategic Plan for Indiana University and Bloomington Campuses' implementation of it; the goals of the Office of the Vice Provost for Undergraduate Education; Program Unit strategic objectives, and the Indiana University Strategic Plan for Information Technology (ITSP2/Empowering People).

### 1.1 ACCOUNTABILITY

---

Action 1.1: IT will be transparent in its operations. Details on accountability and how decisions will be made are available in the Governance Framework, OITGF1.

### 1.2 WORK PRIORITIZATION

---

Action 1.2: Prioritization of work will be intentionally aligned with strategic objectives. Details are made are available in OITGF1.

### 1.3 OPERATIONAL EFFICIENCY

---

#### 1.3.1 ENTERPRISE AND VENDED SOLUTIONS (DIVESTING)

Action 1.3.1: In line with Indiana University's Cyber Risk Mitigation Responsibilities (IT-28) Policy, IT will first pursue leveraging existing Enterprise Services, where available.

In the absence of Enterprise Services that adequately accommodate the requirements, IT will analyze the build-buy-or-partner options for a solution, in adherence with OITGF1.

#### 1.3.2 AGILE METHODOLOGY

Action 1.3.2: Where appropriate, IT will employ agile methodologies for project management. For software development, this will entail regular releases of incremental updates to applications and application-like services that are tested, documented, version controlled, and reviewed by stakeholders.

#### 1.3.3 REUSABILITY AND MULTI-PURPOSE DESIGN

Action 1.3.3: Where appropriate, IT will design and develop services to be reusable. New development projects will be evaluated to determine whether opportunities exist to produce tools that are useful to multiple OVPUE units.

Development of reusable, adaptive services amounts to an investment in future efficiencies for IT; allowing for faster rollout of tools, websites, and applications, and allowing time for work on new IT problems and projects.

#### 1.3.4 AUTOMATION OF SERVICES AND TASKS

Action 1.3.4: IT will increase efficiencies at quality control and managing assets through the adoption of automated solutions for the execution of regular administrative, code testing, and asset management tasks. Such efficiencies will include enhanced capabilities at remotely managing, supporting, and inventorying devices across the responsibility center; code test automation; and refinement of DevOps (development and operations) solutions.

#### 1.3.5 PROCESS EVALUATION AND IMPROVEMENT

Action 1.3.5: IT will regularly evaluate processes and procedures in place to seek out efficiencies that can be leveraged through continuous improvement.

---

## RECOMMENDATION 2: IT SECURITY AND PRIVACY

---

### 2.1 INFORMATION SECURITY AND PRIVACY

---

Action 2.1: IT will follow best practices in ensuring information security and privacy, and enforce all related Institutional policies, including University IT Policy 28 and University IT Policy 12. Measures at ensuring security and privacy will include, but not be limited to application security; server security; end-point device security; security of data at rest; security of data in transit; access control; and security-related user practices.

IT will continue to scan all devices for software updates and vulnerabilities, and systematically review system logs for auditing of possible security vulnerabilities.

### 2.2 SECURITY AWARENESS

---

Action 2.2: IT will promote awareness of security-related issues, as communicated through the University's Information Security Office, IT Community Partnerships, and industry security notices and bulletins. IT will engage in an open and ongoing dialog with OVPUE staff about ways to maintain privacy and security of work and personal data.

### 2.3 INVESTING IN SECURITY TRAINING

---

Action 2.3: IT personnel will regularly undergo training on security matters, including sessions on systems security, web application security and data protection policies.

---

## 2.4 DATA CLASSIFICATION, STORAGE, RETENTION AND RISK MITIGATION

---

Action 2.4: All data managed through OVPUE systems will be classified and handled in line with OITGF1, and the levels defined in the latest institutional policy on data classification ([Policy DM01: Management of Institutional Data](#)). For risk mitigation, IT will provision and or recommend appropriate locations for storage of data based on classification.

IT will conduct periodic scans of managed systems for sensitive data and recommend appropriate action for data stored in unsanctioned locations. Strong recommendations will be made for the removal of sensitive data that has been retained beyond business use.

---

## 2.5 BUSINESS CONTINUITY PLANNING

---

Action 2.: Business continuity, in the event of catastrophic service outages, will be established following the stipulations of the OVPUE Business Continuity Plan, available in the [IU Ready system](#).

---

# RECOMMENDATION 3: IT INFRASTRUCTURE

---

---

## 3.1 HARDWARE LIFECYCLE AND REPLACEMENTS

---

Action 3.1: OPVUE will continue with the machine lifecycle replacement program. Regular reviews of the specifications for the standard machine replacement models will occur, to promote use of quality, cost effective technology that leverages developments in industry.

A process to identify resources-intensive operations and tasks across OVPUE, will be used to establish where special accommodations in replacement equipment are required (e.g., laptops for mobile staff, higher computational resource needs, accessories, etc.). Specifications for higher-resource replacement computers will also be maintained to facilitate long-term financial planning throughout the IT lifecycle. The established policy for approval of acquisitions of such hardware will remain in place.

The OVPUE IT website will outline lifecycle procedures, hardware options, and unit lifecycle statuses.

---

## 3.2: COMMUNICATION AND COLLABORATION TECHNOLOGIES

---

Action 3.2: IT will continue to support telephony services in collaboration with the IT Communications Office. IT will promote the use of collaboration technologies and will advocate for the availability of basic videoconferencing equipment for all staff of OVPUE from their workspaces.

IT will identify standard collaboration technologies for use across the RC and encourage and facilitate their use by OVPUE staff.

IT will also advocate for the establishment of collaboration workspaces across OVPUE that support videoconferencing.

### 3.3 SERVER INFRASTRUCTURE

---

Action 3.3: IT will continuously evaluate OVPUE's server infrastructure and optimize it for changing needs. Changes include the need for more resources, changes in technology and requirements, security enhancements, and revisions in data classifications.

### 3.4 LEVERAGING EXTERNAL PARTNERSHIPS AND IU ENTERPRISE SYSTEMS

---

Action 3.4: Wherever possible, services and resources already available through IU partnerships, will be used or adapted to the needs of units.

IT will work with units to identify valuable uses for enterprise-supported tools like Box, Canvas, and Confluence in managing work and connecting with external constituents (e.g., students, faculty, staff, and the community).

---

## RECOMMENDATION 4: WEB COMMUNICATIONS

---

### 4.1 DEPARTMENTAL WEBSITE STANDARDIZATION

---

Action 4.1: OVPUE unit websites will each be tailored to the requirements of the relevant stakeholders. Websites will factor in the intended goals that units have for their sites, and those of audiences that consume OVPUE services.

While the sites will retain a distinct appeal to each intended audience, they will have a common brand and signature that identifies them with OVPUE.

### 4.2 WEBSITE AND APPLICATION TEMPLATES

---

Action 4.2: Websites will be built using the OVPUE website template(s). OVPUE website and application templates will be updated on a regular basis to accommodate new requirements

for websites and applications. As the templates evolve to accommodate new requirements, template versioning will be employed to identify and track template instances in use.

---

#### 4.3 CONTENT OWNERSHIP

---

Action 4.3: New unit websites developed by IT will be delivered in a form that allows the unit to update and modify many aspects of the site structure and content. Training on this functionality will be given before the publication of each new website.

---

#### 4.4 ACCESSIBILITY

---

Action 4.4: All OVPUE websites will be developed or reengineered to meet standards for web accessibility, including semantic HTML, screen reader accessibility, and the recommendations of WCAG 2.0/ISO/IEC 40500:2012.

Where possible, IT will follow the mobile web accessibility recommendations of the World Wide Web Consortium. IT will also leverage university resources for web accessibility where possible.

---

#### 4.5 WEB MULTIMEDIA COMMUNICATION

---

Action 4.5: In collaboration with OVPUE Public Relations and Marketing, IT will provide guidelines for web multimedia communication and help build and maintain the web infrastructure supporting multimedia communication. IT Support Services will manage web multimedia service accounts and access centrally.

---

#### 4.6 WEB ANALYTICS

---

Action 4.6: IT will provide recommendations for leveraging web analytics for the evaluation of campaigns and outreach activities pursuant of business goals. All new websites and applications will be configured to collect usage data for reports and analytics. A link to the privacy notice on collection, usage and disclosure of non-personally identifiable information will be accessible from each of the sites.

---

### RECOMMENDATION 5: HUMAN CENTERED SUPPORT

---

---

#### 5.1 INVESTMENTS IN LONG-TERM EFFICIENCIES

---

Action 5.1: IT will invest in the use of tools that facilitate efficiencies in providing end user support, including but not limited to tools that facilitate remote assistance, endpoint device management, and deployment of software updates and machine or software inventorying.

## 5.2 HUMAN-CENTERED SUPPORT

---

Action 5.2: IT will endeavor to provide personalized quality customer service at all times.

## 5.3 COMMUNICATION WITH OVPUE STAFF

---

Action 5.3: IT will regularly communicate technology-related developments, global and local prevalent issues, opportunities, and training. A culture of welcoming feedback will be promoted and fostered.

## 5.4 TRAINING

---

Action 5.4: IT will regularly communicate about training opportunities available through UITS and specialized training in software, general technology, and best practices. IT will take a proactive role in identifying opportunities where training may benefit units.

---

## RECOMMENDATION 6: DATA AND DECISION SUPPORT

---

### 6.1 OPERATIONS DATA AND REPORTING

---

Action 6.1: IT will empower unit staff to retrieve and analyze data related to regular business needs without requiring individual requests to be made for data from IT. The Data Services Lead will manage access to these data and assist with interpretations of the resources, as well as identification of changes in business needs and their impact on data provisioning.

### 6.2 DECISION SUPPORT

---

Action 6.2: Role-based dashboards will be provisioned for the presentation of data visualizations of data for decision-making purposes. All roles requiring data on a regular basis will be provisioned access to the service. The Data Services Lead will manage access to these dashboards.

### 6.3 INNOVATING WITH DATA

---

Action 6.3: IT will seek out opportunities to leverage predictive models and analysis techniques in support of decision-making.

### 6.4 DATA WAREHOUSING

---

Action 6.4: IT will utilize extract-transform-load (ETL) processes to archive relevant local data, of broad appeal, in the IU Data Warehouse.



## 6.5 COLLABORATION WITH BLOOMINGTON ASSESSMENT AND RESEARCH

---

Action 6.5: IT will pursue collaborations with Bloomington Assessment and Research (BAR) on data, reporting, decision support, and information visualization projects in the service of OVPUE and unit business needs.

---

## RECOMMENDATION 7: APPLICATIONS

---

### 7.1 INNOVATION AND THE CUTTING-EDGE

---

Action 7.1: IT will champion OVPUE efforts with innovations through application software. IT will support the use of cutting-edge developments in software.

### 7.2 COLLABORATION

---

Action 7.2: IT will place a high value on customer collaboration. Interactions with stakeholders on application projects will be promoted through methodologies that facilitate regular client feedback.

The application services team will collaborate with the web communications team to refine elements of design and usability.

The Application Services lead will work closely with the interaction designer, the web communications team, and with OVPUE units to identify needs and manage development projects - allowing developers to focus on development.

### 7.3 DEVOPS PRACTICES

---

Action 7.3: The applications team will continue to refine and align development and operations practices with industry best practices in efficient code development, versioning, testing and deployment.

By using development frameworks and enterprise-supported development software, application development will become more efficient allowing more time for designing creative solutions for OVPUE units.

### 7.4 APPLICATION SUPPORT

---

Action 7.4: The applications team will continue to divest administrative support of completed development projects to the Support Services team. Older applications that are costly in maintenance resources will be rebuilt to reduce the costs.

---

## RECOMMENDATION 8: INVESTING IN PEOPLE

---

### 8.1 DEVELOPING EXPERTISE

---

Action 8.1: Through team-coding; collaboration in design and implementation; intentional and self-initiated training; internal and external conferences; and shared responsibility, IT staff will acquire knowledge in many different domains. Knowledge of how to execute any given IT task will be shared among several team members.

### 8.2 CULTURE OF CURIOSITY

---

Action 8.2: IT will invest time in exploring new opportunities, learning new skills, sharing knowledge, and building and implementing new solutions for problems within OVPUE.

### 8.3 VALUING EXPERTISE

---

Action 8.3: IT will respect and encourage contributions from all team members in determining how best to solve problems and implement new tools, ideas, and approaches in support of OVPUE's units and staff.