

满足用户的需要以重塑图书馆未来的工作重心

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摘要

在数字时代,技术成为驱使图书信息服务方式变化的主要力量。技术创新使图书馆有能力将信息服务随时随地传递到用户桌面。然而,技术的迅速发展也带来了意想不到的结果,并不断地挑战着图书馆。如今,全球的图书馆员都关注着许多共同的问题,其中包括:

- 随着人们对网络资源使用的增长,到图书馆的人数日益减少,图书馆如何证明其存在的价值?
- 如何通过各种渠道,了解和重新与图书馆用户建立联系?
- 面对 GOOGLE 及其他高科技信息供应商带来的竞争,图书馆如何定位?
- 图书馆如何提升在用户眼中的地位,由此向图书馆的利益相关者证明我们的价值?

为了回应这些挑战和众多的机会,香港大学图书馆自 2001 年起,开始了一系列的转变。至 2008 年的用户调查显示,图书馆职员的成绩达到前所未有的高度,在读者看来,职员的重要性与业绩之间的距离已大大缩短。本文旨在与图书馆界分享我们在转变过程中,在以下 5 个重要方面的成功经验:

- 图书馆结构重组及服务重整
- 变化管理
- 加强图书馆在大学的作用
- 发展以用户为中心的图书馆服务
- 建立适宜和具有弹性的学习环境

本文最后指出,在数字时代,图书馆必须准备由一个内向的传统结构,朝外向的以用户为中心的服务模式转变。只有这样,图书馆才能继续生存、发展并取得领先地位。

关键词: 学术图书馆 学习共享区域 变化管理 信息服务
机构重组 外展服务 图书馆设施 香港

REFOCUSING FOR THE FUTURE: MEETING USER EXPECTATIONS IN A DIGITAL AGE.

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ABSTRACT

Technology is a major driving force behind the methods used to deliver library and information services in this Digital Age. Blessed with technological innovation, libraries are empowered to capitalize on the use of technologies to deliver the information services to the desktop of users anytime, anywhere. However, libraries are also constantly challenged by the unintended consequences of these rapid technological developments. Nowadays, librarians worldwide are concerned about numerous issues, including:

- How to justify our existence despite the decrease in physical library visits as a result of increase use of digital resources through the Internet;
- How to get to know and reconnect with our users through various channels;
- What is the position of libraries facing competitions from other tech-savvy information providers, such as Google;
- What can we do to enhance our visibility in users' perception and to demonstrate our value to our stakeholders.

To respond to challenges such as these as well as to a host of opportunities, the University of Hong Kong Libraries has, since 2001, embarked on a journey of transformation. As a result, the Libraries has reached unprecedented highs in its performance from staff in its 2008 user survey, and has closed the gap between library users' views on importance of staff and their performance. The paper is intended to share our success and experience in this transformational process with focus on five critical areas:

- Restructuring and reengineering of library services
- Managing change
- Strengthening library's role in the university community
- Developing user-centered library services
- Building a congenial and flexible learning environment.

The paper concludes that in the digital age, libraries must be ready to shift from an inward, traditional structure to an outward, user-centered service mode. Only in this way can a library continue to survive, thrive and lead.

Keywords: Academic libraries, Learning, Change management, Information services, Organizational restructuring, Outreach, Facilities, Hong Kong.

BACKGROUND

The University of Hong Kong Libraries enjoys a long and distinguished history. Libraries across the globe are of course facing seismic change that does not appear to be abating, but rather approaching a dramatic crescendo. As we become embedded in the era of the “digital native” (Prensky, 2001) there is a tendency to believe that libraries are no longer relevant or at least less relevant than they previously were. This, we would argue, is true of libraries who have failed to capitalize on such changes and realign themselves to meet the rapidly changing needs of today’s users. In this paper we will outline how The University of Hong Kong Libraries strove to make itself more relevant within an environment that viewed it as complacent, traditional, non-responsive, inwardly focused and bureaucratic.

We sought to turn this perception around for a number of reasons: we wanted to reconnect with our users to more fully understand and meet their needs; we wanted to be able to demonstrate to our stakeholders that we were as relevant today as we ever were; and, we wanted to ensure that as an organization we were not only responsive to current needs but that we were readily adaptable for the future. We wanted to be, and to be seen to be, innovative, friendly and highly relevant.

RESTRUCTURING AND REENGINEERING OF LIBRARY SERVICES: PUTTING SERVICE FIRST

In 2001 a new university librarian was appointed followed by a new deputy. Upon arrival of the new librarian a number of changes happened in quick succession: technical services that had been highly decentralized to branches and departments were largely centralized; meeting structures were radically altered with a view to high levels of participation; open discussion groups for specific library functions were created; reassignments of responsibilities to the deputies; a new and ambitious strategic plan was developed. While successes had been achieved through these changes, it was felt that more was needed. In 2003 we enlisted the services of a library consultant expert who reviewed our organizational structure and delivered a report with numerous recommendations. We already knew that we had to adopt a more flexible approach in terms of both our structure and indeed attitudes. Such flexibility was seen as important due to the anticipated “increased rate of change and the high levels of uncertainty” for the future and because a flexible approach can help to minimise any negative affect caused by these two factors (Walton, 2007, 166).

The consultant commented that, despite all the changes that had been already introduced in the relatively short period of just 17 months, the Libraries remained as “a stable hierarchy with a strong vertical orientation” and with “a very strong pull toward the traditional, functionally based organization”. With an overall aim of making the Libraries a “more agile and responsive organization” we were told, among other things, that:

- Our structure should be focused on and organized around the customers and their needs rather than focused on internal functions;
- The Libraries should move away from rank and position based assignments;
- Equitable staffing distribution should be based on data rather than perceptions and history, particularly data about the effect of staffing on customers;
- Barriers to effective horizontal communication will have to be taken down;
- Supervisors and those who charge project groups hold themselves somewhat aloof from those who are actually doing the work and “bosses” should roll up their sleeves.

Following this report a series of forums and workshops were held that culminated in a special “organizational retreat” to address these issues and derive a new structure. Following on from these efforts we:

- Integrated Serials with the Acquisitions Department (to be the newly renamed Acquisition Services Department);
- Integrated Interlibrary Loans/Photocopying with Circulation Department (to be renamed Access Services Department), and;
- Fully integrated the functions performed by our East Asian Library, the Fung Ping Shan Library, into those of the Main Library.

We wanted to build an organizational structure that would be less rigid, functionally based and more flexible. We created a team structure that was largely built around 4 key areas: a Main Library Services Team; a Technical Support Services Team; a Branch Libraries Services Team, and; a Collection Development Team. In addition to these we established several other supporting teams including: the Administration Services Team; the IT in Learning Support Team; the Libraries Fund Raising and Public Relations Team; the Libraries Effectiveness Assessment Team, and; the Records Management Team.

Several of these teams, e.g. the IT in Learning Support Team, drew upon individuals from the 4 major teams and sought to draw less on hierarchy and more on expertise and interest. In a semi-formal sense, this team is reflective of a matrix type structure that the Library's management was keen to adopt.

With these changes we were able to free up several librarian positions to take on some new roles including:

- *Three subject librarians* whose charge it is to cater to the broadest of information needs of their respective faculties including liaison, representation on faculty committees, collection development, specialized reference, research assistance, in depth consultations and instruction in how to get the most out of the Libraries' information, services, and collections;
- *Information Skills/Literacy Coordinator* who not only coordinates information literacy within all the libraries but also seeks out opportunities to collaborate with other groups across campus to help teachers incorporate IT in their teaching and research.

MANAGING CHANGE AND BUILDING A SERVICE CULTURE

The process of managing these changes has been well documented elsewhere (Ferguson 2007), however underpinning all of these changes was the desire to create an overarching environment of client focused service, or, a culture of service. Our approach was loosely based around the concept of the service profit chain where there exists "relationships between profitability [and growth], customer loyalty, and employee satisfaction, loyalty, and productivity" (Heskett, et. al., 1994, 164). We undertook to develop and nurture this environment through a multi-level approach that began with the strategic and was emphasized through the operational. Strategically we did three important things:

- Developed a strategic plan that emphasised the user community and the need for a service ethic;
- Developed a set of "service standards" that did, among other things act as our articulated commitment to providing consistently high quality service as well as providing a definition of the standards of service by which the Libraries expect all staff to adhere;
- We undertook a branding exercise that resulted in the catchphrase *The University of Hong Kong Libraries. Your partner in intellectual excellence. Caring. Collaborative. Creative.* This brand was attached to the University's logo and now appears in all of the library literature, publications, stationery and web pages.

Operationally, we focused on three key areas:

- Communication was seen as paramount as we firmly believed that better communication within the Libraries and between the Libraries and its user community should result in better customer service levels. We undertook several surveys in order to assess how staff perceived communication both internally and externally and how it might be improved;
- Skills development was also seen as critical to enabling staff to feel confident in their ability to deal with a wide range of users in an increasingly demanding environment. These skills were both task oriented, eg training in various IT packages, but also skills based, eg stress management;
- Thirdly, we developed our own in-house customer service training package covering three modules ranging from the theoretical (philosophy of customer service and management's expectations of staff) to the highly practical (telephone skills, conflict resolution etc).

THE LIBRARY IN THE UNIVERSITY COMMUNITY: A FOCUS ON TEACHING AND LEARNING

In addition to functional and organizational changes we also knew that new roles beyond the library had to be adopted because "librarians require the dynamic, ruthless pursuit of new roles if they wish to survive"

(Fourie, 2004, 62) yet at the same time we were also cognisant of our need to retain “empathy, tireless dedication, commitment and a service-for-free orientation” (ibid) within our staff.

The Knowledge Team

With a renewed emphasis on the user community and a more visible presence in campus activities, the Libraries, and in particular the University Librarian, became more involved in areas of university business in which the Libraries had not traditionally participated. Most significant of these was the appointment of the Librarian as the Acting Director of IT in Learning and the Chair of the University’s Knowledge Team. Broadly speaking, “The Knowledge Team is an action group devoted to helping HKU make better informed decisions and develop better strategies for using ICT to enhance teaching and learning” (The University of Hong Kong, 2006?). More specifically, the Knowledge Team brings together interested individuals from the major groups involved in the creation, access, dissemination and management of knowledge on campus to achieve our mission by engaging in two areas of focus:

1. Discuss, describe and make recommendations about the extent to which and in what ways ICT can be integrated into our teaching and learning and about new directions and opportunities for HKU to leverage ICT to support or extend HKU's educational mission, i.e., to function as a "think-tank" and facilitate strategic planning for ICT in teaching and learning;
2. Identify challenges facing our students and teachers, and provide advice to the University’s Senior Management Team, through the Policy Group, with respect to appropriate responses, and in some cases, take necessary action (The University of Hong Kong, 2004).

Specifically, the Knowledge Team seeks to:

- Become an "area of excellence" in the development and use of learning technologies in Hong Kong, Asia, and the world;
- Foster, encourage, and support academic leadership in the planning and implementation of ICTs;
- Improve teaching and learning. We pursue IT as a means to the end of enhancing learning, teaching; and research, but not as an end in itself;
- Integrate technology throughout the curriculum to assist academics in their move toward more active, student-centred forms of learning;
- Make the enhancement and improved coordination of all levels of user support services an immediate University priority;
- Treat all students and faculty with equal care and dignity, and;
- Integrate knowledge and information resources using ICTs to create a comprehensive, easily-navigable and easily-accessible platform (The University of Hong Kong, 2004).

The Library has in total 5 representatives on this university-wide think tank, by far outweighing any other department of the university. The Knowledge Team has dealt with wide ranging issues that have provided the University with a more cohesive direction in certain areas of ICT specific to its brief. Among these has been the work of a range of task forces tackling issues topical to the University:

1. Learning Platforms. A task force surveyed the range of learning support platforms used across the university with a view to ensuring that adequate support is provided for using such platforms both technically and pedagogically.
2. Institutional IT/Knowledge Repositories. A task force of the Knowledge Team developed a discussion paper on the need for establishing an institutional repository and the resources required to ensure its sustainability. The University now has the most successful institutional repository in Hong Kong in terms of quantity.
3. Plagiarism Awareness, Detection and Deterrence. This group created web pages for both faculty and students in order to raise awareness of plagiarism, of its deceitfulness and of the University’s minimal tolerance for such activity. The group also recommended that Turnitin, plagiarism detection software, should be trialed on campus. Following the great success of the trial, Turnitin is now readily available for the entire campus to use. Administered by the Library through its network and supported across campus under the guidance of the Information Literacy Coordinator, efforts of publicity and promotion and hands on tutorials in usage have been conducted by the Library. A Turnitin@HKU resource web page was created. A reference librarian was appointed

- as Turnitin administrator, handling account requests and user training. Annual reviews of the software reveal an ever increasing uptake in usage by faculty who require students to submit assignments through Turnitin. More pleasingly, however, has been the marked decrease in the high end of word matching detected by Turnitin since its first introduction. The annual survey conducted in 2007 shows that “the software has become more widely adopted within the University community. As of 20 June 2007, there were 300 Turnitin Instructors, 13,330 registered students and 30,277 originality reports generated”. In answering “Do you think plagiarism in student assignments is a serious issue in HKU?” the score has dropped since the first survey. It perhaps indicates students’ growing awareness of intellectual property. Due to the favourable feedback received from the instructors, the university decided to continue the subscription to the software and make it available for all HKU users (The University of Hong Kong Libraries. 2007a).
4. SARS. The aim of this Task Force was to help teachers and students to sustain teaching and learning in the event of another SARS outbreak or other similar catastrophic event that might severely disrupt university activity. A SARS survey was administered to both teaching staff and students to understand their problems, if any, during the SARS outbreak in early 2003. At the same time, the survey also aimed to gauge the views from respondents on ways that the University can help in this regard.
 5. Learning Commons. Perhaps the most significant body of work to emanate from the Knowledge Team has been the planning for the new Centennial Campus’ Learning Commons. Due for completion by 2012, the Learning Commons will cover more than 6,000m² and will be the centre piece for services at the new campus. Following an extensive consultation process, the Knowledge Team developed its report “The Gathering Place: A Learning Commons for the University of Hong Kong” (The University of Hong Kong, 2006) outlining the features, facilities, services and overall ambience that staff and students want from the new learning commons.
 6. Endnote: Bibliographies made easier. To acknowledge the work of another person, one must cite and therefore build up an appropriate bibliography when writing. Without a bibliographic software, this could only be done manually. To make research and publishing easier, the Libraries, on behalf of the University, signed an Endnote site licence in September 2006 which permits all current HKU staff and students to use Endnote both on campus and on their home computer. The Endnote@HKU resource page was also created. Training guides were developed to assist users in learning the software. The training workshops run by the reference librarians are extremely popular and always in high demand. During 2006-2007, there were 56 workshops offered and more than 4,000 users have downloaded the programme in both Windows and Mac versions (The University of Hong Kong Libraries. 2007).
 7. Other areas of involvement by the Knowledge Team have been student e-Portfolio software, the University Laptop program, podcasts and blended learning.

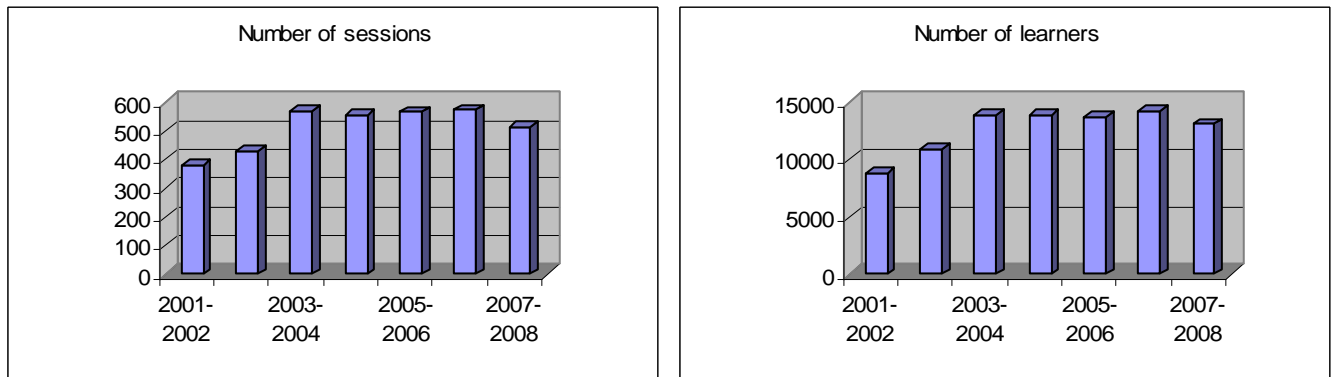
While many of these activities may seem outside the traditional range of library services for many, for others they are quite natural depending upon the university environment and culture to which they belong. For the University of Hong Kong Libraries these functions represented a radical departure from the inward, conservative and reactionary reputation that the Library had previously endured.

Information literacy training

Information literacy is defined as a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (American Library Association, 1989). It is recognized as an essential ability required in a lifelong learning society and the Libraries had been doing such instruction for quite a long time. In the Digital Age, however, the volume and complexity of information resources available is much greater than in the past. With information growth predictions that anticipate “by 2011, the digital universe will be 10 times the size it was in 2006” (IDC, 2008, 2), with evidence that today’s digital natives require special skills in information literacy (Geck, 2006) and that they may not be as technically proficient for their study purposes as was originally believed (Kennedy, et. al., 2006), greater emphasis should be placed on information literacy for today’s students (Oblinger & Hawkins, 2006). To upgrade the quality of instruction given to our user community across campus, the Libraries appointed an Information Literacy Coordinator in 2003 to oversee both the teaching pedagogy and the content that should be taught. Our reference librarians, branch librarians and subject librarians work together to provide both general and subject-specific information

literacy programs to users at different levels through teaching, demonstrations, orientation tours and the *Foundations of Information Technology* course. Online research guides and tutorials were also developed and are regularly maintained for self-directed learning.

Following the appointment of the Information Literacy Coordinator and the Subject Librarians we were able to accomplish a great deal more in the way of training students to be better information seekers and users. The following two charts highlight the rise in the number of sessions and the number of attendees participating in library training. Furthermore with the appointment of the Information Literacy Coordinator we were able to keep track of this activity across the seven libraries that make up the system. Additionally, she has been in a position to ensure that there is little or no unnecessary duplication of activity and that resources developed for one programme can be readily adapted to another when relevant. Finally her oversight of this activity has also ensured that a high degree of quality control, through student evaluations and feedback, is implemented across the entire library system, the first time that this has been undertaken.



Tables 1-2. Growth in Library Courses 2001-2008.

Research consultations

With our new subject librarians in place we embarked on a campaign to aid faculty and higher degree students to more effectively exploit the wealth of information resources, in particular electronic resources, offered through the Libraries. We extended our consultation service that was to be highly focused, personalized and interactive. The Research Consultation Service is a one-to-one advisory service offered by our librarians in specialised subjects to users for in-depth information skills pertaining to their research topics. The service aims at familiarise users with relevant resources and to cultivate their ability to undertake information research independently and effectively. The uptake of this service has been significant, although most users have been postgraduate students.

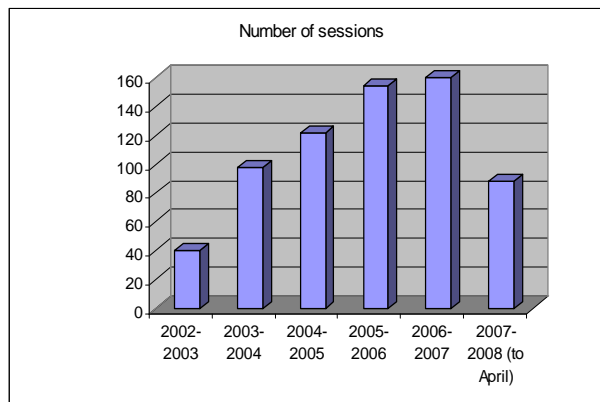


Table 3. Growth in Research Consultations 2002-2008.

DEVELOPING USER-CENTRED LIBRARY SERVICES: SUPPORTING TEACHING AND LEARNING

Apart from its active participation in the Knowledge Team and all of its associated task forces and activities, the Libraries also plays an active role in supporting university teaching and learning through an ever growing range of services aimed at helping modern day teachers and learners. With a new library structure, established service standards and a staff mindset in place, the Libraries was prepared to reengineer services to meet users' diverse expectations in a technologically-innovative environment. A series of new initiatives covering a wide range of library services were starting to be implemented. While alien to an inward-looking, traditional library, many of these initiatives are mandatory for an outward looking, user-centred, service-focused organisation.

General vs Subject-specialized

Prior to 2003, subject specific services were rendered mainly by our 5 branch libraries to the Faculties of Law, Medicine, Education, Dentistry and the Department of Music. Users from other faculties largely relied on general services provided through the Main Library. As some faculties are continuously expanding, users' demands extend beyond the limitations offered through a general service. They require a service that can address the specific and increasingly diverse needs of the staff and students in their subject disciplines. Discussions over generalist or specialist librarians are not new. However, "with the proliferation of information resources, the complexity of the information environment and what might be described as the emerging information chaos, there is a need for specialists who have a deep but broad knowledge of the generation and communication of information in particular areas" (Rodwell, 2001, 49). In addition to recognizing this growing need, the Libraries seized this as an opportunity to reconnect with our users and to further increase our visibility in the university community. Subject librarians were appointed to be responsible for the Faculties of Arts, Science and Engineering, Social Sciences, Business and Economics and Architecture. They take a proactive role in liaising with faculties. Besides working in the Libraries, they also participate in a range of faculty activities. Some serve on the Faculty Board and other Faculty Committees such as Undergraduate Curriculum Development Committees. In 2008-2009, we plan to establish a subject librarians' extension service that will enable subject librarians and reference librarians to physically go out to the faculties. With better communication, integration and collaboration, the library service will continue to evolve and become embedded into the fabric of the university's teaching and learning processes.

Current awareness

Being aware that keeping up to date with the latest publications and research is vital to teaching and learning, the Libraries has developed current awareness services that are available through various modes. In recent years, we have also been employing web 2.0 technologies to enhance these services.

- My Alerts. This service was launched in 2004 and provides alerts for weekly updates on the Libraries' newly purchased books, journals and multimedia via email. Users can access the fulltext articles of our subscribed journals, detailed book records in the library catalogue and Interlibrary Loans request service via the links provided. Further enhancements are still underway. Training on how to set up search alerts, TOC alerts and citation alerts is also incorporated into the library instruction.
- Short Message Service (SMS). This is a value-added service to the existing email alert services. Once users have registered their mobile telephone numbers with us via an e-form, they will automatically receive library circulation notices via SMS.
- Web 2.0 enhanced services. A number of subject blogs were developed and are maintained by the Collection Development Department to help keep users current with information resources and relevant news in their respective disciplines. New acquisitions lists for different subjects are developed for the current week and are kept up to three weeks at the library website. Users can subscribe to RSS feeds to have the updated content delivered to their desktops. RSS feeds are also used in delivering updates and news about training workshops on Endnote.

A renewed emphasis on access

As the cost of library materials is increasing steeply, no library can afford to purchase all resources from its

own budget. The Libraries partnered with other local and overseas libraries to develop new services that allow mutual access to their resources and facilities.

- **Interlibrary Loans.** The Libraries replaced its old paper form interlibrary loan system with OCLC's ILLiad (Interlibrary Loan Internet Access Database) in September 2002. We also introduced a new interlibrary loan quota system, where the Libraries bears all costs incurred from interlibrary loan of local and overseas resources up to a given number of items per academic year. Requests are made online and journal articles are delivered to users' email account without additional staff cost. The number of loans and borrowing has steadily increased over these years.

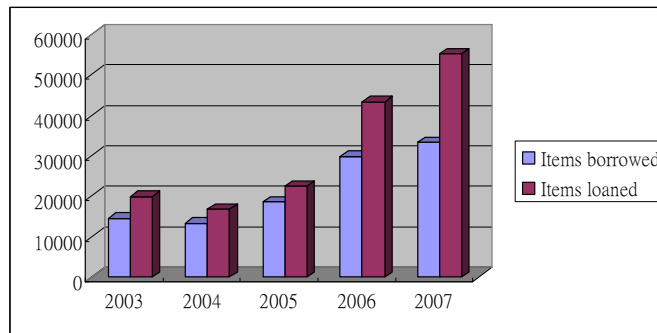


Table 4. Interlibrary Loan Transactions 2002-2007.

- **Center for Research Libraries (CRL).** We became the first overseas member of the CRL's Global Member programme that enables institutions outside of North America to access the Center materials. These critical resources are now available through interlibrary loan for research & teaching in the humanities, sciences & social sciences and consist of more than 4 million volumes from almost 200 North American academic and research libraries.
- **HKALL.** HKALL is a union catalogue allowing the students and staff of the eight partner institutions in Hong Kong to search a mega collection of over 5 million titles of monographs held in the eight participating libraries. They can make direct requests on these materials, and have the materials delivered to the libraries of their respective institutions. In the event that certain restricted materials are not available via HKALL, eligible users can pay a visit to the holding libraries and use them on site.

Delivering services across campuses

HKU Libraries is composed of a Main Library and 5 distinct branch libraries, among which two are off the main campus. In addition, there is a remote storage facility that is away from all library service points. To facilitate access to the resources in these locations, we introduced two new online document delivery services:

- **Interbranch Delivery and Return.** A library borrower can submit an online request for books available in another campus. The requested item will be transferred to a specified library location for pick-up. Books with normal loan period borrowed from one library can also be returned to another library. This service saves users' traveling time and expenses.
- **Remote Storage Collection Request.** This allows users to submit online requests for books and journals held in Hing Wai, our remote storage facility. Copies of journal articles are scanned in PDF and placed on a Web server for users to retrieve.

Remote and wireless access

To meet the users' needs for information anywhere, anytime, the Libraries makes its resources available to eligible users through remote access. User authentication is made through the EZProxy server which requires a Library Account. EZProxy avoids any extra configuration from the end-user's desktop. In January 2006, the Libraries further streamlined the log in procedures and adopted a single sign-on for the University Portal, email account, and for all the Libraries' online services. This change has made life easier

with fewer logins to remember. To allow users to surf the web without using network cables, the Libraries has also installed wireless hotspots in the reading areas of the HKU Libraries.

Going digital

HKU Libraries as a depository library of Hong Kong publications has the world's most reputable Hong Kong collections. Because of their archival nature, all HK materials are for library use only. Because of this, users find access inconvenient when doing research. The *HKUL Digital Initiatives* are a host of digitization projects developed by the Libraries in order to open up online access to local collections originally only available in print format. Since its first database, ExamBase, was launched in 1996, other projects of scholarly interest have been progressively introduced. Through these projects, many rare or unique materials are now accessible worldwide. More digital projects are being developed to provide continuous access to digital content and services and the Library is now piloting a collaborative project with an international vendor to provide commercial print on demand access to some of its unique content.

One-stop searching

The Libraries purchased Metafind, a universal search interface that allows one-stop searching of, and access to, multiple resources including the library catalogue, full-text databases, indexes and abstracts, as well as Internet resources. In 2008, Metafind will be replaced by Research Pro, an enhanced search engine which will provide users with a more efficient and effective way to discover relevant resources.

Customized and personalized services

Personalized library services is defined as "a user-driven, customizable information service" that allows the user "to create a portable Web page listing information resources available from" their home library (Morgan, 1999). My Library is such a personalized webpage portal that we launched in November 2002. Once a user sets up his subject profile, he can customize the pre-defined page to include his favourite resources. My Library also provides links to other related services. A user can recommend books online, view his circulation record, ask reference questions, set up MyAlets and check new acquisitions lists in subject areas of interest.

Research consultation services

The previously mentioned Research Consultation Service which is an individual and specialized information skills training service geared to the research community. Its uptake has been significant, reflecting the growing difficulties that researchers face when confronting the growing myriad of information resources in both print and digital formats.

Library 2.0 and user-generated content

Library 2.0 evolves from Web 2.0 and its applications in libraries. There is no single definition about Library 2.0. According to Maness (2006), a theory of library 2.0 has four essential elements: user-centred; provides a multi-media experience; socially rich, and; communally innovative. Casey and Savastinuk (2006) state that Library 2.0 is a new library service model which focuses on "user-centered change", "encourages constant and purposeful change, inviting user participation in the creation of both the physical and the virtual services they want, supported by consistently evaluating services" (Casey & Savastinuk, 2006, 40). Furthermore, it "attempts to reach new users and better serve current ones through improved customer-driven offerings" (ibid). They further indicate "technology can help libraries create a customer-driven 2.0 environment", (ibid) and "any service, physical or virtual, that successfully reaches users, is evaluated frequently, and makes use of customer input" (ibid, 42) makes up a Library 2.0 service. Inspired by such a vision, HKU Libraries have been attempting to incorporate these new Library 2.0 elements into our services. Users' participation and presence are now becoming integral parts of our library services. They can be seen in the following initiatives:

- CD Blog. CD Blogs are regularly maintained by the Collection Development Librarians. For each selected discipline based blog, users are allowed to post comments and suggest new URLs. Therefore, librarians and users co-contribute to the content of the blog;
- FAQ vs Wiki@HKUL. The Libraries previously maintained a static FAQ webpage that contained a host of questions which were not even searchable. Based on the Wikipedia technology, Wiki@HKUL was launched in November 2007 and is the fully searchable knowledgebase to the HKU Libraries. It serves as a quick way for users to know more about the library. The initial

content of this knowledgebase has been drawn from the Libraries' FAQ enriched with user enquiries handled in the past. It aims to become a platform for sharing information about HKU Libraries as well as users' experience in information searching. Users are encouraged to log in, create new pages or edit the exiting pages pertaining to information searching;

- OPAC vs personalized social network interface. Social networking applications are enjoying massive popularity in Web 2.0 technology. Users utilise them not only for social activities, but also for sharing information. Dragon, the library catalogue, has evolved from a traditional online catalogue which serves as an inventory of local library holdings into a dynamic information networking hub. By clicking on the image of a book jacket, users can go to Amazon.com to find more information including reviews on this book. They are able to contribute their own reviews, interact with other customers and enjoy a wide range of services available at Amazon.com. Recently, the Libraries has incorporated AddThis into the OPAC interface which enables users to bookmark and share a library item via a range of social networking software, including MySpace, Facebook, Favorites, Del.cio.us, etc. We are now in the process of implementing a fully integrated, next-generation OPAC which will have an increasingly self-intuitive interface with additional 2.0 functionality including users' reviews and seamless connectivity between Internet resources and library subscribed/licensed/purchased content.

Other Library 2.0 enhanced services such as delivering reference services via instant messaging are also under consideration.

DEVELOPING A USER-CENTRED PHYSICAL ENVIRONMENT

In this digital age, as libraries are making great efforts to deliver information services to users' desktops, they are also facing a serious dilemma: fewer users are physically visiting libraries as a response to the unprecedented development of technological innovations and as the traditional library as a physical space has less to offer today's students. How can libraries continue to justify their occupation of physical space in this climate? Comprehensive factors that are shaping the library as a space are well analyzed by Bazillion and Braun (2001) in their book *Academic Libraries as High-Tech Gateways*. They point out that, in responding to rapid technological change, library buildings need to be "flexible enough to accommodate a future governed by information technology" (Bazillion & Braun, 2001, 1). The ubiquitous presence of the Internet, growth of electronic publishing and proliferation of online scholarly journals are the developments that will "affect the physical and intellectual structure of library buildings in decades ahead" (ibid, 1). The development of collaborative learning requires that new buildings must "accommodate group studies, electronic classrooms, 'information galleries' and space for faculty to create Web-enhanced courses" (ibid, 2). The concept of the "library as place" was also recently reviewed in a report published in 2005 by the Council on Library and Information Resources entitled *The Library as Place: Rethinking Roles, Rethinking Space* (Bennett, et. al., 2005). It is easy to agree that "given Bennett's view of the *library* as a learning place, preconceived, flexible *planning* based on students' learning needs is required if librarians are to achieve the redefined role as the heart of the campus" (Kocevar-Weidinger, Kinman & McCaslin, 2007, 29). A survey at a college library shows (Demas, 2005) that users still come to the library for a range of activities traditionally associated with academic libraries, including reading, studying, doing research, creating papers and presentations and using individual study carrels. As lecturers increasingly set assessment based on group work, demand for large group study areas is increasing. Meanwhile, students also want to enjoy non-traditional uses of libraries in today's environment. Such uses may include relaxing in quiet privacy, using other academic support services, meeting and socializing, eating and drinking, participating in cultural events and having fun. Users' perceptions of libraries have enormous implications on library space and facility planning and many libraries are today responding to these implications and building more diverse physical spaces.

Knowledge Navigation Centre

This is our campus gateway to the global information network. It was developed in response to the emerging information technologies and the University's vision for a digital campus. It is the hub where students and faculty can integrate learning, research, printing, and digital publishing in one convenient place. Users can take advantage of the latest hardware and software to explore the world of information

and create their presentations. While the Centre was quite innovative for the period when it was constructed, it will soon further evolve into an extensive learning commons after an extensive renovation of the Main Library currently in the planning.

Student Learning Centre

Recognising that students' learning habits are varied and markedly different from a decade ago, we refurbished some former staff offices and made them into a 24 hour access envelope that is attached to the Main Library but is also easily sealed off. Since its inception in 2004, the popularity of this service has escalated with regular feedback asking that we create an even bigger space.

Single study carrels

Currently, there are 37 single study carrels in the Main Library, out of which 36 are provided for postgraduate students for a 1-month loan. One is for 3-hour short loan for all library borrowers. Demand for single carrels is always high. Winners are randomly drawn from the pool of applicants. Users are able to connect their laptop via wireless or network nodes provided inside the rooms.

Group study facilities

Several group study facilities are available. There are six audio-visual group viewing rooms. Each room can accommodate 3-8 users. In the 24-hour access Student Learning Centre, users can also find both single study tables and large tables for group discussion.

Leisure reading area

Recognising that students and teachers have diverse reading needs that extend beyond the academic, we expanded our Leisure reading area in 2006. This service hosts a collection of bestsellers, fiction, light and easy reading and recreational books. Around the area, comfortable sofas were added to create a quiet and relaxing environment for users.

Food prohibited vs Food tolerant

It is our hope that the Libraries can provide a comfortable environment for study, research, and intellectual discovery. Although it is true that a clean and pest free environment is good for library preservation, we also recognize that being able to eat and drink while working allows users to make better use of their time. The 24 hour access Student Learning Centre opened in September 2004 is the first place in the Libraries that allows food and drinks. In addition to the drinks and snacks vending machines, a drinking fountain was also installed. The Libraries food and drink policy has further been relaxed in the Main Library on a 6 month trial basis. From July 2008, food is allowed in more designated areas. Users however are required to take care of the library by being considerate of the facilities and your fellow users.

Renovation of Main Library

In addition to the previously mentioned learning commons planned for our Centennial Campus, the Main Library is now planning for an extensive makeover of its entire ground floor and part of its 1st floor in order to accommodate a wider variety of learning spaces in keeping with the university community needs as identified by the Knowledge Team.

DISCUSSION

The University of Hong Kong Libraries has enjoyed a longstanding international reputation for its extensive collections in both Western and Asian languages. With a new management and management style taking charge from 2001, the Libraries has refocused from a primarily inward looking organization to one that is more geared towards being a key player in campus activities, particularly those supporting the innovative use of IT in teaching and learning. It has also responded to shifting demands and trends in user behaviour by adopting a more client centred approach to service and through the innovative use of technologies to not only respond to, but to anticipate these trends. New and innovative services have been complemented by a remodeling of physical library spaces that have been adopted, or soon will be. Students today need to work in a variety of learning spaces that support group work; problem based learning work as well as individual and reflective study. Libraries need to embrace a flexible attitude to delivering such physical spaces.

To what degree have these changes been successful? Since 2003, the Libraries has conducted biannual user surveys that have enabled us to track our performance against a fixed set of criteria. Our survey follows a format based on a gap analysis approach as exemplified in the SERVQUAL methodology (Parasuraman, Zeithaml and Berry, 1988) and the Association of Research Libraries' LibQUAL+TM (Association of Research Libraries, 2008). On a Likert scale of 1 to 5, users are asked to first rate the degree to which they attribute *importance* to the subject and secondly the degree to which they perceive the Libraries' current *performance*. The resulting gap between the two highlights the degree to which the Library is exceeding expectations (+ve result) or the degree to which the Library is falling short of expectation (-ve result). A selection of results from the past three surveys is reproduced in the Appendix. While only selective, these results tend to show that in at least the categories provided, the Libraries have progressively narrowed the gap between the importance users place on our range of services and their rating on our performance in these same areas.

CONCLUSION

While survey results provide us with a sense of satisfaction and belief that what we are doing is enjoying some success, we cannot take these to mean our task is completed. Like other academic libraries we must continuously reassess what it is we do and why we do these things. We need to take action to improve ourselves. We need to provide a rich environment for all of our users in terms of, not only the scholarly resources but, the physical environment and indeed the virtual environment where so many of our users now regularly inhabit. We need to remain vigilant to any creeping complacency and never believe that we do not need to prove ourselves to our stakeholders. We must remain relevant in an information world that is evolving at an increasingly faster pace that makes many of our staff feel uncomfortable. We need to continually refocus in order to put our users' needs ahead of our own. Only then can we demonstrate our true value.

APPENDIX: BIENNIAL LIBRARY USER SURVEYS: 2003-2008

Mean gaps between importance and performance

Question	2003/04			2005/06			2007/08		
	Mean Importance	Mean Performance	Mean Gap	Mean Importance	Mean Performance	Mean Gap	Mean Importance	Mean Performance	Mean Gap
Books in your discipline	4.55	3.72	0.84	4.62	3.82	0.80	4.52	3.89	0.63
Ease of use (of electronic resources)	4.36	3.67	0.71	4.39	3.79	0.60	4.38	3.81	0.56
Ease of locating electronic resources	4.34	3.66	0.706	4.40	3.74	0.66	4.36	3.81	0.55
Electronic databases/Electronic resources	4.23	3.68	0.551	4.34	3.80	0.54	4.31	3.78	0.53
Dragon (HKUL Catalogue) provides clear and useful information	4.54	3.99	0.56	4.57	4.07	0.50	4.51	4.05	0.46
Noise level in general study areas				4.49	3.73	0.76	4.28	3.84	0.44
Journals in your discipline	4.26	3.68	0.59	4.38	3.83	0.55	4.26	3.87	0.4
Recommended materials are purchased and processed rapidly for inclusion in the collection	4.11	3.46	0.667	4.12	3.58	0.54	4.01	3.61	0.4
Prompt action is taken regarding missing books & journals	3.96	3.31	0.673	3.96	3.42	0.54	3.86	3.49	0.37
Books & journals are reshelfed quickly	4.15	3.62	0.546	4.17	3.72	0.45	4.04	3.78	0.26
Discussion Rooms/Areas				3.92	3.63	0.29	3.86	3.71	0.15
Library staff are knowledgeable and answer enquiries accurately and clearly	4.23	3.99	0.253	4.24	4.00	0.24	4.21	4.08	0.13

Question	2003/04			2005/06			2007/08		
	Mean Importance	Mean Performance	Mean Gap	Mean Importance	Mean Performance	Mean Gap	Mean Importance	Mean Performance	Mean Gap
InterLibrary Loan requests are followed through	3.94	3.64	0.324	4.00	3.82	0.18	4.01	3.91	0.11
Library staff are readily available to provide assistance and respond in a timely manner	4.24	4.04	0.209	4.22	4.04	0.18	4.22	4.13	0.09
Assistance from librarians	3.92	3.8	0.13	4.01	3.87	0.14	3.95	3.89	0.06
Items from remote storage and off campus branch libraries/Main Library are delivered in a timely manner				3.87	3.74	0.13	3.83	3.79	0.04
Library staff are polite and friendly	4.14	4.06	0.084	4.18	4.06	0.12	4.17	4.14	0.03
Being alerted to new electronic resources by bulk email, Focus (newsletter), e-alert, blogs, etc.	3.43	3.65	-0.21	3.62	3.78	-0.16	3.63	3.62	0.01
Library printed/online guides	3.54	3.49	0.073	3.57	3.62	-0.05	3.62	3.64	-0.02
Audio-visual materials	3.42	3.37	0.075	3.63	3.52	0.11	3.57	3.61	-0.04
Library user education (courses/workshops/orientation)	3.34	3.59	-0.22	3.49	3.76	-0.27	3.55	3.74	-0.19
Library orientation/ courses/ workshops meet my needs	3.4	3.57	-0.16	3.44	3.72	-0.28	3.5	3.71	-0.21

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