

## Kitty Bridges

### **EXPERIENCE**

#### **UNIVERSITY OF MICHIGAN, Ann Arbor, MI**

##### **IT CENTRAL SERVICES (ITCS)**

**Associate Vice President (September 2004- )**

**Executive Director (August 2002-August 2004)**

Responsible for the direction and leadership of IT Central Services, a large and complex organization supporting faculty, staff, and students in a variety of areas, including technical infrastructure and academic computing services. Responsible for managing a substantial budget made up of \$45M in recharges and \$14M in direct funding. Responsible for management of the development and operation of:

- Networking and telephone services (including legacy voice service, Voice over IP, backbone network management, Internet access, wireless, departmental network support, Network Operations Center)
  - Campus computing sites (access to hardware and software for instruction)
  - Consulting and user support (Help Desk, online consulting, documentation, training)
  - Core computing services (E-mail, file service, blog/wiki services, web application development and hosting services, production support for UM's course management system/research collaboration system CTools – UM's implementation of Sakai)
  - Infrastructure and Middleware (directory service, identity management, authentication and authorization services, federated authentication)
  - Contract services (including contract system administration, application development)
  - Services in support of research computing, including: file storage, MiLR – fiber ring to Chicago for high bandwidth connections for research, operation of a new high performance computing data center, planning for the provisioning of shared compute cycles
- Partner with IT units on campus in the ITCommons initiative, a program to bring collaboration and coordinated decision-making to the highly distributed IT community at Michigan. Through collaboration, define and develop the infrastructure and middleware needed to enable all campus units to develop appropriate computing services.
  - With campus leadership, develop strategic and tactical plans for IT services that support campus IT ambitions. Work with the Provost's Office, and academic and administrative units to design and implement IT services and programs that support faculty, student, and staff excellence in teaching, learning, and research.
  - With campus leadership, develop and implement new funding models for infrastructure and technology services.

#### **UNIVERSITY OF MICHIGAN - UNIVERSITY LIBRARY,**

**Head, Shapiro Science Library and Director, Science Libraries and Spatial/Numeric Data Services Cluster (November 1998 - August 2002)**

Responsible for the overall planning, direction and operations of the science libraries at the University of Michigan, including:

- Budgeting, staffing, and coordination of public services and technical processing;

- Collaboration with faculty, graduate students, and undergraduates in developing information services for these groups;
  - Development of innovative services in response to and anticipation of the needs of library users, including the areas of electronic access to information resources and document delivery; and,
  - Direction for the sciences cluster in the areas of information services, collection development and collection management, and information technology.
- Responsible for the leadership and direction of the Shapiro Science Library. The Shapiro Science Library supports faculty and students in the basic sciences. Its collections number about 400,000 volumes, with subscriptions to 2,000 journals (about 40% of which are also available electronically), and a collection budget of over \$2 million.
  - Responsible for coordination of the units within the cluster, including:
    - Museums Library
    - Biological Station Library
    - Faculty Exploratory, a technology training facility supporting faculty in their research and teaching
    - Map Library
    - Spatial/Numeric Data Services
  - Served as chair of the Networked Information Steering Committee, a library-wide committee that develops, coordinates, implements and rolls out electronic services for patrons.
  - Led the team evaluating library management systems. The Library chose and implemented Aleph from Ex Libris, as its LMS.

**UNIVERSITY OF MICHIGAN - MERIT NETWORK, INC., Ann Arbor, MI**

**Associate Director, National Networking and Online Services (July 1997- November 1998)**

- Led and managed the national research and development activities of Merit. This included providing support and leadership to project directors and teams with National Science Foundation funding, to the director and staff of the GateD software consortium (a major source of routing protocol software used on the Internet), and to teams creating Internet tools and services.
- Led and managed the email, Web and server hosting, training, and consulting services that Merit provides to its members (the Michigan four-year universities), affiliates (primarily colleges, K-12 schools, and libraries) and others.
- Served as the Internet2 applications lead for Merit.
- Served as a facilitator to a several month long Michigan-wide information technology summit, sponsored by the Kellogg Foundation.

**UNIVERSITY OF MICHIGAN - INFORMATION TECHNOLOGY DIVISION**

**Director, Product Development & Deployment (February 1996 - July 1997)**

- Led 10 product area managers and 200 technical and support staff in a team-based organization that developed, maintained, enhanced, contracted for and deployed new products, services, and systems supporting instruction, research, and administration. Major areas included:
  - Oversight for Client-Server Systems for primary administrative applications: financials, facilities, student systems, human resources, payroll, and development. Maintenance of legacy systems. Planning for Year 2000 compliance effort.

- Academic and General Purpose Computing: Core computing services that support the academic mission of the University. These included: Kerberos authentication; email; basic Unix services; electronic conferencing; AFS-based file service; X.500-based online directory with over 100,000 entries; dial-in service; distributed, charged-for printing; and others. A key part of this environment was the distributed accounting & billing system that allowed users to draw from an allocation to pay for these computing services.
  - Telecommunications: Telephone service (40,000 telephone circuits, 65,000 calls per day), voice mail (12,000 student, faculty, and staff subscribers), teleconferencing, data services.
  - Information Resources: Digital library collaboration (JSTOR, Making of America, MESL); creation and maintenance of Web servers, the UM Gateway (the University's front-door homepage), Gopher, and Wolverine Access (Web-based access to student systems for grades and course schedule reporting, and address updates); and Web development for University units.
  - Instructional Technology: Instructional technology assistance to faculty. Development of courseware and multimedia services. Creating and operating the New Media Center.
  - Public Access to Computing and Computing Support: Consulting help desk (over 42,000 calls per year), training (1,000 hours of regularly scheduled workshops per semester), documentation (190 pieces of documentation, all of which are available via the Web), and departmental contract services. Campus computing sites with over 1,400 publicly available machines in 15 locations. Negotiation and maintenance of over 50 software license contracts, covering several hundred software products.
- Served as member of senior management team, representing ITD and the University to internal and external groups. Served as a member of ITD's Budget Steering Team.

## **UNIVERSITY OF MICHIGAN - INFORMATION TECHNOLOGY DIVISION**

### **Director, Information Resources and Access (November 1994 - June 1995)**

- Collaborated with the School of Information and the University Library on a number of projects related to the Digital Library. These projects include:
  - Making of America (Cornell, University of Michigan). The goal of the project, funded by the Andrew Mellon Foundation, was to digitize and make monographs from the Civil War era available via the Internet. This project has 5,000 pages of texts scanned with bibliographic citations searchable in the next 18 months.
  - Museum Educational Site License Program. This project brought together 6 universities and 7 museums to digitize the images that are holdings from these museums and make them available on the Internet. Through this project, the museums and universities have explored issues of intellectual property, security, and rules for access and use of the images. The images began to be used by the universities as part of courses in Fall 1995.
  - JSTOR. Funded by the Mellon Foundation, this project began by digitizing key journals in economics and history from their inception to 1990.
  - UM Gateway. This project created the University of Michigan homepage and developed the policies and procedures for making official resources of the University available via the Internet.
- Served as a member of senior management team, representing ITD and the University to internal and external groups. Served as a member of ITD's Budget Steering Team.

## **UNIVERSITY OF MICHIGAN - INFORMATION TECHNOLOGY DIVISION**

### **Director, Future Computing Environment Project (March 1993-November 1994)**

- Coordinated a major technical development effort (30+ projects) to move the U-M campus from a mainframe-based computing environment running a 20+ year-old proprietary operating system to a distributed, standards-based computing environment. This effort included: communication to the user

community about technology and service changes; planning for new funding and pricing models; systems development; marketing; and assisting users in their use of the new services. The project also encompassed migrating users from their current computing base to the new distributed environment. The user base for these services was about 50,000 faculty, staff, and students.

The results of this project included identification/authentication, accounting/billing, email, networking, printing, statistical analysis, computation, directory services, and distributed file systems.

- Served as Senior Manager in ITD, providing the link between ITD strategic planning and the Future Computing Environment. Served as a member of the unit's Budget Working Group.

## **UNIVERSITY OF MICHIGAN - INFORMATION TECHNOLOGY DIVISION**

### **Associate Director, Consulting and Support Services (CSS) (January 1990-March 1993)**

- Negotiated a major information technology partnership between the Information Technology Division and the College of Literature, Sciences, and Arts. Directed the ITD/LSA Distributed Support and Instructional Technology Partnership. This project includes: provision of UNIX system administration in LSA departments; a program for onsite consulting & training; instructional technology initiatives for faculty; and an equipment upgrade program.
- Participated in division-wide budgeting and planning activities.
- Co-led a needs assessment project to determine the value ITD customers placed on various ITD services. The customers involved included faculty, staff, and students. Managed the preparation of questions and interviewing of over 150 customers.
- Led a major requirements gathering and strategic planning project for the College of Literature Science and Arts to determine the computing needs of teachers, researchers, and students in the humanities, social sciences, and natural sciences. Prepared a report documenting the findings.
- Participated or lead major cross-functional committees of faculty and staff. These include: MTS futures (as preparation for the move to distributed computing), software distribution, and the campus-wide Library Symposium.
- Served as Associate Director of Consulting & Support Services. Responsible for advising CSS Director, supervising Manager of Planning Group, and advising other CSS Managers. Serve as alternate at Senior Management meetings. Participated in ITD reorganization activities, mid-manager meetings, diversity training.
- During ITD reorganization, provided interim leadership for Information Center consultants, trainers, and writers. Provided interim management of facilities and equipment. (January 1990-March 1990)
- Served as Interim Manager of the CSS Communications Group (April 1990-present). Supervised staff of 11. Responsible for communication and marketing planning and implementation. Responsible for communications projects (publications review, public facilities marketing, user group review, initiatives in customer service) and assigning Communication Group staff to projects.
- Provided support, advice, and planning assistance to ITD projects (ITD planning model, fiber pricing, Housing pilot, Computing Resources on Campus review and coordination)

## **UNIVERSITY OF MICHIGAN – INFORMATION TECHNOLOGY DIVISION**

### **Systems Development Coordinator/ Systems Planner (August 1987-December 1989)**

- Provided extensive planning and consulting on systems selection, development, and implementation for schools, colleges, and other units at U of M. Consultation and planning in the areas of: Local area networking, hardware and software selection, campus-wide networking, training.
- Coordinated systems development activities for administrative systems. Served as liaison between the user department and technical programming staff. Responsible for selecting U of M groups to be represented in systems development effort, reviewing systems requirements from a corporate perspective, acquiring the appropriate resources needed to complete the project, and assisting in the implementation of completed systems. Large projects included: online purchase requisition, financial aid, online food stores requisitions.
- Led a major 9-month internal development project to determine directions for administrative end-user computing. The project, which used a 15-member end-user team from all parts of the campus, resulted in a report detailing current problems with end-user computing and recommending solutions. This White Paper became the basis for several projects, including the Data Access Project, through which administrative data was made more available via client/server systems.
- Led an internal project to plan for a new systems development methodology for the Office of Administrative Systems. The project involved: determining the type of methodology needed and selecting the methodology; coordinating the methodology with the CASE tools being evaluated and selected; producing an implementation plan that included marketing, training, and support issues; assisting management in understanding the retraining issues for staff.
- Coordinated a major local area networking project for the Business and Finance offices at the University. Worked with the Business and Finance representatives and ITD staff to facilitate the selection and implementation of a local and wide area network to serve all Business and Finance units (approximately 1500 workstations or microcomputers).
- Participated in University and Information Technology Division committees, including committees to select a relational DBMS for the University, to evaluate Ethernet over Twisted Pair products for local area networking, and to evaluate and provide support for U of M-supported local area networking products.

## **INDUSTRIAL TECHNOLOGY INSTITUTE, Ann Arbor, MI 1983-1987**

### **Manager, Database Development**

- Planned, designed, implemented, and managed a revenue-generating online information service, AMTech Information Exchange, including databases, email, and online conferencing. Managed customer service, billing, and other administrative activities associated with the online service.
- Managed and developed AMTech online databases and electronically published products in print format. Managed database development activities for ITI researchers and external clients. Developed database applications with a relational DBMS (Ingres) and a full-text DBMS (BRS/Search) on a Unix (bsd 4.2) system.
- Marketed online service and print products to manufacturing end-users and intermediaries.
- Negotiated with a software company for use of its conferencing software for AMTech Information Exchange. The contract called for royalty payments based on use of the software. Responsible for

installing the software and implementing upgrades.

- Planned and carried out a survey of 6500 Michigan automotive suppliers to determine the degree to which they have implemented advanced manufacturing technologies. Developed a database for the survey data and published reports detailing the findings.
- Supervised database development professional and support staff.

**EXXON CORP., Research & Environmental Health Div, E. Millstone, NJ**  
**Group Leader, Proprietary Information Systems (1981-1982)**

- Responsible for planning, implementation, and management of division's administrative computing services (office automation, personal databases, word- and text-processing, financial and accounting systems, and information center operations). The installed system consisted of a minicomputer and a local area network serving professional, technical, and clerical staff.
- Managed proprietary information service (indexing of correspondence and research reports and data, generation of online databases and indices, and retrieval of information on request). Oversaw implementation of ORBIT software for text retrieval of data from internal databases.
- Managed and developed internal databases, using ORBIT, Nomad, and Datapoint proprietary software.
- Coordinated training of staff on administrative computing and information management programs.
- Participated in development of information and office automation software in use by Exxon sites worldwide. Prepared software documentation.
- Supervised professional, technical, and support staff.

**EXXON CORP., Research & Environmental Health Div, E. Millstone, NJ**  
**Information Analyst (1978-1981)**

- As part of the library and information services group, coordinated and ran online database searching activities for this research division.
- Oversaw computerization of in-house literature service (indexing & abstracting of published literature and preparation & distribution of current-awareness bulletin to Exxon health professional worldwide).

**EDUCATION**

M.S. in L.S. University of North Carolina, School of Library Science, Chapel Hill, NC  
A.B. Smith College, Northampton, MA

**PUBLICATIONS/PRESENTATIONS**

Managing in a Constantly Changing Information Environment. Presentation to SI550, School of Information, University of Michigan, April 1999, April 2003, April 2004, March 2005, March 2006.

What is a Library Portal and Why Should I Care? MyLibrary at the University of Michigan.  
Presentation at a Michigan Library Association workshop, Ypsilanti Public Library, 2002.  
Presentation at a pre-conference workshop, Michigan Library Association, Lansing, November 2001.

Change Management. Presentation to SW660: Managing Projects and Organizational Change, School of Social Work, University of Michigan, July 1999.

Internet2 and Merit. Various presentations to Merit Member Campuses and to the Merit Joint Technical Staff meetings, 1997-98.

Future Computing Environment. Campus presentations on the FCE Project and distributed computing, University of Michigan, 1992-1995.

"Distributed Support & Instructional Technology - A Partnership Model". Presented at CAUSE 1992.

"Optimizing End-User Access During a Period of Transition", (co-authors: K. Dickinson, K. Dannemiller, H. Loner, R. Wilke). Presented at the 34th Annual College and University Computer Users Conference (CUMREC), May 1989.

Cooperation and Competition in the Global Economy: Report on an Online Conference, (in support of the National Science Foundation Conference on Industrial Science and Technological Innovation), Industrial Technology Institute Report 86-28, December 1986.

Michigan Automotive Suppliers: A Survey of the Industry and Its Use of Advanced Manufacturing Technologies, Industrial Technology Institute Report 1001, September 1985.

"An Integrated Online Conferencing and Database System" (co-authors: N.G. Vaupel & Gus Teschke). Presented at Online '84, November 1984. Published in Online '84 Conference Proceedings.

"Minicomputers: Their Use in Integrating Online Information and Office Systems" (co-author: B. Lawrence). Presented at National Online Meeting, New York, March 1981. Published in Proceedings of the National Online Meeting.

"Integrated Information Systems: A Case Study" (co-author: B. Lawrence). Presented at Information Utilities '81, New York, March 1981.

"Environmental Health and Toxicology: An Introduction for the Online Searcher," ONLINE 4:27-34, January 1981.

"Online Environmental Health and Toxicology Information." Presented at the New Jersey Chapter of the Special Libraries Association, October 1980.

"Online Environmental Information." Presented at the National Online Meeting, New York, 1980.

### **COMMITTEES AND AWARDS (1998-)**

University of Michigan Workplace 2005 Outstanding Leadership Award  
Association for Women in Computing (Michigan chapter): 2005 Top Michigan Women in Computing Award.  
Educause, Jane Ryland Fellowship Committee 2004-  
UM Privacy Oversight Committee 2003-  
Ann Arbor District Library, Technology Advisory Committee 2002-  
UM Digital Strategy Council 2003-2004  
UM Center for Information Technology Integration (CITI) Advisory Board 2002-2003  
UM Research Policies Committee (University committee advisory to the Vice President for Research) 2000-2003  
UM Library Collection Management and Development Council 1997- 2002

UM Library Electronic Resource Team Chairs 1999-2002  
UM Library Information Technology Planning Task Force 1999-2000  
UM Library Management System Lead Team 2001-2002  
UM Library Networked Information Steering Committee (Chair) 1998-2002