

# **Gettysburg College Information Technology Strategic Plan Preparing IT to Support a 21<sup>st</sup> Century Liberal Arts Institution**

## **Introduction to the Strategic Plan**

For the past several years, Gettysburg College's Information Technology division found itself reacting to the forces of an economic downturn and a major relocation of the division from five separate locations to one central area on the edge of campus. Along with these local conditions, globally the information technology community in higher education is experiencing a significant transformation due to consumer electronics, cloud based services, and the explosion of mobile devices.

With tight budgets, rapidly changing technologies, and the increasing expectations for technology to enhance higher education, college and university technology organizations must be acutely aware of their current operations and customer needs along with an insight into the future technologies impacting business units across the campus.

To address the current and future technology conditions at Gettysburg College, the IT division embarked on a process of assessment and planning. This strategic plan first sets the stage by outlining IT's governing principles along with IT's current context. The second major section outlines IT's strategic themes, initiatives, and the process of assessment.

## **Governing Principles: IT's Context**

On a daily basis, IT must balance outstanding customer service with pursuing the strategic goals of the College and those related directly to the IT division. In striving for a healthy balance between operational and strategic efforts, IT relies on its Mission, Standards of Excellence, Resource Allocation Strategy, Advisory Groups, Key Indicators, and up-to-date knowledge of Future Trends.

### **Mission**

The mission of the Information Technology division is to support the growth of Gettysburg College and its students, faculty, administrators, and staff toward their attainment of personal and institutional goals by:

- Partnering, collaborating, and consulting with all college divisions.
- Being a leader on the assessment of Value On Investment (VOI).
- Providing and supporting the use of technology tools.
- Researching and developing new technologies.

- Using strategic thought to evaluate innovation.
- Identifying efficiencies through innovation.
- Providing an institutional-wide lens on technology use.
- Providing technical leadership in strategic technology directions.
- Being a leader in responsible computing.
- Support and manage the institution's technology resource pool.
- Educating the institution about innovation and technology.
- Facilitating the joint journey from vision to reality of a solution.
- Enabling campus constituents to be technology champions.

## **Standards of Excellence**

- You should listen twice as much as you speak.
- You only have a solution when the user thinks there is a solution. A solution is based upon what you can do and not upon what you cannot do.
- You should follow through, then follow up on all that you do.
- You should answer all questions honestly keeping an Information Technology divisional perspective and should not omit information if there is a need for the client to know.
- You are both a technical expert and interpersonal relationship expert. You are a true wizard at Gettysburg College when you do both well.
- You are 1/35 of the Information Technology division, but each day you can make 35 people look good.

## **Resource Allocation Strategies**

- Identify, standardize, and reduce cost of commodities while maintaining the high quality educational and work experiences at Gettysburg College
- Invest in infrastructure
- Identify and invest in innovative/strategic initiatives

## **Advisory and Support Groups**

At its core, the Information Technology division is a service organization. IT must constantly receive feedback from campus members. IT has seven feedback loops with the campus through surveys and campus wide committees.

- Education Technology Committee (ETC)  
ETC addresses issues related to educational technological needs. It investigates, advises, and assumes a sounding board with respect to directions devised to enhance teaching and learning with technology.
- Student Technology Advisory Council (STAC)  
STAC brings forth and advises IT on student related technology issues and needs.

- Divisional / Director Meetings
  - IT AVP meets once per month to review current status and future requirements for Data Systems related projects.
- Data Systems Support Teams
  - Core Delivered PeopleSoft Team – meet once per month
    - Individuals supporting the PeopleSoft Core delivered applications including Student Records, Admissions, Financial Aid, Human Capital Management, Financials, College Life, Athletics, Student Financials, and Provost Office.
  - Custom Developed PeopleSoft Team – meet once per semester.
    - Individuals supporting custom developed PeopleSoft applications including Internships, Off-Campus Studies, Celebration, Sunderman Conservatory Recruitment and Scheduling, First Year Dashboard, Institutional Analysis and Committee on Learning Assessment (COLA), Events Planning and Coordinating Committee (EPACC), Faculty Governance Voting Tool, Health Center, and Center for Athletics.
  - Web, Campus Community, Cloud-Based Application Team – meet twice per semester
    - Individuals supporting the college website, the campus community, and cloud-based applications including College Life, Learning Management System (Moodle), Development, Alumni and Parent Relations, Library, Web Communications, College Bookstore, Dining Services, Facilities and Transportation, e-Commerce Services (Cashnet), Procurement Services (UniMarket and JP Morgan), Advancement Systems.
- Helpdesk Surveys
  - After each helpdesk ticket is completed, the end user receives a survey to comment on her satisfaction with the resolution.

## **Key Indicators**

Any information technology division needs financial and human resources to provide quality customer service. IT will be relying on three main KIs groups to assist in assessing the Information Technology division.

- Service Indicators: Participate in the multi-institutional customer satisfaction survey, Measuring Information Service Outcomes (MISO), <http://www.misosurvey.org>
- Financial Indicators: Information Technology budget ratios.
- Personnel Indicators: Personnel ratios.

Other data that IT will be monitoring include density of systems, amount of deferred maintenance, maintenance allocations, and resources available for research and development.

## **Future Trends**

The Information Technology division is committed to staying abreast of current and future trends. Balancing innovation, adoption, and sustainability are constant issues to address when investigating new trends. To stay current, members of the Information Technology division subscribe to trade magazines, attend conferences, participate in training and workshops, present college developed best practices, and visit other schools.

# **Analysis and Strategic Themes and Initiatives**

The strategic planning process started with a clear set of questions or points of investigations. The remainder of this document provides more background, context, and philosophies related to IT's strategic plan.

## **Essential Questions**

These questions have guided the reviews and campus conversations related to the strategic planning for the IT division.

### **Instructional Technology and Training**

- What skill sets and instructional support will be needed by IT members, faculty, and students for blended learning? What specific training and workshops are needed to enable faculty to create online materials with associated assessments?

### **Infrastructure and Technology Devices**

- What strategies and investments should IT be considering for infrastructure and devices to leverage 21<sup>st</sup> century technologies?

### **Enterprise Applications**

#### **Data**

- What best practices are available that Gettysburg College should investigate in the fields of business intelligence and data analytics?

#### **Mobility**

- What enterprise information does and will the campus need on a device?
- How can IT address those needs: Home-grown apps, Vendor user groups, Other methods?

### **Funding**

- What open source technologies, cloud-based technologies, strategic partnerships will provide opportunities for budget relief?
- What messages should IT continue to share with the campus around IT budgeting?

### **Current Information Services**

- Are there unrealized efficiencies that are available with IT's consolidation in the West Building?
- Have there been unintended consequences from the consolidation that need to be addressed?

## Assessments and Reviews

Starting in 2012 and continuing annually, IT assesses and audits service and risk using several different methods. Our intention is for the current and future state of IT to be evaluated as a whole and as a continuum opposed to only a snapshot in time. The blended set of specific initiatives resulting from the reviews follow in the Initiatives Section. The assessments are:

1. Measuring Information Services Outcomes (MISO) survey (Spring 2012, Spring 2015, Spring 2018)  
The MISO Survey is a web-based quantitative survey designed to measure the effectiveness of higher education IT and library services for faculty, students, and staff. The Survey was created through the joint effort of several institutions that wanted quantitative information on how our services are perceived.
2. Classroom and Event Support Review (October 2012)  
This report highlighted a new phase that should involve plans to increase the number of faculty who use technology in the classroom and to introduce the use of technology to faculty who are less technologically sophisticated. The next phase should also address the approach to be used in classroom design and maintenance, which includes seamlessly incorporating the technology into the classroom design, to enhance faculty teaching and improve student learning by creating a unique educational experience for Gettysburg College's students.
3. Wireless Technical Review (Fall 2012)  
In this review, IT contracted with an outside to review the technical configuration of the campus wireless network. Minor adjustments were performed following the review.
4. IT Divisional Review (February 2013)  
This report describes the current state of IT at Gettysburg, with emphasis on the next three to five years.
5. Instructional Technology and Training Departmental Review (April 2013)  
In this review, IT worked with the Director of Instructional Technology from Penn State University. The intention of the review was to brainstorm and identify approaches to address the future needs of academic technology.
6. Academic Division Visitations by Vice President and Director of Educational Technology (Starting in Spring 2013 and continuing annually)  
Nothing replaces personal feedback and connections. Rod and Eric Remy, Director of Instructional Technology and Training, visited and will continue to visit academic divisional meetings at their convenience and pleasure to receive thoughts and feedback on the technology support they receive in their academic work.
7. IT Divisional Risk Assessment by RCMD (Spring 2014)  
Low priority recommendations. One medium priority to assess card access business processes.

## 8. IT Annual Audits

<b>Audit Year (Academic)</b>	<b>Audit</b>
2007/2008	Information Management Risk Assessment
2008/2009	Security and Information Management Policy review
2009/2010	Review data storage location of sensitive information
2010/2011	Review IT Recovery Processes
2011/2012	IT Security Program Review
2012/2013	External Reviews
2013/2014	IT Risk Assessment by RCMD
2014/2015	Review Cloud Vendor Assessment Procedure
2015/2016	Enterprise Data Applications – Email Audit
	Oracle Database Review: Reviewed configurations and security surrounding core PeopleSoft database
2016/2017	Physical Space Audit for Innovation & Creativity Laboratory
2017/2018	Internal GDPR/GLBA reviews
2019/2020	Cyber Security Audit
2020	External Penetration Test

## Technology and Project Considerations

When addressing technology assessments or future trends, many issues and questions rise to the surface. Many of these issues involve trade-offs and compromises. These issues also involve the life cycle and endurance of the technical solution. Any conversation involves both items related to the short-term and items related to the long-term. Finally, issues involving people, practices, budget, and processes must be addressed with any technology adoption. Following are categories of topics that Information Technology has identified as implication topics when discussing any technical solution.

- **Innovation, Adoption, and Low Tech verses High Tech**  
More times than not, users associate new technology with innovation. Innovation is related to the environment into which the technology will go. The introduced technology can be cutting edge, low tech or high tech. The importance is the fit of the technology with the environment.
- **Business Unit Leads, Support, Sustainability, and Training**  
The success of any technology project depends on the champions of the project. Successful projects are lead by non-Information Technology members. Coupled with the

project implementation are the support and sustainability of the technology in the environment. These conversations best take place at the beginning of the project.

- **Data/Content – Creation, Security, Facilitate**  
Data and content are the blood of any technology solution. The integrity of data and content is a partnership between end users and Information Technology. In general, end users are responsible for the accuracy and Information Technology is responsible for the security.
- **Business Process Review**  
Any technology change will impact the way things are done. With the adoption of new technology, the processes and procedures involving the technology need to be reviewed and adjusted.
- **Assessment, Measurements of Success, and Value on Investment**  
Technology solutions require a large amount of financial and human resources. To justify these large investments in time and money, assessment and value on investment must be clearly defined and understood.

## **Information Technology Organizational Strategic Vision**

In the upcoming years, the Information Technology division will pursue excellence in three focused areas.

### **1) Relationships**

At the core of any technology initiative or project are the individuals implementing the project, the individuals involved with the business process support, and the end users benefiting from the technologies. IT must maintain healthy relationships with the campus community ensuring information exchange built upon a layer of transparency and collaborative spirit.

### **2) On-going Services**

On a daily basis, everyone in the College community relies upon technology to perform their work and accomplish their goals. IT must coordinate the evolution of strong core services with emerging campus requirements.

### **3) President's Goals and the Gettysburg College's Strategic Directions**

Annually, Information Technology reviews and studies the strategic items in the Strategic Directions document to identify opportunities where the Information Technology division can provide front line technology service. These opportunities are reflected in IT's annual goals.



## **Assessing Progress**

All the initiatives and actions outlined below will be incorporated into IT's Annual Goals and Objectives. The progress on the initiatives will be measured and documented in the annual IT accomplishments document. This document contains for each objective either a due/done by date pair and/or a target/actual measurement pair.

## **Strategic Initiatives**

The remainder of this section provides more details of Information Technology's divisional initiatives to support the Gettysburg College community and the College's Strategic Directions. The recommendations and observations primarily fell into Governance & Policy, Mobile, Resources, Ongoing Services, and Teaching & Learning. No items appeared in the categories of Risk, Staff & Structure, and Adoption.

### **Governance and Policy**

For IT and the customers it serves, there must be a flexible, transparent, and consistent communication structure. Project and information sharing governance committees coupled with thoughtful and empowering policies are the foundation for successful communications. Three goals and associated actions resulting from the reviews are listed below.

1. Empowering user decisions and healthy and sustainable "Yes" for Technology Projects and Purchases
  - a. IT is currently reviewing divisional policies to improve "Yes-ing" where possible
  - b. Increase hardware options available to users
2. Improve project and instructional governance, management, and communication
  - a. IT has implemented a new support structure for Data System projects
  - b. Support the creation of a new instructional technology advisory committee
3. IT Leadership, Collaboration, and Access to the CIO
  - a. CIO will continue intentional conversations twice a semester with colleagues
  - b. CIO will meet annually during AVP divisional meetings
  - c. CIO will have announced open office hours
  - d. CIO will continue annual Academic Departmental Visits

### **Mobile**

For the majority of our communications and content consumption, the Gettysburg College community uses smartphones, tablets, and laptops. Mobile computing is the core

technology for our customers. Two goals and associated actions resulting from the reviews are listed below.

4. Resolve wireless connectivity issues
  - a. Continue to add access points as dead spots come to light
5. Enhance mobile access to campus data and services
  - a. Investigating custom work related to the CISCO location based services project
  - b. Investigating other third-party Apps for Peoplesoft and other campus data systems

## **Resources**

Maintaining the integrity and health of the technology portfolio is a critical responsibility of IT. Infrastructure and consumer based technologies require both human and financial resources allocated in a systematic and thoughtful manner. Two goals and associated actions resulting from the reviews are listed below.

6. Budget and human resources will continue to be tight
  - a. Develop healthy and sustainable ways of balancing the needs of the institution and employees versus available resources ensuring the high quality of the educational and work experiences at Gettysburg College
7. Resolve the aging academic "private" inventories of computers and equipment
  - a. Working with the Conservatory and Library to freshen computer and AV equipment
  - b. A goal of measuring and planning for the academic technology weight is in 2013/2014 Annual Goals

## **Ongoing Services**

The ongoing services that IT delivers to the campus are the foundation for IT relationships and work with the members of the Gettysburg College community. Before IT can encourage and facilitate innovation and business process improvement, IT must deliver outstanding services. Trust in IT is built from incredible customer service. Five goals and associated actions resulting from the reviews are listed below.

9. Strongly consider moving student email to the Cloud and cloud based collaborative Document Editing
  - a. Assessing approaches to student email move to the cloud
10. Assess and plan for replacement of campus TV system
  - a. Assessing approaches to replace the campus TV system
11. Continue work with institutional event structure
  - a. Working directly with key event committees and individuals across campus.
12. Explore online technical training, such as Lynda.com

- a. IT had a non-utilized institutional license and discontinued in 2005. Revisiting pricing, interest, and promotion.
- 13. Plan future of CNAV functionality
  - a. Was an item on 2013/2014 Technology Advisory Council Agenda
- 14. Consider printer management solution (Green options for printing)
  - a. We have a central printer management software solution already in place that can monitor and log user submissions to campus networked printers. Work with Sustainability Committee to promote “Green” printing

## **Teaching and Learning**

With the enhanced organizational and national attention to online and blended learning, IT through the Instructional Technology and Training department is working with the Academic division on many projects and initiatives ranging from classroom upgrades to workshops for faculty. IT is involved with the Technology Task Force. Five goals and associated actions resulting from the reviews are listed below.

- 15. Maintain State of the art classrooms: Maintain up to date connectivity and AV in classrooms, enhance connections across the spectrum of devices from older standards such as VGA and newer ones such as HDMI Enhancing software on podium machines that allow for wireless control from devices such as iPads, Android and Windows tablets.
  - a. Working to include as part of our normal classroom upgrade package
- 16. Incorporate innovative classroom and lab designs: Stay current with best and innovative practices for classroom configurations and usage. Explore redesigned, flexible lab spaces. Create new and more focused digital media labs
  - a. Enhance promotion of Digital Center
  - b. Perform a computer lab utilization study working with Registrar
  - c. Work with Provost Office and Facilities to incorporate innovative best practices in classroom design where possible.
- 17. Establish an advisory faculty committee for the classrooms and a process that encourages greater collaboration and a closer connection between facilities management (construction-planning area) and the classroom-support (IT) staff
  - a. Explore new roles and models for faculty members on the Technology Advisory Council
  - b. Continue the collaborative work with Provost Office and Facilities on classroom projects
- 18. Establish a process to continually evaluate the pedagogical uses of technology and new technology in higher education including Massively Open Online Courses (MOOC) & Open Educational Resources (OER)
  - a. Participated on Task Force on Technology and Liberal Arts Education at Gettysburg College
- 19. Coordination with the Provost Office, Library, and Johnson Center for Creative Teaching and Learning on Instructional Technology Issues:

- a. Identifying and delivering training and best practices for creating online materials that are coupled with informative assessments for the students and faculty leveraging adaptive content techniques where possible
- b. Working with Provost Office, assess the concept of Faculty Participation Awards
- c. Working with Provost Office, assess the concept of Teaching and Learning with Technology Symposiums and workshops

Revised by RST: September 2020