

WOC Meeting Minutes

02/21/2007

Present: Miriam Barkley, Scott Milman for Mike Byers, Robert Brown, John Cocking for John Eatman, Helen Hebert, Bruce Michaels, Jason Fleck for Ellen Robbins, Todd Sutton

Guests: Dr. Jim Clotfelter, Donna Heath, Valerie McFadden, Susan Hensley

Absent: Gregory Grieve, Richard Stewart

Recorder: Sherri MacCheyne

Minutes – Corrections

No corrections

Clients' Opportunity to Recommend Priorities

Dr. Clotfelter led this discussion regarding priorities that clients may have that are not yet funded. (see attachment). The WOC should review the items listed in the document and also recommend any others.

The document imaging priority will remain on this list, but will be on hold for one year due to staffing resources.

The costs contained within this document are only estimates and have not been secured.

Robert Brown stated that the forecast for the UNC system is now 78,000 additional students in the upcoming years. This means that distance learning will become even more important. UNCG's technical infrastructure must be upgraded to keep up with the anticipated influx of distance learning students.

Blackboard Portal Subcommittee

We are trying to decide how to best implement a Bb portal. Currently, we have decentralized development, and we need to figure out if it would be better to have a centralized development team for this project.

The portal sub-committee has talked to Miami of Ohio setup and will be looking at Clemson's.

One of the biggest questions is the governance of data.

Rob is going to meet with Ray Purdom, Gloria Thornton and the Provost to discuss the need of a Blackboard Oversight Committee.

Action: In response to Dr. Clotfelter's request Helen will work with Rob to submit an update on the need for a university-wide portal.

Web 3 Update

Web 2 Certification – we are putting together the “how-to” document.

We are looking at Google Calendaring to see if it meets the data criteria and supports our environment. Currently, it won't be a viable option unless it is hosted by the Library. However, Geoff from IT is looking at ways we can implement it from within IT.

Action: Todd will ask Kevin and others from the calendar committee to come to a WOC meeting to discuss these issues.

Web Communications Update

There has been some discussion regarding placing the Blackboard link in the gray bar at the top of the home page. A suggestion has been made to move “site tools” to the footer.

Action: Miriam will discuss with Paige and come back with a recommendation.

Action: Susan Hensley will let us know which logs are available for quantitative data relating to campus link “hits”.

There is now a microsite that supports the University's advertising series. You can get there by knowmore.uncg.edu or www.askbryan.uncg.edu. Check it out.

Campus Weekly went online February 14. The print versions are still being distributed. The online version is a pdf of the print version. The url is campusweekly.uncg.edu

There are new campus links – International Programs, and Outreach is merged with Corporate Resources.

We are currently working on getting an interactive UNCG Magazine online.

We are in the process of updating the maps and making them interactive.

Artslink no longer exists so the arts webpage is being redone.

The next meeting is March 21, 2006 in EUC – Willow Room



February 8, 2007

MEMORANDUM

To: Web Oversight Committee

From: Jim Clotfelter

re: 2/21 meeting

Attached are brief descriptions of six technology areas identified by some clients as needing additional institutional support. We're meeting with various client groups to determine which ones they believe to be most important. We look forward to meeting with you Wednesday, February 21, to get your thoughts. I'll be joined by Gloria Thornton, Donna Heath, and Valerie McFadden.

The six areas are listed in alphabetical order:

Data Management/Warehousing
Document Imaging
High Performance Computing/Research Technology Enhancements
Identity Management
Next-generation Video/other Collaborative Services
Web Portal
...or other.

Three caveats:

- A campus-wide committee chaired by Laura Young was charged to study the case for an enterprise solution to document imaging. We'll take no steps on document imaging until we hear from that committee.
- Any time we look at new services, we also need to look for ways to minimize net new costs.
- The scale (costs) estimates here are preliminary – designed only to convey a sense of the “ball park” of costs. No cost savings or cost avoidance are included here.

Clients' Opportunity to Recommend Priorities

Major Institutional Unfunded Technology Needs

January 26, 2007

DATA MANAGEMENT/WAREHOUSING

SERVICE DESCRIPTION	<p>A comprehensive data management program provides better protection and control of data assets, avoidance of penalties and reputational damage for the misuse of data, better understanding of the meaning behind data elements and improved data quality.</p> <p>An enterprise data warehouse provides opportunities for more effective use of the University's data assets for planning, analysis, and monitoring purposes.</p>
CURRENT STATUS	<p>Student Data Warehouse – contains nine semesters of student data organized into 49 views; no enhancements have been made for over 3 years (technology = Oracle database on VMS platform; unit providing service = ODM; multi-departmental)</p> <p>Operational Data Store – contains Banner data optimized for enterprise reporting (technology = Oracle database on UNIX platform; unit providing service = ODM; enterprise-level out-of-the-box, customized for Finance and soon for HR)</p> <p>Data Governance – data classification high-level roles and responsibilities defined; initial data stewards identified; data awareness program to be designed and initial training conducted (assuming contractor funded Feb 2007) (technology = none; unit providing service = ODM; enterprise-level)</p> <p>Data Quality – Data Standards Sub-Committee meeting regularly to address most pressing issues regarding shared data elements (technology = data monitoring/cleansing/correction PL/SQL programs; unit providing service = jointly chaired by ODM and BAF with campus wide representation; enterprise-level)</p> <p>Data Privacy and Security – Administrative Applications Security Sub-Committee meeting regularly to address common security issues (technology = none; unit providing service = chaired by BAF with significant ITS-wide participation; enterprise-level)</p>
AT STAKE	<p>More effective use of data assets – quicker and easier access to data to support decision-making and strategic planning related to institutional priorities (e.g., improving recruitment, increasing retention, tailoring financial aid packages, enhancing fundraising efforts) and to regularly measure and monitor performance of existing programs/initiatives</p> <p>Providing better protection and control of data assets – data governance and stewardship structure in place so accountability for the use of data assets can be embedded into everyday work processes</p> <p>Avoidance of penalties – absence of penalties for non-compliance with external regulatory and legal requirements (e.g., FERPA, HIPAA, NC Privacy of State Personnel Records law, NC Identity Theft Protection Act, etc.)</p> <p>Avoidance of penalties – absence of penalties such as audit findings for non-compliance with internal policies</p> <p>Avoidance of reputational damage – prevention of damage to the University's image caused by publicized actual or perceived misuses of data assets</p> <p>Improved understanding of data and data quality – mechanisms for defining business rules and valid data values for shared data elements and for recording those definitions in a common repository in place so users can understand the nuances behind the data</p>
AFFECTED CLIENTS	<p>All areas of the University would benefit, especially Academic Affairs and University Advancement (timely access to quality data and an untarnished image improve our ability to attract students and financial support)</p>
SCALE (preliminary estimate)	<p>EDW Recurring Costs - \$285,000- \$375,000/year Data Governance Program Recurring Costs - \$75,000 - \$110,000/year</p>

DOCUMENT IMAGING

SERVICE DESCRIPTION	<p>Document imaging is the business of capturing, indexing, storing and retrieving of documents to meet the administrative needs of units across campus. Typically capture involves scanning printed documents but can include capture of electronic files generated by other means. Documents, once captured, are logically associated with or indexed to a record in an enterprise system (for UNCG typically Banner). The indexed documents are stored on enterprise class central disk space which is regularly backed up. Retrieval for viewing and/or supplemental notation is managed via security rights within the application.</p>
CURRENT STATUS	<p>Document imaging at UNCG currently consists principally of the NolijWeb system, purchased, implemented and supported by Enrollment Services, which contains approximately 1.25 million documents and is used by nearly 200 users across approximately 10 departments. ITS provides disk space and database space for the application which is managed by Application Administrators within Enrollment Services. There are several other single department initiatives on a smaller scale with desktop level software within Campus Police, Auxiliary Services, Sponsored Programs, Cashier's Office and Safety.</p> <p>A campus wide committee, led by Laura Young, has been charged by the Sponsors for Information Systems to document UNCG's need for Enterprise Document Imaging, consider available products, and develop implementation/support cost proposals for consideration in time for budget planning for the 07-08 Fiscal Year.</p>
AT STAKE	<p>Management of paper files has traditionally been a departmental concern, with some sharing of documents between offices based on specific work processes or lifecycle (applicant to student to former student). Recent legal changes regarding document discovery during litigation have introduced the need for a higher level of accountability by all organizations regarding document management. An electronic document imaging system can, if properly utilized, assist UNCG in following document retention regulations guidelines.</p> <p>The demand for faster and more efficient execution of multi-step functions, some of which realize a tactical advantage for UNCG (faster processing of transfer credit, financial aid, admissions applications), has driven the need for an imaging system within Enrollment Services, and in keeping with the principles of PACE, document imaging could potentially provide for similar gains in efficiency and effectiveness for other enabling functions.</p> <p>Consolidation of all enterprise functional areas (Student, Financial Aid, Alumni, Finance and soon Human Resources) on to one platform (Banner) gives UNCG for the first time the opportunity to invest in a single imaging system which can benefit all divisions.</p>
AFFECTED CLIENTS	<p>Students, faculty and staff would benefit from accelerated processing of "paper-work" by administrative offices who utilize document imaging, minimally by elimination of paper movement via campus mail, but to a larger degree by the serious analysis of work processes that usually accompanies an imaging implementation. Where appropriate, units could reclaim office space devoted to storage of paper documents, converting that to space for personnel once documents are imaged.</p> <p>Enrollment Services currently expends resources supporting NolijWeb for other units in Academic Affairs and Student Affairs, with a desire from numerous other units to participate in Nolij. An enterprise approach would allow ES to more appropriately utilize staff for ES functions.</p>
SCALE (preliminary estimate)	<p>Initial One Time/Implementation: Product Acquisition/Expansion: not sure yet (100-250k or 250k+) Ongoing Expenditures: Annual Staffing within ITS (100-250k) Hardware Renewal Costs: Every 3-4 years (100-250k)</p>

HIGH PERFORMANCE COMPUTING/RESEARCH TECHNOLOGY ENHANCEMENTS

<p>SERVICE DESCRIPTION</p>	<p>Recently classified as a Carnegie “High Research Activity” University, UNCG provides a number of academic research computing resources, but researchers have expressed interest in new or expanded resources. One of several areas of interest is “high performance computing” (HPC) - computational work that cannot effectively be performed on a typical desktop computer, but rather requires a high-powered server or collection of multiple servers (“clusters”). Another area of great interest to faculty from many areas is a research-caliber web survey tool.</p>
<p>CURRENT STATUS</p>	<p>For research that can be performed on a “desktop” computer, ITS has purchased and implemented a number of software packages that are used both instructionally and for academic research. Many are quantitative analysis packages (e.g., SPSS, SAS, Matlab), but qualitative analysis and reference management packages are also available. These are provided in addition to curricular-specific packages purchased by departments. Most are Windows applications available on the Novell academic software network, and some are available for the Macintosh and/or Sun Solaris (“UNIX”) platforms. Most research packages purchased by ITS are student fee-funded, making faculty plans for instructional use a pre-requisite for purchase. Researchers have expressed interest in adding several additional data analysis software packages to the current offerings on the UNCG academic network.</p> <p>HPC resource access and user support was historically provided through the North Carolina Supercomputing Center (NCSC), but the demise of that center several years ago left UNCG faculty with fewer options for HPC access - collaborate with a (typically) off-campus vendor or research partner, pay for access to remote HPC resources, purchase and run local/departamental HPC resources, or use a pilot collaborative service established between UNCG and NC State. ITS currently offers no centralized HPC support, but only facilitates use of resources at NC State as part of an HPC pilot. A long-term business model for continuing this collaboration has not been established.</p> <p>The “Virtual Computing Lab” (VCL), a system developed by NC State, could potentially allow UNCG researchers to access research computing resources from any location with a good (i.e., better than dial-up) network connection. The start-up VCL system for UNCG has, however, been funded from student-fee money; and, therefore, will only be available for student and instructional faculty use.</p>
<p>AT STAKE</p>	<p>Investing additional funds in research computing resources will help solidify UNCG’s recently earned status as a Carnegie “high research activity” campus. Without such investments, UNCG could face problems with recruitment and retention of research-oriented faculty. Productivity of current faculty could be affected by lack of resources and support. Graduate programs may find it challenging to teach students the skills they need to thrive in their respective disciplines. Faculty and research staff may face difficulty obtaining grants in cases where reviewers might perceive that the grant applicants lack suitable technical resources to perform their research (or, lack resources to perform it without incurring unacceptable costs).</p>
<p>AFFECTED CLIENTS</p>	<p>All faculty who perform research as well as research staff have a stake in this. Some technology of interest for research could potentially benefit administrative staff and students as well (e.g., user friendly web survey tools, data analysis software that could be used for instruction as well as research, graduate faculty wishing to teach/use high performance computing resources in class).</p> <p>Interest in HPC has expanded from the sciences and engineering to be incorporated into diverse disciplines including economics, music, English, social sciences and more. Software packages once of interest primarily to a single discipline (e.g., GIS - Geographic Information Systems) are now of interest to a wide variety of disciplines, but faculty and research staff often cannot make use of these tools without adequate technical support.</p>
<p>SCALE (preliminary estimate)</p>	<p>Resources needed vary widely depending on the number of new (or expanded) tools desired. An April 2006, request to support UNCG’s “High Research Activity” classification with expansion of research technology infrastructure identified over \$1,000,000 in potential annual funding needs, but was not funded. Parts of this expansion (e.g., acquisition of new analysis software tools) could, however, cost as little as \$5,000 to \$10,000. Clearly, input of campus researchers is required to set priorities. UNCG’s most recent expansion budget request included almost \$500,000/year for HPC resources, but also was not funded. Depending upon the scope of the need, expanding opportunities for inter-institutional collaboration may now make it possible to implement HPC support at UNCG for a much lower annual cost.</p>

IDENTITY MANAGEMENT

<p>SERVICE DESCRIPTION</p>	<p>Implementing Identity Management (IdM) will allow users to authenticate to the campus network and immediately access data and services based on who they are and what they are supposed to have access to, rather than on what machine they are using or where they are located (on or off campus).</p> <p>The general concept of identity management is similar to that of using an online travel portal. The user goes to one website, uses one id and password, books a flight, hotel, rental car and dinner reservations (each with a different company) using a single “global” identity. Rather than having to go to the Delta, Marriott, Hertz and steakhouse websites and remember a user id and password for each, the user has access to everything he or she needs from one central site, with one ID and password.</p> <p>The primary benefits of identity management to the UNCG user community include:</p> <ul style="list-style-type: none"> • Quick setup of new accounts with all of the appropriate access rights • One ID and password for every ITS service • Ability to fully access services based on identity, not on location • A single, simple self-service process for password changes <p>The primary benefits of identity management to the University include:</p> <ul style="list-style-type: none"> • Increased efficiency in user account management • Increased productivity • Operational cost savings • Reduced security risks <p>The campus community is reliant on critical applications that run on a variety of platforms, distributed across the enterprise. Users cannot access those applications without being registered to use that software - having a user account set up for them. User accounts need to be constantly added, deleted and modified in response to people joining or leaving the organization, changing roles or moving locations. A typical user needs accounts on multiple platforms and access to a number of applications. This means that each user needs to be registered on many different software layers.</p> <p>It is not uncommon for the average user to have between 5 and 10 registrations each. In a 20,000 user organization like UNCG that means between 100,000 and 200,000 user accounts to manage. Each user account normally consists of more than just a username and password and will include profile information, file systems, access rights and other important data. Further, we want non-UNCG entities like vendors, guest lecturers and collaborative researchers to have accounts, passwords and access rights to our campus network.</p> <p>The complexity of the account management process at UNCG results in sub-standard service for the client community. User management is very labor intensive and involves a lot of different people. This operational cost is compounded by the loss of productivity that occurs through delays in registering users on the business processes to which they need access. Today, it takes longer than it should for a new employee to be created and start working. This results in decreased productivity across the University. The amount of time that an employee is unable to work because of resource access rights is time that the new employee can't be productive.</p> <p>Implementation of an integrated IdM solution can have a dramatic return on the investment made in terms of operational savings. According to Gartner Group research, the ROI for an IdM project can be more than 100% in less than 8 months.</p>
<p>CURRENT STATUS</p>	<p>Centralized services for account provisioning are in place for enterprise systems through a mixture of university written software and vendor tools. Business rules need to be expanded to define roles so that services may be offered beyond the limited definitions now in place. Account provisioning automation needs to be expanded. Presently Banner and Blackboard are done semi-automatically. UNCG does not have a single sign on application which is required to do role-based shared computing services. Auditing capabilities are limited and need to be expanded.</p>
<p>AT STAKE</p>	<p>UNCG must be able to deploy new service offerings faster and more securely in order to attract top researchers and students. As new services are deployed on campus, an IdM solution would allow for faster more secure access to new services. As UNC campuses start to share services, role-based identity management will be the mechanism to gain access. Identity management will be a vital component in building secure collaborative research partnerships between UNCG and other institutions.</p>

	<p>IdM will also provide administrative users a tool for granular auditing of access to data which has become a regulatory issue for financial data within corporations and is likely to reach higher education.</p> <p>IdM is a necessary component of a strong and flexible security framework for campus computing. Most security vulnerabilities come from improperly managed rights and entitlements. Not having an automated process for effectively managing user accounts can lead to having a large volume of accounts that should not exist. These consist of staff who have left but have not been cleaned off the system, staff who have been given erroneous access through virtue of having been cloned from an existing user, and the simple mistakes that pervade a manual process. It is not uncommon for some 25% of all accounts across any network to be erroneous.</p>
<p>AFFECTED CLIENTS</p>	<p>Identity management holds significant potential benefits for all UNCG faculty, staff and students. All will benefit from quick setup of new accounts with all of the appropriate access rights, one ID and password for every ITS service, the ability to fully access services based on identity, not on location, and a single, simple self-service process for password changes. Nationally, a great deal of attention has been devoted to IdM, for library and other resources that can be shared across campus lines.</p>
<p>SCALE (preliminary estimate)</p>	<p>The scale is the entire enterprise. Business rules must be established with the clients, an infrastructure must be built and development of new tools must be take place. The costs depend on the choice of tools. While open-source tools are available tradeoffs exist between additional staff time and annual licensing fees for products. Presently, the scale for complete packages from vendors would be in the range of \$75K-\$125K annually for licensing fees which does not include staff time or hardware for deployment. This easily equates to 2 FTE should an open source solution be selected. Hardware and software infrastructure ongoing cost would run between \$10K - \$30K annually (does not include startup costs).</p>

NEXT GENERATION VIDEO/OTHER COLLABORATIVE SERVICES

SERVICE DESCRIPTION	<p>The UNC system traditional solution for video collaboration has focused primarily on managed, high quality interactive information technology services. These services have proven useful to the higher education community. At UNCG, these centralized services are provided through the Telelearning Center in Stone which facilitates both distance learning credit-classes and a number of administrative video and teleconferences on a weekly basis.</p>
CURRENT STATUS	<p>In today's environment of emerging communication and information technologies, however, technologies have both diversified and converged, offering significant opportunities for hybrid forms of service. Communication and information technology solutions for conferencing, collaboration, and e-learning are maturing. New tools are available on a wide scale, providing options to faculty, staff, and students that have not previously been available. With appropriate planning, implementation, and support, opportunities exist for suitable and reliable collaborative communications originating from end-users' computing devices (e.g., desktops and laptops) using means that are accessible to typical users.</p> <p>While options have expanded, fiscal pressures are prompting the UNC community to seek even more efficient and effective methods to provide shared services for collaborative tools. Many lower-cost technologies and collaboration tools work well in one-to-one or one-to-many interactions, but, without standardization and centralized management, they may not scale well (e.g., to facilitate many-to-many collaboration, the type most often provided in the Telelearning Center). The UNC communication and information technology community via the NCREN infrastructure is working to establish and regularly refresh a vision for the efficient and competitive application of collaborative services to ensure that institutions in North Carolina have state of the art resources to accomplish their stated missions.</p>
AT STAKE	<p>As application services like YouTube and Myspace have changed the way people communicate from home, coming technologies may change collaboration within the higher education. These above applications grew from non-existent to major market shapers in less than two years. We should expect that this kind of change will happen in higher education within the next two years.</p> <p>As the UNCG community grows to include more off-campus locations and more distance learners, collaborative tools will become increasing important for providing needed forums for communication and information exchange. Depending on the rate of growth in these areas, demand may outstrip the physical/scheduling capacity of the current Telelearning Center. Also, the University should recognize and respond to the collaboration needs of those at a distance who do not have access to a centrally managed collaborative facility like the campus Telelearning Center, and should provide alternative forums for effective collaboration. Finally, certain types of collaboration (e.g., one-to-one collaboration) do not always require the oversight, exceptional quality assurance, and centralized management provided through the Telelearning Center. As appropriate, the University should provide alternative, lower-cost solutions to meet such needs in a way that is cost-effective, but still results in a positive end-user experience.</p>
AFFECTED CLIENTS	<p>These services potentially affect all of the University, but are especially relevant for off-campus University units, or campus units that frequently collaborate with off-campus units or other remote entities. Distance learning students and faculty benefit greatly from these services.</p>
SCALE (preliminary estimate)	<p>Scale of needed investment will depend a great deal on growth in demand for these services and on the types of services desired. High quality services that require a great deal of "hands-on" management will have the highest costs. If UNC GA reduces its current financial support for NCREN's collaborative video services, that could force decisions in this area.</p>

WEB PORTAL

<p>SERVICE DESCRIPTION</p>	<p>A web portal is an entry point to many sources of information and services, with structured navigation, and a collection of loosely integrated, information sources intended typically to serve diverse target audiences. By this definition, UNCG's home page (www.uncg.edu) is a portal.</p> <p>The term portal as used by many Universities and as viewed by UNCG has come to mean a web site that:</p> <ul style="list-style-type: none"> - Is a "one stop shop" for information and services for members of the campus community - allows customization and personalization based on individual (or group) interests or needs - has a single, centralized authentication method (service would be greatly enhanced by the role-based access provided by an identity management solution) - has information that is served dynamically <p>Features that are commonly included in a dynamic campus web portal include:</p> <ul style="list-style-type: none"> - Email (at least access) - Access to University and personal calendars - Off campus channels which could include access to news feeds and other dynamic information such as weather, sports, etc. - Public on campus channels which could include campus news, athletic information, event registration, etc. - Private on campus channels which could include access to information such as student records, employment records, billing information, communications from faculty, housing information, etc. - Collaboration and community building tools - messaging and chat capabilities
<p>CURRENT STATUS</p>	<p>Currently, information and services that would be "centralized" via a campus portal are being provided in a variety of ways and by different units on campus. Some information sources are treated as enterprise level (Banner, Blackboard) while others are not.</p>
<p>AT STAKE</p>	<p>Benefits of a portal include:</p> <ul style="list-style-type: none"> - Targeted communications based on audience or role - "pull" technology instead of the current "push" method - Development of a single sign on (SSO) system for all services provided through the portal (dependent on identity management solution) - Increased efficiency of communication leads to less "information overload" for UNCG community - Potential creation and evolution of communities centered around common interests - Consistent front end for a variety of "back end" tools - Increased customization and personalization for the end user - Integrated University Calendar - Potential for file storage for faculty, staff and students - Potential centralization of access to services such as final grades, registration information, etc. - In the case of Blackboard - provide a common framework for distributed campus developers - Promotion of data sharing between departments - Establishing a perpetual community that students will continue to belong to as they graduate and become alumni <p>Potential Challenges</p> <ul style="list-style-type: none"> - Development of a de-centralized development model - Data Ownership/Stewardship - Decentralization of portal information (i.e., it's not beneficial for a particular school or unit to setup their own information site) - Development of a single sign on (SSO) system for all portal services- one does not yet exist at UNCG
<p>AFFECTED CLIENTS</p>	<p>All members of the UNCG community would benefit as users of a campus web portal. A sample of University Units that could potentially expand service offerings via a campus web portal: Library, Bookstore, Enrollment Services, Housing and Residence Life, Event Management, Alumni Affairs, Athletics, Distance Learning, University Relations, ITS, academic and research units wishing to communicate with and provide services to their constituents.</p>

**SCALE
(preliminary estimate)**

Currently under development. Certainly new positions will be needed not only in ITS but potentially in client areas yet to be determined. An initial proposal by the Blackboard Portal Sub-Committee is suggesting creation of 3 positions (2 in ITS and one in BAF). An additional investment in infrastructure will be necessary (additional application servers as well as additional disk space) and is projected to be approximately \$150,000 (3 year refresh cycle) plus \$12,000 annually for maintenance.