

Strategic Plan for Information Technology

Fiscal Year 2014

James Madison University

May 2013

INTRODUCTION

James Madison University is a living, evolving university where change is the status quo. The university's mission as a *"community committed to preparing students to be educated and enlightened citizens who lead productive and meaningful lives"* is pursued in planning and operations activities throughout the university.

TECHNOLOGY VISION

To enable this mission, the vision of JMU's Information Technology (IT) evolves to reflect the vibrant, yet focused, character of the university it serves. IT collaborates within and beyond the university to create and sustain a technology environment that enables innovation and superior service for university constituents. Information Technology seeks a model environment characterized as intuitive, personalized, seamless and secure. One further characterized as providing positive identification and full mobility for users and that is "always on" to support university functions.

In search of this ideal, Information Technology and its many partners constantly monitor shifts in technology, adopt new strategies and solutions and strive for continuous improvement. To sustain these efforts, IT relies on the ongoing engagement of all who use and support the environment. By sharing ideas, questions or needs, participating in a project, offering feedback or reporting a problem, individuals who use JMU's technology resources obligate themselves to assuring the resources are utilized constructively and to the full benefit of the university.

IT MISSION

To create and sustain an intuitive, personalized, seamless and secure environment that provides positive identification, continuous mobility and is 'always-on' to enable innovation and superior customer service

CORE VALUES

When selecting among the many alternatives that may assist in realizing its vision, Information Technology is guided by several dominant principles:

- **Instruction, research and service are primary in meeting university mission—information technology is secondary.** Technology projects exist to facilitate the greater mission of the university.
- **Technology change is inescapable.** No technology environment is ever complete. Instead, it is a reflection of the on-going evolution of the university and the needs of its constituents.
- **Technology is complex.** The intricate academic and business processes of the university demand a sophisticated and well-integrated technology portfolio that demands thoughtful planning and constant care.
- **Investments in technology demand careful stewardship and project management.** The greatest potential for successful outcomes from technology projects is assured by university level cooperation to examine potential costs and benefits, evaluate alternatives and provide for appropriate direction and oversight.
- **Collaboration is essential to information technology success.** On a university scale, no one person or group is capable of evaluating the full spectrum of technology needs and challenges for the university. Identifying, selecting and prioritizing among various technology investments that might be made requires group effort and engagement throughout the university.

While seemingly obvious, these principles provide a foundation of shared values within Information Technology. By demonstrating these values, members of IT further relationships with internal and external partners and bring focus and dedication to the task of technology management.

STRATEGIC FOCUS

Reflecting these core values, Information Technology has identified four primary areas of strategic focus:

Building and Sustaining **Relationships**

Infrastructure/Service **Development**

Strategic **Investment**

Service **Delivery**

These strategic focus areas guide operation of the IT organization and provide a foundation for evaluating the contribution of individual initiatives to the broader technology vision. While examined annually, the focus areas are designed to promote continual development in an extended long-term horizon and are supplemented with initiative areas that provide focus for a shorter period.

Relationships

The most basic activities within a university—learning, teaching and service—are rarely performed in isolation. Students learn in group settings, faculty members teach in teams and employees form work committees. In such interactions we communicate and build collaborative relationships that help us grow as individuals, teams and organizations. By collaborating with others at JMU, members of the IT organization can gather additional knowledge and perspectives about technology projects (i.e. find out how others view the need, the impact, the priority, the values and risks, the quality of the outcome, etc.). Such information helps enrich the associations, inform decision-making and improve service.

Through collaborative relationships, IT can promote lasting interest and partnership around technology projects and services. Motivated by successful relationships, IT can more ably share its direction, successes and challenges as an informed and respected part of the university community.

Good relationships with others in the university presume good internal relationships as well. Within IT, an environment of healthy, open dialog and a strong management commitment to clear communication help cultivate strong associations within and among IT departments. Information Technology employees will seek to model these values as they interact as leaders, service providers, customers and colleagues of IT.

JMU's IT organization also pursues external relationships with other universities, state entities and business partners. Through formal and informal affiliations, members of IT share information and understanding gained through JMU



experiences and profit from the knowledge of others. As an organization, Information Technology continually seeks new relationships and ways to work together. Many strong relationships already exist and are nurtured on a regular basis to maintain their mutual benefit.

GOALS

IT will initiate and nurture contacts within the JMU community as a means of building knowledge and gathering input regarding technology management and use.

IT will develop strategic partnerships that cause others to value our service and seek our business and cooperation.

IT's work environment will be mission-focused and reward good communication and teamwork as core values.

Infrastructure and Service

Students, their families, and other constituents come to the university with an expectation that technology will support their activities wherever and whenever they occur. Much like electricity, technology is most noticeable when it is unavailable. While Internet access is certainly a primary demand, other elements of the university's information technology infrastructure have high levels of expectation. From the point of engagement (via laptop PC, PDA, cell phone, tablet computer, public kiosk, etc.) to the completion of a specific activity (registering for a course, paying a bill, submitting an assignment or contacting a professor, etc.), individuals care little about the complexities or components associated with delivery of that service. What they do care about is that appropriate technology is reliably available to let them do what they need/want to do, when they are ready, from where they choose.

But to IT, the ability to install and consistently operate fiber networks, web-enabled software applications, servers, identity and authorization services, etc. is an essential focus in meeting the evolving service expectations of the university community.

New technical challenges and exponential growth make the perfect, desired reality an elusive goal. More than any other technology endeavor the university undertakes, deploying appropriate infrastructure ahead of academic and other service needs requires collaboration, long-term planning and on-going commitment of resources. Any lack of these elements risks having learning, research and service delivery initiatives hindered by infrastructure limitations.

The university's infrastructure development focuses on three primary areas:

- network/telecommunications infrastructure,
- information systems software/application infrastructure, and
- desktop and general computing support infrastructure.

Technical challenges, time cycles and resource requirements vary and make timely delivery and high quality more difficult. IT's infrastructure initiative focuses on providing access, stability, security and seamless delivery of services across all products and layers of the infrastructure. IT infrastructure development goals are designed to address such characteristics in one or more of the infrastructure areas.

Strategic Investment

Effectively judging the potential of various investments requires a strategic view. University managers are challenged by business and technical complexities coupled with frequent resource constraints. And, their ideas and needs are easily overcome by negative possibilities. To succeed they must precisely identify resources, skillfully decide where, when and how they are to be applied, and focus on a best-value proposition. A good investment strategy is proactive and deliberately concentrated toward the best possible overall outcome.

Nowhere is this more desirable or necessary than in the intricate mix of technology resource investment. Strategic technology resource investment requires: evaluating existing investments in light of new opportunities and challenges, directing any new resources to the areas of highest priority, seeking new resources, and finding ways to extend the positive impacts of individual and aggregated resource investments. On behalf of its students, the taxpayers of Virginia and university benefactors who all bring resource support to the university, JMU pursues such strategic technology resource investment. The overall aim is to achieve the greatest instruction and service value

GOALS

IT will exploit opportunities within university budgeting and capital projects to extend and upgrade network connectivity (wired and wireless) to meet existing and emerging needs.

IT will implement additional redundancy for key infrastructure services to add flexibility and reduce risk. Projects targeted to increase availability, stability, security and contingency management will receive particular attention.

IT will advocate for a program of planned replacement/recycle of desktop machines so that minimum technical requirements can be met.

IT will develop and execute a program of proactive resource monitoring and volume testing to enhance capacity planning and operational control capabilities.

possible for the resources applied. In determining value (defined here as the most desirable intersection of cost and positive outcome), JMU respects both financial and human resources as inputs to technology investment.

To promote coordination of technology selections, avoid redundancy and minimize incompatibility in the greater university environment, individual programs/departments are encouraged to work collaboratively with IT to consider an enterprise approach. A 'big picture' view aids prioritization and management of resources and allows individual projects to be evaluated based on anticipated life cycle costs and benefits. Such analysis preceding initial investment helps develop a more thorough understanding of potential project value and procurement alternatives.

An example of this is JMU's recent purchase of a web content management system. University Advancement's marketing group, University Unions and IT were all independently considering the need for such a product. Through a process like the one described above, these stakeholders were able to collaborate in selecting a solution that will meet needs across the institution. A VASCUPP (Virginia Association of State College and University Purchasing Professionals) contract that incorporates the aggregate purchasing potential of Virginia institutions was then used to complete the procurement.

Since a high percentage of technology investment is in people, efforts to make sure that human resources are being used most effectively are also important. This is best done by examining the alignment of staff in relation to the institution's priorities and goals. Use of existing personnel, new hires, contractors, and other sources of labor receive careful thought initially and as a matter of on-going process. To prepare personnel for the possibility of new assignments, a focused staff development program is essential. For example, as academic and business functions move rapidly toward web and self-service environments, developers are learning new programming techniques and languages. As computer systems have become more integrated, mastery of new testing and teamwork techniques are also necessary. Information Technology provides for on-going staff development in keeping with its technology agenda.

Seeking new or underutilized resources can also contribute strategically. For example, based on recent institutional surveys, over 98 percent of incoming freshmen bring a personal computer with them to the college experience. Once here, these personally-owned machines are connected to the campus network facilitating access to self-service capabilities, messaging systems, library resources, the internet, etc. and making residential computing a seemingly



viable productivity option for many students. Similar capability is available in apartment complexes occupied by upperclassmen.

Still much of the instructional software, shared file storage and print capabilities required to carry out course assignments is available only in general-purpose or departmental laboratory facilities. This leads to a situation where many students who would otherwise prefer to "work from home" cannot; and much of the capability of personally-owned machines goes untouched. Meanwhile, the university investment in supporting and replacing equipment in such computing labs continues to grow with increased demand for access. Both to provide better service and to extend the reach of

GOALS

IT will continually analyze existing resources to assure technology staff and funds are most beneficially applied to JMU's mission.

IT will seek alliances, funding sources and procurement opportunities that grow and extend the impact of JMU's information technology resource investments.

IT will develop a program of services that allow the university to leverage the significant resource of personally-owned, student computers for use in instruction and service delivery.

IT will value its employees as a critical resource and foster their continued development.

current financial investments, JMU continues to explore new ways of leveraging students' personally-owned equipment within individualized learning and other service settings.

While residential/mobile computing scenarios based on personally-owned equipment will likely never eliminate the need for university-owned and managed computer facilities, taking full advantage of existing personal equipment investments has significant potential enhanced service flexibility. Simultaneously, it invites a strategic resource management question as to whether such residential computing services will free the university to direct limited resources toward more specialized, in-class, or shared computing needs.

Through new and existing means, IT will seek new resources to further the university's technology goals and will make sure these resources are effectively used

Service Delivery

Each of the previous strategies—developing open working relationships around technology management and use, providing adequate baseline infrastructure, and managing technology resources effectively—was selected with the ultimate goal of providing excellent service. As university services take a variety of forms, (e.g. a course session, a library circulation exchange, a business transaction, a facility access approval, a message from an advisor, etc.), technology is generally present to enhance or deliver another capability. Therefore, IT works in partnership with other departments to provide customer services with IT and the technology serving an enabling role.

Less often, but on a larger scale, access to technology is considered an IT service in itself (e.g. e-mail communication, high-speed network connectivity, wireless access, etc.). Such services are generally provided by the central IT organization as base service. Regardless of the circumstance, university technology is to provide or enhance constituents' ability to learn, work, serve, communicate and innovate.

To keep ahead of the service delivery curve calls for constant attention to business, academic and research processes and to the potential needs of the university's user populations. For example, growing demand for access may suggest the need for expanding the hours when technical support is available. Remote patterns of work call for new authentication and security measures. And, high-volume usage of critical systems suggests a need for more focused capacity planning, greater fault tolerance and fine-tuning of IT work flow. Through collaboration and a solution-oriented focus on the future and the greater needs of the university, JMU selects technology alternatives that help provide services with new and enhanced functionality through the most accessible, stable and individualized means possible.

Doing this demands perspectives and resources from various organizational units and a particular focus on the needs of students. For example, by further integrating the functionality of the existing JMU web, card services, e-campus and other systems through use of portal technology the university can create a one-stop-shop for students' access to information and services. Barriers of multiple logins, varying knowledge requirements and general information availability begin to dissolve to provide quality, on-demand service.

Even with advanced networking, location can also be a service barrier. As discussed earlier, students performing academic coursework in computer labs receive a very different service than if they choose to work from their residence. Yet in order to be successful at

GOALS

IT will develop and measure the success of service offerings based on their impact on students and the mission of the university.

IT will promote quality and accountability for its service delivery by developing performance measures and service level agreements around all major service areas and customer departments.

IT will encourage individual inquiry and problem solving through expanded self-service access and self-help information resources.

IT will provide increasingly seamless access through the thoughtful integration of varying systems and access control components.

IT will maintain the availability, integrity and confidentiality of JMU's information technology resources by instituting appropriate security controls and awareness efforts.



incorporating personally-owned computers into service delivery, significant process issues must be overcome. For example, there are presently more than 100 software applications being delivered in general-purpose computer labs. Compared to what might be found in residential settings, these labs present a relatively controlled environment. The machines and operating system software are standardized. Configuration settings are managed to assure compatibility and sustainability. Connections to printers and other devices are also readily available in keeping with anticipated instructional needs and service expectations. To deliver equivalent capabilities within the residential environment, software issues such as licensing, installation and on-going support, must be appropriately addressed. Large-scale shifts to residential computing may also cause unanticipated technical and managerial impacts associated with shared network resources. The overall effects on teaching, learning and service delivery must also be evaluated in light of new computing behaviors such as increasing use of wireless laptops, cell phones, and personal digital assistant (PDA) devices.

INITIATIVES

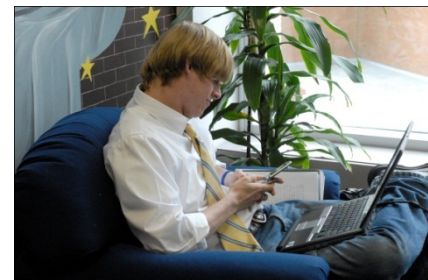
To reflect specific areas of emphasis in the upcoming planning period, several initiative areas are also identified. These initiatives highlight thematic shifts in technology, policy or direction that require increased university-level attention and coordinated planning across multiple domains and supporting projects. As work progresses and new initiatives are adopted, projects supporting the existing initiatives are assimilated into the broader domains. Initiative areas for this planning period are described below.

Collaboration

As the university continues to expand in time and place, finding new ways for faculty, staff and students to collaborate and work together seamlessly is a greater necessity. IT has several projects to create an environment where sharing of documents, calendars, messages and video can happen in real time allowing a new level of dynamics and teamwork. This initiative will focus on integration of on-premise faculty/staff solutions with similar cloud-based services for students and will take advantage of continued increases to our wireless environment.

Connectivity

Teaching, learning, research, collaboration and university business operations all depend on a reliable network. A new connectivity initiative will concentrate on bringing the university's network to new levels of performance. Included in this initiative are projects to double current Internet bandwidth, implement additional fail-over and fault tolerance capabilities and position for near immediate provisioning of additional bandwidth as future situations may require. In addition, high capacity network management and security devices will be installed along with new solutions to help the university Internet connection withstand the crush of daily requests for rich, dynamic, and interactive content, transactions, and applications. Membership in National LambdaRail (NLR) and Internet 2 will extend the university's reach to over 300 universities, corporations, research agencies, and non-profit network organizations involved in innovative research and education projects over these high speed networks.



Mobility

To further leverage new collaboration and connectivity capabilities, IT will undertake several projects concentrating on increased user mobility. The advantages of laptops, smartphones and iPad/tablet devices will be furthered by planned expansions of JMU's wireless network. Currently concentrated in academic/administrative buildings and group work spaces, a new wireless infrastructure plan will focus on achieving wireless ubiquity on campus including residence halls and additional outdoor and communal spaces.

PROJECTS

Projects are temporary endeavors meant to address a specific set of requirements. Listed below are highlighted projects for this planning period.

Access Policy

Increased mobility and new devices used by faculty/staff/students are challenging the university's remote access policies and procedures. Information Technology will work with university data managers and administration to develop remote access strategies and policy statements to achieve balance between the innovative goals/activities of the university, the new work styles of its constituents and the need for appropriate data management and security controls. Defined policies and strategies will allow IT to investigate technologies and make recommendations on how to provide needed access while maintaining acceptable risk levels. The goal this period is to identify acceptable technologies and make recommendations on how to provide the needed access.

Implement Tiered Desktop Management/Security Model

Information security continues to be a main focus for Information Technology. Faculty and staff desktop and laptop computers are subject to virus attacks and compromises, putting university data at risk. Building on previous objectives related to Desktop Baselines and Risk Assessment, IT will begin university-wide to:

- Assess risk in areas handling highly confidential and/or sensitive protected data as a way of identifying areas in need of desktop/security controls beyond baseline levels
- Establish operating procedures for identifying/tracking machines with advanced tier controls
- Implement appropriate desktop management/security tier in keeping with risk assessment
- Monitor customer response to advanced tier operation to assure effectiveness

Fiber Extension to Memorial Hall

IT's Telecom Department will work with Facilities Planning and Facilities Management Engineering to design and execute an extension of the university's fiber plant to Memorial Hall. The fiber extension will use infrastructure already being planned and installed for JMU's new housing complex on Grace Street and further extend it to Memorial Hall.

Potential use of a Geographic Information System (GIS) database to document JMU's network infrastructure

IT's Telecom Department will research and evaluate the use of a Geographic Information System (GIS) database to map/document the physical layout (fiber, twisted pair, cable TV and conduit paths) of JMU's network infrastructure for the entire campus footprint.

- Work with Geographic Sciences and Facilities Management to evaluate ArcGIS application to understand its capabilities and whether it can meet our functional requirements
- Evaluate other software GIS database offerings that may meet our requirements
- Research and understand the infrastructure mapping and GIS location processes of such GIS systems to formulate budget and cost projections to "map" the fiber, twisted pair and conduit infrastructure maintained by JMU.

Continue to support Cisco TelePresence Video Conferencing and Interoperability Infrastructure and support additional collaboration implementations as part of the 4-VA Project

IT will assist JMU's collaboration with the University of Virginia, Virginia Tech and George Mason University as part of the 4-VA project through continued development and support of video conferencing and interoperability infrastructure and by working with JMU's 4-VA coordinator to incorporate additional facilities and enable new uses.

- Work with Senior Administration and the 4-VA Management Board to determine the methodology for performing the necessary administrative functions in this new collaborative environment.

- Work with JMU's 4-VA coordinator to continue to enhance and develop our video conferencing infrastructure to incorporate additional facilities into our environment. For example:
 - Create a lab environment for CISE
 - Support an Innovation Center in the new ICE House facility
 - Evaluate the creation of a "Lance Ford Theater" in support of Technology Innovation

Continue efforts to provide self-service functionality to university constituencies

Providing the ability to complete business with the university via MyMadison is a major focus for IT. Information Systems will continue work to expand available features during the 2013-14 year. The focus will be on beginning the work necessary to provide access to the parents of our students and providing employees with the ability to obtain their W-2 electronically.

Information Systems will work with a group of stakeholders on campus to identify the functionality that should be offered to the parents of our students. MyMadison will provide links to the information most commonly required by parents. In addition, a means of allowing students to grant their parents access to certain aspects of student information such as schedule, transcripts, financial aid and account information will also be developed. The first phase of this project will focus on credentialing parents so they have the ability to log in to MyMadison and providing links to the most commonly access information. Development of the functionality required to support students granting their parents access to their data will also begin but is not expected to be fully complete in this planning period. The goal is to be credentialing parents for access to MyMadison in the August/September 2013 timeframe. Information Systems will also work with Payroll to provide employees the ability to electronically view and access their W-2 via MyMadison. This functionality is targeted for January 2014 and will include the ability for employees to opt-out and continue receiving a paper W-2.

Continue efforts to support efficiencies for the university community through automation and workflow.

The university procured a set of workflow tools that fully integrate with the student, human resource and finance applications. These tools were procured in 2012-13 to support automation of the university's Personnel Action Request (PAR) process. The ePAR functionality allows for elimination of the paper-based PAR form. The workflow tools will be used in 2013-14 year to complete ePARs and begin automation of the employee on-boarding process. Related to the student system, these tools will help automate the grade change process. Both of these projects will eliminate paper-intensive processes and provide stream-lined functionality.

- For the employee on-boarding process, staff from IS, HR and Payroll will work with Gideon Taylor to write the templates necessary for capture of the required information to on-board a new employee. The data workflow will be documented and established in the system. The target for completion is being determined and will follow completion of ePAR roll-out.
- For grade changes, the project will focus on automating approvals required for grade changes. A completion date for the project will be determined once analysis of the business processes and workflow is complete.

Continue support for faculty, staff and student collaboration in SharePoint.

Today's academic and business environments continually call for working together. Sharing and editing documents is but one of the areas where SharePoint technology can assist collaboration. JMU IT has a SharePoint environment established that is currently being rolled out to the university faculty/staff community in a deliberate way. IT is also in discussions with Microsoft regarding SharePoint capability that will be available to students as migration from Live@Edu to Office365 takes place. Information from this exploration will inform the university's approach to using SharePoint as a faculty/student collaboration space. Currently, the move to Office 365 is targeted for July 2013.

Support technology initiatives of University Advancement

In order to provide better outreach and reporting technologies, Information Technology is working closely with staff from University Advancement to implement data warehouse/business intelligence applications and supporting the implementation of Encompass, a constituent outreach tool. In order to position the Advancement records management system (Advance) to be best utilized by these new technologies, an application upgrade is also scheduled. The following projects will be completed by the end of the 2013 calendar year so they can be fully utilized in 2014.

- Installation of Oracle data warehouse and Cognos BI technologies (April 2013)
- Training of UA and IT staff in use and support of these technologies (May/June 2013)
- Support of the implementation of Encompass by ensuring appropriate connectivity between Encompass and Advance (June - September 2013)
- Data warehouse and BI technology Go Live(July 2013)
- Upgrade of Advance to version 9.8.1 (August 2013)
- Go Live of Encompass(December 2013)

Implement Master Data Management technology

A Master Data Management (MDM) solution was procured to serve as a constituent hub to support JMU's management of university data. It provides the capability for managing the university's data in a way that facilitates identification of those person records related to each of JMU's primary information systems and maintenance of a central authority for use and update of that data in other systems. The master data management system, once implemented, will be the central authority on which university systems maintain data regarding a particular constituent and the related needs of that system. The central data authority can ensure data quality is maintained and the university is able to identify each constituent and the system that serves as the master of that data. The MDM system will also support sharing of data updates to the appropriate systems as needed, increasing accuracy and timeliness of status changes. While a MDM solution will not totally remove "people" from such transactions, it will automate the appropriate handling of the information and the updates to systems according to business rules.

All users of university data will benefit from implementation and use of the new central repository. A primary benefit of implementation, and the initial starting point for the project, will be data governance conversations within the university that will lead to a better-documented sense of all the types, sources and stores of data and the methods for managing and maintaining them. This review and documentation of JMU's data governance information will form the basis for future automation. This analysis and documentation phase is expected to take approximately three months and will result in an appropriate implementation plan on which to move forward.

Evaluate replacement of Remedy call logging/tracking system.

The Remedy system is a highly customized system that has evolved over the last 16 years. It is used extensively within IT for call logging/tracking, change reporting, project management, time tracking for student employees and lab software request management. It is also used by students, faculty and staff to submit incidents and service requests. Modern systems are feature-rich and tuned to the service management needs of an IT organization. They potentially allow for migration to a system that can be tailored to function more adequately in our environment through configuration rather than through extensive and expensive customization. Modern systems also offer a richer self-service experience for end-users to log tickets, check status, search solutions, provide feedback, etc. Staff from various parts of IT will be involved with evaluation and analysis portion of the project.

- Investigation of potential systems is to be complete by 10/15/13.
- If funding is available, IT will move forward with an RFP. Otherwise a budget initiative for funds to be available 7/1/14 will be submitted.

Continue to expand wireless access across campus.

Expectations for ubiquitous wireless access continue to grow with our students, faculty and staff across campus. IT will continue to expand in designated areas as budget allows, with special attention in the residence halls. A list of buildings, prioritized by need and ease of implementation, is developed to use as our guide. Budget initiatives are being submitted.

- Funding is available to complete all nine Village residence halls during Summer 2013.
- The evaluations for Eagle and Shorts halls have been completed and are waiting budget.
- Harrison, Godwin and Taylor and Warren evaluations are complete with evaluations for Maury, Keezell and Music yet to be completed.

Continue to enhance the network infrastructure

The JMU network continues to grow in terms of buildings, devices, and customers. A plan and funding to replace old equipment such as switches, routers, servers, storage, and security solutions are essential. A budget initiative has been submitted for storage, Memorial Hall fiber extension, and network equipment upgrades. For these and similar infrastructure projects, IT will work to:

- identify end-of-life equipment that needs to be replaced,
- identify other equipment or service needs based on project priorities within IT,
- research, evaluate and test new devices and services
- procure necessary resources, and
- communicate, schedule and install the services.

Continue to monitor Internet bandwidth to ensure needs of the JMU community are met

Our current commodity Internet bandwidth for students, faculty and staff is 2 GB. Bandwidth for our National Lambda Rail and Internet 2 is current 250MB. IT anticipates the need to add additional throughput to meet growth of the 4VA TelePresence project.

- Meet with Lumos in February to agree on timeframes.
- Define any additional cost.
- Agree on implementation date.

Upgrade enterprise services to the latest versions

All Microsoft collaboration services need to be upgraded to the latest 2013 versions. This includes the faculty and staff Exchange service, Office 365 for students, and Lync and Sharepoint collaboration tools. Other related upgrades include: 1) research and replacement of the current IP administration service and 2) research and implementation of a new guest wireless service, if funding is available.

Upgrades to Exchange and Office 365 are planned for the summer, Upgrades to Lync and SharePoint will be planned for an earlier timeframe. The guest wireless and IP management services will come at a later date when research and evaluations are completed and funded.

Research, evaluate and implement a Security Incident and Event Management System

IT will research, evaluate and implement a Security Information and Event Management (SIEM) system. The SIEM collects log data, normalizes it into a consistent format and allows for cross checking of events from multiple systems. IT will allow for detailed reporting and the sending notification with a high degree of confidence. Implementation will include:

- researching vendor solutions via SANS, Gartner and higher education sources,
- developing an RFP to be submitted in summer 2013,
- setting demonstrations with top vendors and making a product selection,
- developing a project plan, identifying an implementation team, and
- completing a phased roll out.

Other Projects

Not all the information about JMU's information technology plans is contained in this document. More projects and additional supporting information about the status of Information Technology's work are contained as part of the computing website (<http://www.jmu.edu/computing/>). See <http://www.jmu.edu/computing/itplans> for a copy of this plan and additional planning resources.

SUMMARY

Recognizing that information technology management and planning are by no means isolated endeavors, the Assistant Vice President and Directors of Information Technology encourage input regarding this plan. It is developed in conjunction with [JMU's Strategic Planning process](#) and renewed annually. Individual and workgroup goals and objectives are submitted relative to the university's various planning themes. The goals and objectives move forward in a structured process to form the base for revised IT initiatives and selection of new projects.

For members of IT, this plan is designed as a roadmap for our work together. All members of IT are challenged to:

- become aware of JMU's information technology vision;
- understand how IT's initiatives and projects serve this vision; and
- consider how your individual and collective work contributes to the vision of IT and the mission of the university.

For others in the JMU community, we hope this plan adequately describes IT's direction and priorities for the upcoming year. Further, we hope that you will join us in the planning process by providing feedback and sharing your needs and plans with us as well. We invite your contributions during annual strategic planning or otherwise throughout the year. You are the people we serve and we look forward to working with you for the future benefit of the institution and our students.

Please direct questions, remarks or requests for additional information to hulveydb@jmu.edu or 568-7063.