Academic Libraries’ Strategic Planning in the 21st Century: The Role of Information Technology
Michel Nguessan (Governors State University)

The purpose of this paper is to analyze the importance of information technology in libraries’ strategic plans. Most academic libraries develop a written strategic plan. This plan is available within the institution and, in many cases, on the website of the library. Typically, these strategic planning documents establish the goals and objectives of the library for the next five years even though some documents cover a timeframe that is more or less than five years. This study is based on information collected from secondary and primary sources. First, we selected and reviewed research literature on: 1) strategic management/planning; 2) strategic management/planning for academic libraries; 3) the role of information technology in higher education. Then, we collected about a hundred academic library strategic plans; and we discussed with academic library directors/deans about the role of information technology in strategic planning for their libraries. The analysis of these sources allowed us to find out that academic strategic planners discuss different types of technology (hardware, software, network, specific library systems, web technologies, emerging technologies, etc.); they anticipate technology evolution; they plan how to leverage technology to help their libraries reach their goals and objectives; and they think about issues and challenges related to technology planning and deployment. The first part of the paper presents 21st academic library patrons and their expectations. The second part discusses the current state of information technology in academic libraries. The third part of the paper shows how libraries are currently using (and plan to use) information technology to meet the needs and expectations their users today and in the new future. The paper concludes that most academic library strategic planners consider information technology deployment critical for current and future academic libraries’ existence and operations.

Achieving Interoperability: Linking systems using the NCIP standard
Gail A. Wanner (SirsiDynix)

Have you heard conflicting statements about whether NCIP can be implemented? This session will show several examples of successful implementations. Attendees will learn what NCIP is, how it works, and how librarians can communicate with vendors to achieve the desired type of interoperability. NCIP is a “swiss army knife” standard and uses profiles to group messages into functional bundles. Version 2 was adopted in late 2008 and it contains a number of changes to streamline messages, reduce ambiguity, and support for extensions. The promise of NCIP to provide standardized links between open and proprietary systems is key to interoperability among today’s libraries.

Beyond Research: OpenCourseWare in the Institutional Repository
Heather Leary, Brett E. Shelton, and Marion Jensen (Utah State University)

OpenCourseWares are open access collections of educational materials used in formal courses. Only eight years after MIT’s first OpenCourseWare Initiative in 2001, over 175 universities now offer free access to content for 8,000 courses via the web.
Through their OpenCourseWare projects, universities such as Johns Hopkins University, Notre Dame, and many others worldwide share their knowledge as part of a growing movement among higher education institutions to provide free, quality educational content.

Utah State University’s OpenCourseWare (USU OCW) is an open access repository of educational materials powered by EduCommons. Under continuous development, the collection currently includes courses from irrigation engineering, instructional technology, and other areas, with the long-term goal of supporting almost every course offered by Utah State University.

Using a Creative Commons license, users are allowed the right to use, reuse, copy, transfer, translate, extend, improve, and redistribute the materials so long as they provide proper attribution, avoid commercial use, and reciprocally provide open access to any new works based on the materials. Anyone may access these online course materials for self-learning.

**Bite-Sized Repositories: The Benefits of Small Scale Repositories for Local Use**

*Lauren Pressley (Wake Forest University)*

This session will discuss small-scale, localized repositories designed to help librarians share their work openly. The content held in these repositories can be reused in other contexts, can save library staff time, and can help the library better meet the needs of the users.

We will explore three repositories as examples of this type of model: LibGuides as a repository of modules, a library skills video-based toolkit, and a website designed to share teaching with technology strategies for information literacy instruction.

In the process of discussing these repositories, we will address a number of issues relevant to the LITA Forum Audience:

- E-learning for students via the Toolkit and LibGuides, for librarians via the Toolkit and the teaching with technology website
- The Toolkit was designed with technology on a budget in mind, as to contribute each library staff member needs access to software. It was also designed to encourage participation from staff who might typically be reluctant to use new technologies.
- This session will directly address anticipating change by discussing how all the repository content is modular, to be reused in new contexts as they arise.
- These repositories incorporate social software because they enable commenting, tagging, and user participation.
- Web design is incorporated into each repository via user-centered design and usability testing.
- Each of these repositories is a large project that requires technology management through project management. They each also applications that enable knowledge sharing.
Bulk Digital Image Uploading via Flickr’s API
Jason P. Michel and Elias Tzoc (Miami University - Oxford)

Our Digital Initiatives department, like most Digital Initiatives and Special Collections, has a large amount of rich digital image collections, stored primarily in a third party content management system. These systems, however, do not always create sitemaps to help expose content to search engines, which limits end-users to find local records. It was our desire to expose two image collections to the wider web environment.

We immediately thought of Flickr; the most prominent website for image discovery and sharing. Our problem was scale; the default uploading interface was too inefficient to push forward with the project. So, we developed a set of PHP scripts devised to interact with Flickr’s API to allow for the quick and efficient uploading of images as well as metadata such as titles, subjects, tags and hyperlinks back to our collections. Once the scripts were in place the uploading process was completely automatic.

We’ve uploaded over 5,000 images using this method and the results have been outstanding. We are consistently attracting new users to our content and in about a month we had over 30,000 views of our images.

Our presentation will discuss the following issues:
1. Brief discussion of Flickr and the importance of contributing library materials to these types of communities.
2. Explanation of scripts, Flickr’s API and the process’ workflow.
3. Discussion of results and outcomes of project, including the potential of reusing the stats generated by Flickr.
4. Sharing of PHP scripts to audience.

Collections can be viewed @ http://www.flickr.com/photos/muohio_digital_collections/

C2: Collaborating on Collaboration
Thomas C. Wilson (University of Alabama - Tuscaloosa)

Starting in late 2007 the University of Alabama Libraries with a growing instruction program indentified a need for a more intimate setting for smaller groups of faculty and graduate students. At the same time, the University’s Faculty Resource Center needed additional space for its expanding program, particularly in a central campus location. Thus, a marriage of convenience was born. In the midst of planning and repurposing space in the Gorgas Library, a new VP-CIO arrived with a vision to expand the services available in this space. Needing a similarly sized space to institute an Access Grid node on campus, he recommended that we build out the room appropriately to add this capacity. This presentation will focus on the planning, specifications, implementation, and collaboration pay-off in other similar projects underway.

Collaborating In The Cloud
Robin M. Hastings (Missouri River Regional Library)

This presentation will discuss the ways in which libraries can use free accounts at various social networking sites (like Facebook, Twitter and Flickr) and social groupware sites (like Gr.ou.ps or Google Docs & Spreadsheets) to work collaboratively with others.
either in their libraries or around the world. A number of services will be profiled and examples of real-world applications will be highlighted in the presentation.

Cultivating Digital Collections: Enabling Discovery with OAI Harvesting at the University of Nebraska-Lincoln
Rice Majors (Innovative Interfaces, Inc.) and DeeAnn Allison (University of Nebraska-Lincoln)

As libraries move through a digital transition, it’s important to increase both intentional and serendipitous discovery of these resources rather than leaving them isolated in data silos. Several parallel digital projects at the University of Nebraska-Lincoln have differing management needs and are thus in different databases: an enterprise-level institutional repository, a digital media project, special collections finding aids, and full-text treatments at The Center for Digital Research in the Humanities.

Promoting the use of these resources through OAI-compliant harvesting is an essential component to discoverability. Libraries cannot assume that users will begin searching with the library’s WebPac “front door,” let alone with each individual database. Harvesting allows the library to promote local use of all of its collections – print and digital – through a unified search experience. Leveraging a discovery services platform (Encore), the library is able to allow patrons to search against its entire portfolio of collections, whether built on MARC (traditional catalog data) or on XML-based schema (Dublin Core, EAD, TEI, etc.) using modern web discovery features like faceted searching. Leveraging the knowledge of local users via tagging also adds value to the formal metadata of these digital resources and facilitates future discovery.

Data Driven by Design: Using IESR to Map a Service Oriented Architecture at the LANL Research Library
Krista D. Black and Beth Goldsmith (Los Alamos National Laboratory)

Web Services. Service Oriented Architecture. Open Source. Standards and protocols. These terms are important to the information science community, including the developers at the Los Alamos National Laboratory Research Library. The concepts listed represent the ideals of simplicity, sustainability, interoperability, and modularity; and are the cornerstones of development for the Research Library. However, the reality of implementation often is a far cry from the ideals of theory.

In 2006, the Research Library began a bold design to replace its aging search and discovery tool, SearchPlus, which was a locally developed legacy system. This system could not scale to the size of the Library’s collection and was increasingly difficult to support, maintain, and improve. Drivers for the replacement system ranged from security to data scalability to specialized needs for data processing and analysis. Ideals and goals centered on the use of standards, protocols, and easily supportable open source software. What emerged from the design process was a service oriented architecture - a Web 2.0 solution - to support the research needs of the library’s customers.

The new system, called OPPIE, was envisioned as a management service to provide access to the Library’s collections and search and collaboration tools and was architected to be a foundation for the exposure and deployment of continually evolving
and developed services and collections. As such, OPPIE was designed to be agnostic to the services and collections that it makes available to customers, with the intent that available content (services and collections) would drive the users' interactions with the system and that new content could be seamlessly added to the system simply by identifying them to OPPIE.

To accomplish this, a roadmap was required, and the JISC Information Environment Service Registry (IESR) was selected to fill that role. Developed to provide a central source of information about electronic resources and the ways they can be accessed, the IESR schema neatly supports the needs of defining digital library resources. However, while ESBs and BPELs are familiar jargon and architectures in the world of business and while IESR was in use in some library registry projects (most notably perhaps being OCKHAM), real-world implementations of IESR to define and expose collections and services to a library service bus were not prevalent in 2006-2007, leaving the development team to explore new territory.

In this talk, we will discuss the services that make up the OPPIE architecture, the implementation of IESR to define and make available resources to OPPIE, and lessons learned along the way.

**Designing Library Services for the Cloud Computing World**
*Ken Fujiuchi (Buffalo State College) and Kathryn Frederick (Skidmore College)*

Cloud computing represents a fundamental shift in how we store and access data. Moving away from local storage of data and local installation of applications presents unique challenges and opportunities for libraries. This presentation will present an overview of cloud computing, discuss the effect it will have on library staff and patrons, and demonstrate practical techniques that librarians can use to provide their services through cloud computing.

**eXtensible Catalog - Unifying Access to Library Resources**
*David Lindahl (University of Rochester)*

The eXtensible Catalog (XC) Project is developing software to facilitate the discovery of both digital and non-digital library resources on the web. The software will integrate with (not replace) commercial and open-source ILSs and repositories. Compatibility with specific systems will be discussed, and toolkits will be provided that will enable any repository to be exposed through standard OAI-PMH and NCIP interfaces. XC will provide set of next-generation user interfaces with faceted browsing and integrated with content management and learning management systems. Metadata services are at the center of the XC architecture. These services enable an institution to clean-up and aggregate metadata, FRBRize records and transform between schemas. In addition to the included services, the XC plug-in architecture will allow other libraries to build and share metadata services. The software will be released in 2009 under an open-source license. This presentation will include a demonstration of the software and an overview of the architecture and features. [http://eXtensibleCatalog.org](http://eXtensibleCatalog.org)

**From U-SKIS to USpace: Creating and Using an IR Workflow Tool**
*Anne Morrow and Lisa Marie Chaufy (University of Utah)*
In 2005 the University of Utah Libraries began collaborating on the development of an institutional repository, USpace; we faced a series of challenges from building effective outreach initiatives to creating scalable workflows. While we are still developing in terms of integrating the IR into the collective psyche of the library and campus, we have successfully created a scalable workflow tool. The University Scholarly Knowledge Inventory System (U-SKIS) provides workspace for institutional repository staff. The system tracks an item and/or citation from initial ingest through the permissions and acquisitions process until it becomes fully prepared for IR inclusion. U-SKIS follows the Dublin Core standard to apply metadata, which are then re-used once the item is ready to be added to the repository. System administrators utilize either an FTP (or, in the future, HTTP/HTTPS) to send files and metadata to the repository’s content management software.

The University of Utah Libraries have been using U-SKIS since July 2007. IR coordinators and staff have added over 5900 items and 600 publishers. Approximately 900 articles have been uploaded to USpace via U-SKIS. Another 4200 items are eligible once publisher requirements have been met. U-SKIS ver.1 was fully completed in December 2007 and added to Sourceforge.net in February 2008. Since then, there have been 190 downloads of U-SKIS code from Sourceforge. The Libraries of Claremont Colleges have fully implemented U-SKIS as part of their IR work. Another digital collection at the University of Utah, Western Soundscape, has customized U-SKIS to suit its needs. Currently being developed is U-SKIS ver. 2 which includes uploading via HTTP/HTTPS.

**Green IT: Eco-sense and Eco-Savings for Library Systems and Services in the 21st Century**  
*Maurice York (North Carolina State University at Raleigh)*

The case for Green IT is compelling. John Holdren, President Obama's Director of the White House Office of Science and Technology Policy, has forcefully highlighted the serious implications of the global climate crisis over the next several decades. Information Communication Technologies (ICT) form a relatively small percentage of global carbon dioxide output, but research indicates that efficiencies in IT can drive efficiencies and savings throughout the enterprise. The importance of addressing the environmental impact of ICT is so critical that in 2008, Gartner rated Green IT as the number one issue for the IT industry as a whole. In short, Green IT is at the heart of an effective strategy to stimulate reductions many times its weight in carbon.

Considering that a single server outputs as much carbon in a single year as an SUV that gets 15 miles to the gallon, and that desktop computers alone account for 40% of global ICT carbon emissions, it's tempting to think that greening the IT enterprise boils down to better and more efficient machinery. The fact is that better efficiencies in hardware will net very little in the greater battle against climate change. In order to achieve it’s true potential for drastic reductions in carbon output, IT must take the lead in radically rethinking our approach to operations and the impact that we have on our environment. Colleges and universities, and research universities in particular, are uniquely positioned to lead the industry in the necessary changes that must play out over the next twenty years if we are going to hit the targets necessary to mitigate the effects of climate change. As the intellectual hub of campus, the library sits in a position to demonstrate the best practices and cost savings that can spark a change in thinking in the right direction. Whether the library manages a few desktops or 800, a handful of servers or an
enterprise data center, every one of us can become advocates and examples for the kind of smart decisions and efficient management that can have sweeping global implications. Using the new Hunt Library being planned for NC State’s Centennial Campus as a basis for discussion, this presentation will explore four layers of efficiencies in Green IT--from hardware to infrastructure to virtualization to cloud computing--including practical strategies for incorporating principles of Green IT into technology planning, actively reducing the library’s carbon footprint, and saving money in the process.

If You Build It, Will They Come? How to Achieve Buy-In, Encourage Participation, and Build Successful Online Communities
Andy Peterson (Western Washington University)

Building successful online social tools takes more than just technical knowledge. Fear and misunderstanding flourishes around social computing and the thought of unmoderated content. During Western Libraries’ Learning 2.0 training exercise, nothing created as much angst as the MySpace / Facebook section. This presentation will present ways to build understanding and support for online social tools, provide some advice and information on using Drupal, and provide some techniques that were successful in building participation in Western Washington University Library's online social projects. Three different Drupal projects will be used as examples throughout the presentation.

Just keep clicking Till You Find It: Building a Library Digital Collection Interface with Browsing in Mind
Gretchen Gueguen (East Carolina University)

This session will explore how East Carolina University's Joyner Library developed an interface to their digitized special collections to facilitate user browsing. The library's digital collections contain thousands of items digitized from hundreds of collections – in some cases only one or two items are digitized from a collection. This hodge-podge approach is a result of the library's image management practices which attempt to store materials digitized on a daily basis (for patron requests, preservation concerns, publication or exhibits, etc.) into the publicly available digital repository.

As the repository was being developed, the staff of Joyner Library decided that the traditional approach to presenting digitized special collections materials as a sort of online "exhibit" where materials are selected to illustrate a theme or to systematically convert an entire collection to the digital format would not work. Instead, the staff experimented with different ways to enhance user browsing through materials. They looked to the world of commercial websites, next generation catalog interfaces, and social networking sites to develop a suite of navigation tools that enhance serendipitous discovery using their own home-grown solutions that are built on top of an SQL database and an XML database. The final collection interface includes: broad thematic "collections", "tag cloud"-style navigation, and a faceted-browsing refinement tool, all developed from cataloguer-created subject headings; hyperlinked terms in item records to facilitate broadening searches; links back and forth between collection finding aids and other digital resources at the library; user commenting and tagging of resources to begin to integrate emerging folksonomies.
The session will describe the technologies and techniques used to develop these tools, examine some of the benefits and drawbacks to this approach, and discuss user feedback collected through usability testing, website statistics, and reference interaction.

**LiBerry Guides Go Mobile: Creating Usable Handheld Solutions for 21st Century Students**  
*Leslie G. Adebonojo, Kathy A. Campbell, and Mark E. Ellis (East Tennessee State University)*

According to the PEW Internet Project’s December 2007 survey, on a typical day 73% of young adults (age 18-29) use their cell phone or PDA. An informal survey of 150 East Tennessee State University students indicated they would be highly likely to use a handheld device to access course materials or library related information. Dovetailing with our student population’s desire to use their Blackberries, IPODs, and other handheld devices, the ETSU Library decided to adapt its library guides to work in the mobile handheld environment. The library uses LibGuides, an application for producing webpages, which are linked to ETSU’s online course management system Desire2Learn (D2L). A link to the library homepage already exists on every D2L course site. The decision to go mobile not only determines the content but how a librarian customizes a subject guide to be embedded in a course’s D2L site, builds subject guides for the library’s webpages, or produces individual guides for researchers. These mobile subject guides include text and links to online materials such as the online catalog, e-books, databases, Internet sites, bibliographic style guides, and advice on database selection. Librarians have to be prepared to tailor subject guides based on the capacity of the devises currently being used by their clients; one size doesn’t fit all.

**Libraries and Mobile Devices: Public Policy Considerations**  
*Timothy Vollmer (American Library Association Office for Information Technology Policy)*

OITP will host a panel discussion on the public policy issues surrounding the use of mobile technologies within library services. Panelists will explore the potential benefits offered by mobile technologies in serving existing library users better and serving new types of users altogether. Presentation will outline the challenges posed by mobile devices, including issues of copyright and content licensing, privacy, network security, bandwidth planning, and access concerns involving interoperability standards and DRM.

**Libraries To Go**  
*Kristine Ferry, Lisa Sibert, and Holly Tomren (University of California, Irvine)*

Students and faculty are always on the go. Our collections and services need to be available to them when and where they need them. The presenters will address the special challenges involved in providing library content and services to mobile users in this big picture presentation. The topics will range from offering an entire library experience to your mobile users to potential best practices for cataloging electronic resources specific to mobile devices. Other topics include IT issues, collection development trends, licensing issues and gathering usage statistics. We will discuss some discovery tools available, such as mobile-friendly OPACs, union catalogs, library web pages and subject guides. We will also broach the impacts of these issues, and consider ways in which the library can best position itself for the mobile revolution.
LibX 2.0 - A Community Platform for Developing Library Services
Annette Bailey (Virginia Tech)

LibX (http://libx.org) is a popular browser plugin for Firefox and Internet Explorer that has been adopted and customized by hundreds of libraries. Through its intuitive configuration interface, the Edition Builder, LibX editions can be freely created and customized by anyone. The LibX plugin gives libraries a presence on web pages to which they would not have access otherwise, allowing them to contextualize those web pages in a manner that is useful to and relevant for their users. As libraries compete with other online resources, extending the library's presence onto those sites becomes crucial. LibX 2.0 will provide a community platform for the development, sharing, and deployment of applications that will facilitate this presence.

This presentation will give an overview of the new LibX 2.0 infrastructure. LibX 2.0 is all about getting the library community involved in creating the services that their users need. LibX 2.0 applications are called LibApps, which can be included in a LibX edition and made available for other libraries to use. For example, a LibApp could embed a tutorial a librarian has created for searching a database directly into the website for that database. Another example may be notifying library users when they are visiting the IMDB movie site that the movie they are reading about is available at their library, or to suggest related movies available for borrowing. LibApps can use web services to display up-to-date holdings and availability information as well.

LibApps are made from smaller building blocks called Modules. Just like the LibX Edition Builder allows librarians to create LibX editions without needing to know programming, LibX 2.0 will enable our community to create and share LibApps.

Newspaper Discovery Made Easier with Solr
Kathryn Jessica Alverson (New York University)

Increasingly, researchers need to examine newspapers as primary historical documents. While OpenURL technologies have made it easier for researchers to conduct known-item searches for full-text newspapers, they do not assist the user in the discovery and identification of relevant newspapers. This session will explain how New York University Libraries harnessed the faceting technology of Solr (an open source search server) and vendor-supplied title lists to create a newspaper database that allows users to search and discover newspapers by publication location, time period, and language.

Next-Gen Catalog is Half the Solution: Making eResources Truly Accessible
Andrew Nagy (Serials Solutions)

For many years, libraries have been dreaming about a simple, easy, fast search solution that incorporates ideas from Google and Amazon by unifying all of the resources into a single repository. Current solutions for managing access to resources in the library only offer a very lengthy listing of resources. This talk will discuss how library discovery applications can go beyond the local library holdings and beyond federated search to offer a single Google like search service across all local and subscription resources. It will also introduce an API that will enable new innovations for integrating your library resources in the user applications and the library’s web environment.
Open and Safe: Securing Linux in the Library
Eric P. Delozier (Penn State Harrisburg)

The connection between open source software, especially the Linux operating system, and libraries is not a new concept. In fact, there is an abundance of library literature describing the advantages of Linux as both a server and desktop platform. These include, but are not limited to: portability, cost, community support, liberal licensing, and application (software) variety. Security is also cited as an advantage, but only in a superficial manner. Furthermore, while Linux, in general, was developed from the ground up to be secure, the installation procedures adopted by many popular distributions can leave it open to vulnerabilities, especially in a library environment. This discussion identifies those vulnerabilities and provides preventive measures for securing Linux in the library. Although both local and network security will be addressed, more attention will be given to the former rather than the latter.

Putting the School Librarian Back in the Digital Library
M Brooke Robertshaw, Andrew Walker, and Heather Leary (Utah State University)

Rapid technological innovations offer a wealth of potential for transforming education, in particular with regard to helping support the development of critical 21st century teaching and learning skills (Computing Research Association, 2005). For school librarians these skills include effectively finding, sharing, and teaching with the vast wealth of high-quality online learning resources increasingly available on the Internet, and the emerging cyber-infrastructure for education.

In the context of a 9-year research project, largely funded by the National Science Foundation (NSF), we have developed simple Internet-based tools to help school librarians and teachers better design and share classroom activities that use high-quality online learning resources, especially those housed in digital libraries. We have also developed an accompanying professional development (PD) program for K-12 teachers and the school librarians that serve them. This proposal describes the NSDL, our software tools, professional development, and our experiences working with school librarians over the past 4 years.

Putting your Library on a Mobile Phone—It's More than Screen Size
Cindy Cunningham (OCLC)

Offering library-based information in a mobile environment is not about exporting your OPAC onto a mobile phone, and there is much more to the user experience than screen real estate. Learn about what mobile library access is really about and how to create an optimal user experience.

Real Life Experiences with Library APIs
Bruce Washburn (OCLC)

Have you wondered just what an API is, and what it would mean to use one? Are you thinking of investing effort into building new systems that rely on APIs, or enhancing an existing service with API-provided data? Bruce Washburn will describe the APIs offered by OCLC, and how these are built to support production-level services, global availability, new markets, and web scale activity. Then, Karen Coombs of the University of Houston will discuss the evolution of the Library’s use of APIs offered by OCLC in
combination with other APIs and the role these currently play in extending information access for the UH community.

Releasing Open Source at the Library of Congress
Leslie Johnston (Library of Congress)

The Library of Congress supports the use of open source software in its initiatives, from software development tools to technologies used in its web sites. In late 2008 the Library of Congress for the first time released its own open source software. Three utilities—the Parallel Retriever, the Bag Validator, and Veriflyt—were released on SourceForge, the technology community’s hub for open source software distribution and services, under the “Library of Congress Transfer Tools” project. The tools support validation and transfer of data that conforms to the BagIt specification. The Library plans to release additional tools as part of a suite of solutions and software development resources as they are completed over time. This presentation will provide an overview of the issues involved in developing, releasing, building a community around, and supporting open source software, based on the experiences of this project.

Scratching the Surface at the UNR Knowledge Center
Will Kurt (University of Nevada - Reno)

The University of Nevada, Reno Library recently purchased 3 Microsoft Surface units for its new Knowledge Center. The Microsoft Surface is a touch interactive computer that enables library users to interact with media and information in new and exciting ways. The library is developing custom applications for the Surface, including an interactive tool with which Anatomy and Physiology students explore digital content and images triggered when “body parts” circulated from reserves are sensed on the surface. Future library oriented projects include creating tools for browsing materials and displaying information from the library collection. In addition to development of library applications, the MS Surface’s Virtual World has been modified to display information about the UNR campus and the photo collection is highlighting photos by campus photographers. Aside from its technical merits the purchase of the Surface has also caused a stir of community interest in Knowledge Center. We are working with 6 students from the Computer Science department to assist them in developing applications for the Surface. One gaming application is already in draft for review and other projects are under way. Faculty, students and other valuable members of the UNR community frequently visit the development area – they are very excited to share their ideas about potential projects they might do in collaboration with the Library. As one of the first educational institutions to obtain Surface units, and start in-house development, we are excited to share what we have discovered.

This presentation will discuss: Basic overview of the Microsoft Surface product How this changes computing Reaction from the community Out-of-box features In-house application development for the surface at the UNR Library Brief technical overview of surface development Working with faculty and students in other departments in application development Assessment of the MS Surface as a tool for libraries UNR’s future with the Surface
Selection and Implementation of SilverStripe, an Open Source Web Content Management System
Elizabeth L. Black (Ohio State University - Main Campus)

The Ohio State University Libraries' Web site is large, including over 100,000 files at the beginning of the implementation, and the content model decentralized. In order to streamline the method by which content providers added content to the site, to facilitate a consistent design, and to ease maintenance of the site, it was determined that a content management system was needed.

This presentation will describe the requirements identified, the thorough tests of 3 different content management systems that led to the selection of SilverStripe, and the implementation of SilverStripe. This multi-year project also included a significant change to the site architecture and design based on user input gathered throughout each stage of the project.

The Future of Libraries is IT (and some people just don't get it)
Kenning Arlitsch (University of Utah) Kristin Antelman (North Carolina State University)

Libraries face a future brimming with economic, organizational, and technical challenges. It is a certainty, no longer seriously debated, that we will have to make fundamental shifts in what we do and how we do it. As IT librarians, we felt a particular sense of urgency to learn more about how we might help our own organizations move in the right directions. We conducted a study to learn about the opinions and expectations of more than 240 future leaders nominated by colleagues, and then we followed up with more than two dozen video interviews.

In this presentation we will show a short video that brings to life some of the concerns people expressed to us, and some of their good ideas about how to move forward. The survey and interviews revealed libraries' lack of investment in areas of future growth as well as continued investment in low-value functions. We heard about our inability to employ technologies more intelligently, and about our failure to develop technically-proficient staffs. We learned that most librarians hold deeply conservative views about their profession, and have been slow to react to the new technological service demands of their users. We heard that traditional organizational hierarchies and management styles thwart younger librarians' efforts to make an impact. We found that the organizational culture and management style that IT staff find productive is the same type of organization all librarians want to work in. Those are not the types of organizations that we have now. We hope this study's findings will promote organizational change, workforce development, and strategies to help lead research libraries toward a meaningful future.

The role of custom transaction log analysis in informing the design and implementation of a locally developed open source metasearch application
William H. Mischo, Elizabeth M. German, Joshua E. Bishoff, David S. Vess, and Mary C. Schlembach (University of Illinois at Urbana-Champaign)

This presentation reports on the design and implementation of custom transaction logs for Easy Search, an open source metasearch engine developed at the University of Illinois. The custom database driven transaction logs provide a much more detailed picture of user search behaviors (including clickthrough activities) and system responses.
and actions than are provided by Web server transaction logs. Through the use, detailed analysis and re-creation of the experience of a sample of user sessions captured in the custom transaction logs, we identified interesting search failures that suggested improvements in Easy Search functionality. This process informed the future development of features such as a “commonly searched terms” database that offers shortcuts to frequently used resources (e.g. JSTOR, course reserves or Nature magazine). Additionally we’ve developed persistent search algorithms for search failures that expand the query to additional databases (“dark targets”) and provide better support for the surprisingly high frequency of “known-item” searching. The system now offers suggestions based on sensible “next steps” for users: expanding/limiting queries to specific search fields; suggesting author searches for queries matching certain proper-name syntax; and suggesting other library tools (such as our Journal & Article Locator service) for queries that resemble full article citations (which we found was a common user behavior). Moreover, the expanded suggestion capabilities of Easy Search have led to the development of open search APIs and created a new avenue to expose content such as librarian-authored subject guides (LibGuides). With the changes to Easy Search, the custom transaction logs have also been modified to monitor the usefulness of the changes. The transaction log analysis also found that user information seeking behaviors in the Illinois academic gateway environments differ from results obtained in web search engine and OPAC studies with regard to types of queries, the number of terms per query, search session dynamics, and the use of search assistance techniques.

Unlocking your ILS data: Mobile access via handheld devices
Michael Doran (University of Texas at Arlington)

A handheld device (PDA or phone) can connect you to the Web, but it becomes even more valuable if you can use it to access the data in your integrated library system (ILS). This presentation will briefly touch on the current state of vendor-developed PDA/handheld ILS clients. However, the emphasis will be on how libraries can, and should, develop their own mobile clients. The presenter will describe how library systems staff can leverage the skills and knowledge they already have to create a mobile ILS client that fills their needs. Mobile design strategies and techniques will be discussed and illustrated with real-world examples of mobile ILS clients developed at the University of Texas at Arlington.

VuFind at the University of Illinois
Jenny Emanuel, Peggy Steele (University of Illinois at Urbana-Champaign), Paige Weston (Consortium of Academic and Research Libraries in Illinois)

VuFind is an open source next generation catalog interface developed by Villanova University. The Consortium of Academic and Research Libraries in Illinois (CARLI) has implemented a customized version of VuFind to overlay their current Voyager catalog. The University of Illinois at Urbana-Champaign is a CARLI member library. This presentation will cover the basics of VuFind and how Carli implemented it. We will then talk about its implementation specific to UIUC, including the product rollout, staff training, and publicity. Finally, we will discuss usability testing related to the VuFind installation and the future of next generation catalogs at UIUC.

Why Reference and Instruction Librarians Hate Federated Searching and NextGen Catalogs
User-centered research tools such as federated/meta-searching engines and NextGen catalogs are often billed by vendors as the Holy Grail in the age of Google. Perhaps this has raised our collective professional expectations of these products to an unreasonably high level, because reception of them among reference and instruction librarians can be described as lukewarm at best. The short answer for the lukewarm reception is that product expectations are built on expectations of the products that it is designed to federate. The longer answer to this question envelops these technical issues and also the dissonance between what these products purport to do and the pedagogical roles of reference and instruction staff in the library. This presentation will examine: user-centered product shortcomings: perceived or real? the role of a user-centered environment in reference and instruction; the role of reference and instruction in a user-centered environment; negotiating a comfortable space in a user-centered environment for librarians and other expert searchers User-centered tools like federated/meta-searching and NextGen catalogs are not the Holy Grail—at least not yet. They do not automatically make library patrons better searchers or researchers, but thankfully, reference and instruction librarians do. When implemented as a discovery tools, however, these tools can successfully connect patrons with subscribed online content. Even with all of their current technical shortcomings--real or perceived--federated/meta-searching engines and NextGen catalogs provide a means of presenting our hyperstructured universe, with all of its semi-secret classification schemes and codes, to our customers in a way that they not only understand, but have come to expect.