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FORWARD WITH IMAGINATION: INNOVATIVE LIBRARY CLIENT SERVICES FOR THE 21ST CENTURY

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Fostering and facilitating innovation, the intelligent use of knowledge and an internal enterprise culture which embraces change are critical issues for universities and their libraries. In considering innovation in academic libraries, this paper has three parts. The first explores the definition and nature of innovation and the literature relevant to academic libraries in particular. In the second part the outcomes of a search of library websites and a survey of IATUL and Australasian academic libraries are detailed. The final part reviews the issues which need to be considered by libraries seeking to be innovative and learning organizations in the 21st century.

Innovation: what is it?

The English word *innovation* derives from the Latin innovare which means to renew or alter. According the Oxford English Dictionary (OED) the senses of the 'introduction of novelties' and of 'something new introduced' may be traced as far back as the sixteenth century.

Another meaning for innovation is proposed in the OED. This has a commercial sense and is 'the action of introducing a new product into the market; a product newly brought onto the market'. Such usage is over 50 years old, and is the dominant popular understanding today.

As the managing director of the Australian company Cochlear Ltd, the pioneer of the bionic ear, stated in a lecture in April of this year, in a business context

Innovation is not just the idea. Innovation is achieved only when the idea has been transferred into an outcome which has value to the extent that people are prepared to pay for it.

In his 1997 book Implementation of organizational innovation: studies of academic and research libraries Australian library educator Peter Clayton points out that there are other definitions, with a more academic flavour, to be considered.

One is 'any idea, practice or material artefact perceived to be new by the relevant unit of adoption'.

Similarly, in their 1994 book *Information services for innovative organizations*, Maguire, Kazlauskas and Weir define innovation as

...the application in any organization of ideas new to it, whether they are embodied in products, processes, services, or in the systems of management and marketing through which the organization operates.

As Clayton comments, this kind of definition implies that

...anything that is being done for the first time in your organization is an innovation for you. Put it that way and every organization has to innovate much of the time... any organization that is not regularly doing things that it has not done before will become increasingly out of touch and irrelevant. So the implementation of innovation is not just important, it is a critical issue for organizations of all kinds.

The Literature

The copious innovation literature of the last three decades is not replete with books, or even journal articles, specific to libraries. Clayton's book, which does contain an extensive bibliography on innovation, is one laudable exception. It is complemented by his articles on organizational learning and the 'learning library'. His book is instructive, because it draws heavily on a series of case studies in academic and research libraries carried out over several years. It also assumes that libraries have much in common with other organizations in the adoption and implementation of innovation. This assumption was validated by Clayton's case study research.

The other text which is worthy of greater attention than it has possibly received is that of Maguire, Kazlauskas and Weir. Maguire, also an Australian library educator, and her colleagues have produced a book which is well endowed with quotations and bibliographic references to the importance of national and company competitiveness and the management of innovation. It explores the meaning of innovation and its importance in modern societies. The models of the innovation process used in the book all establish information flow, broadly defined, as a key component of the innovation process.

At a more pragmatic level is a recent UK Library Association publication Becoming a successful entrepreneur: a practical guide to creating an innovative information service. The preface to its fifth chapter, 'Delivering innovative services', observes that

It would be easy to devote this entire book to the ways in which new technology and libraries have come together. It is one of the paradoxes of the profession that a group of people perceived as being so traditional have been such enthusiasts for new technology.

There are some, such as Walt Crawford and Michael Gorman, who contend that the library profession has become too enthusiastic about the technology, and lost balance and perspective about its societal role and responsibility for the record of human endeavour. There are others outside the library profession, such as Clifford Stoll, Jamie McKenzie and the Technorealism movement who present a convincing case for education and society at large manifesting the same loss, and of succumbing to 'the Age of Glib' and rampant technohucksterism. Nonetheless, chapter five of *Becoming a successful entrepreneur* provides a range of UK and international examples of, often technologically driven, library innovation. These are mostly taken from public and academic libraries. It is argued that none of them 'would happen without the entrepreneurial information professional...who looks for the opportunities to develop new value from existing resources, or new resources to develop further value'.

The survey

To extend the range of examples of innovation given in *Becoming a* successful entrepreneur, a one page survey of all IATUL members, of all Australian and New Zealand University and technical and further education (Tafe) libraries was undertaken early in 2000.

A wide ranging search of websites of English language university libraries was also undertaken to identify examples of mission statements emphasising innovation, and examples of innovations themselves.

The results of such a simple survey are indicative only, and necessarily limited in terms of data. However they do convey an impression of where a fairly large number and range of academic libraries stand in relation to innovation in client services in this last year of the 20th century.

IATUL MEMBER RESPONSES (excludes Australia and New Zealand) Forty nine responses were received

Physical innovations since 1995

Annual report (several were sent with the survey responses - the most innovative is that of the University of Waterloo, Canada) Campus wide delivery of books Coffee shops (9) Color copying (3) Computer information retrieval laboratory (4) Consolidation of service points (5) Digital cameras for hire Drive by issue and return (2) Electronic scanning system (5) Fee based reservation service Integrated library, university press, copy shop, multimedia team Internet access via laptops (2) Internet reading room (browsing, email, text editing) IT Intensive Knowledge Commons Longer hours (9) More open access (5) Music listening booths Pickup of phone ordered books Second hand IT/PC sale Self check loans (20) Self service bar Seven days a week opening (4) TV sets for hire Twenty four hour opening (2) Twenty four hour PC labs (5) Twenty four hours self issue and return Wireless access by mobile users Wireless broadband information retrieval Wireless internet access

www user registration

Electronic and nonelectronic information service innovations since 1995

Aerospace and Defence Internet gateway ARIEL document delivery (5) Digital library projects (2) Digital Media Archive Electronic full text journals (19) Electronic reference service (9) Email and www document delivery (6) End user online searching via STN and DIALOG Infokiosk (3) Online self renewals/reservations (8) Opac requests from closed stack (2) Portfolio databases for scientific expertise Protected user accounts Scanner/printer for braille materials Web virtual libraries (4) Webopac (8)

Information literacy innovations since 1995

Courses in e-publishing Integrated project on curriculum and information education for civil engineering Literature review as research method National TV program 'University library on the information highway' New training sessions 'Finding quality information on the internet' Software module for postgraduate researchers Speed reading workshop Team teaching (4) Team teaching between university and library school staff Use of EU program DEDICATE (2) User education sessions (8) Web pathfinders/database guides (8)

Community access innovations since 1995

Borrowing by high school students (3) Consultancy services (5) Five per cent of use by people not members of university Free internet courses for young people PCs available for public internet use (3) Servicing of libraries of national research institute Technical periodicals article index sold on CD-ROM or as web product

Library cooperation innovations since 1995

CALICO bringing together resources of 5 tertiary libraries Conference organization Consortial licensing/purchasing projects/publisher negotiation (14) Electronic document delivery service Electronic interlibrary loans Electronic library cooperation Electronic registration of reciprocal borrowers (5) ELMET (Estonian) consortium for shared LIMS Conspectus and Digital Library IT training to two local public libraries National subject databases Reciprocal borrowing (12) Regional subject based gateway Roquade, a highwire type publishing infrastructure Unified readers card (3)

Other innovations in client services since 1995 Full text study books on the net Integration with ICT services (2) ISO certificates of document supply and internet processes Service level agreements with all faculties TQM (3) TUT bibliography used for education purposes by university administration

Innovation specified in mission, objectives or strategic plan (10)

Staff development program facilitates innovation and enterprise culture (13)

Budget provision for innovation (5)

Australian and New Zealand responses A total of thirty nine responses were received. Twenty one were from Australian and New Zealand university libraries, and eighteen from other post secondary education libraries, principally those of technical and further education institutes. Some of the university libraries are IATUL members.

Physical innovations since 1995

Adaptive technology laboratory (students with disabilities) Client satisfaction surveys (5) Coffee shop (2) Color copying (7) Consolidation of branches (3) Consolidation of service points (4) Drive by book return Electronic reserve (5) Electronic security system (2) Electronic training suites (14) Employment of international students as 'library buddies' for other international students Flexible learning centre (2) Improved disability access (16) Incorporation of bookshop and community centre Increased hours (9) Increased role of paraprofessional library technicians (2) Infokiosks (2) Infolab (database room) International Students Centre Internet cafe Laptop room/docking (4) Light fiction reading for students Multimedia room Open reserve (7)

Postgraduate study rooms (2) Researchers/Scholars Centre (3) Self check loans (15) Student learning centre Telephone call centre Time out space (comfortable cushions on floor etc) Twenty four hour PC labs (3) Videoconferencing facility (3) Wireless trial

Electronic and nonelectronic information resource innovations since 1995

ARIEL document delivery (6) Cooperative out of hours reference support with different time zone libraries (2) Database expo days Desktop delivery of documents Electronic examination papers (3) Electronic full text journals (19) Electronic reference service (8) Electronic requests for interlibrary loans (2) Electronic requests for purchase Electronic suggestions (3) Interlibrary loans available to students Library home page in four South East Asian languages New titles lists on Webopac Olympics website http://www.library.unisa.edu.au/vl/olympic Remote access to databases (4) Renewals by phone Roving help (reference staff and student assistance for general IT support) Self help document delivery Self help renewals, holds, view borrowing details, links to electronic resources (5) Services for distance students (3) Time zone sharing of helpdesk with UK library Virtual libraries/subject portals (8) Web based FAQs (2) Webopac lists to electronic resources

Information literacy innovations since 1995

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Appointment of Information Literacy Coordinator (5)
Compulsory infolit subject - library provides classes, web and
print self paced
Electronic tutorials for databases (3)
Establishment of library teaching and learning committee (TALC) to
complement main university TALC
Faculty librarians involved in student lectures and course based
assignments (3)
Faculty librarians participate in Introduction to tertiary teaching
programs (3)
Generic internet and database classes (4)
Influence on university information literacy policy, teaching and
research (4)
Information literacy as a graduate quality
Information literacy program for indigenous adults
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Information skills compulsory part of common unit program for all undergraduates Integration of information literacy into curriculum (8) Librarians conducting regular electronic training programs offshore for students living in SE Asia Online tutorials for undergraduates (4) Organization of national conferences on information literacy Organization of national workshop to develop information literacy competency standards for higher education and to establish an Australian Institute for Information Literacy (Sept 2000) Outreach program - site visits to academic staff (5) Pre university info literacy programs Site licence for Endnote plus (2) Unilinc webeasy - interactive web program for information literacy (2) Web based support and teaching by librarians (4) Workshops on weekends for part time and external students

Community access innovations since 1995

Certificate of Library Professional Practice Commercial information service Community membership program (3) Consultancy services (2) Electronic text collection access Fee based internet training (2) High school access to library's electronic resources High school programs Internet workshops for teachersNational Periodical Service for Schools Saturday workshops available to general public Single community borrowing allowing access to 3 university libraries Specialist community programs eg Online Australia Day for senior citizens

Library cooperation innovations since 1995

Agreed supplied times for document delivery (2) Consortium for resource sharing and reciprocal borrowing Courier service Electronic registration of reciprocal borrowers (7) Exchange of senior staff to lead internal operational reviews Joint photocopying card between 3 university libraries Joint RFI between three university libraries for new library management system Joint university libraries store (2) Journal sharing (3) Library science publishing Reciprocal borrowing (5) Registration of noninstitutional members without referral Staff exchange scheme (2)

Other innovations since 1995

Year of the Client Client feedback scheme (3) Client charter/advertised service standards (4)

Innovation specified in mission, objectives or strategic plan (8)

Staff development program facilitates innovation and enterprise culture (5)

Budget provision for innovation (4)

A scan through the above list of client service innovations suggests that most of them fall into the 'perceived to be new by the relevant unit of adoption' category. Few of them will be a surprise because librarians are adept at their information exchange, of which conferences such as this IATUL conference remain, despite the electronic revolution, an important part.

Nonetheless they should be a stimulus to thought about why and how they occurred. They do also demonstrate the wide range of issues and challenges all libraries worldwide are tackling - and they do not include the major innovations in academic library technical services over the past few years. It was particularly reinforcing to find that colleagues in Eastern Europe and South East Asia are well to the fore in their responses to these issues, many of which since 1995 have, of course, been electronically and information literacy focused.

Most libraries would agree with one survey respondent's observation that the 'Biggest change since 1995 has been how journals are provided and accessed'.

This change in itself is at once a benefit to clients but an impediment to that cooperation and community access provision to which librarians, more often than the institutions which employ them, aspire and achieve. Certainly in Australia and New Zealand the licencing restrictions of vendors and the restriction on internet access to bona fide students and staff of universities are inhibiting both library cooperation and community use of resources.

Despite this caveat, reciprocal direct borrowing arrangements for clients have been very long established in Australia and New Zealand, and are common. They appear to be increasing in Europe too.

The only website which could be found on library innovation is public library focused and is *Innovative internet applications in libraries*. This provides links to a number of relevant e-journals and websites. There would be scope for IATUL, or some other international organization, to develop a broad based website on academic library innovation.

Information literacy

Apart from the electronic focus, and in a way driven by it, there has been the increasing emphasis on information literacy as, what one Australian TAFE library describes in its strategic plan, 'the key competency for lifelong learning'. Lifelong learning, prompted by the 1996 UNESCO Delors Report Learning: the treasure within is the educational policy icon of the late 20th century, and doubtless of the next. Some libraries are asserting the essential connection between the information literacy and the lifelong learning concepts. Both concepts present definitional and realisation challenges, but information literacy at last is moving towards a degree of tangibility and assessment in higher education with the recent promulgation of the US ACRL Information Literacy Competency Standards. Although library initiated, earlier this year the standards were endorsed by the American Association for Higher Education in recognition of their educational importance. A similar process is on track in Australia with a national workshop towards the adoption of information literacy competency standards for higher education under the aegis of the Council of Australian University Librarians (CAUL) to be held in September 2000 in Adelaide by the University of South Australia.

From the responses to the questions about information literacy initiatives, there are very many web based and curriculum integrated initiatives occurring around the world. Librarians <I>are</I> helping to drive educational change. Despite policy and attitudinal barriers to partnership within higher education, they are taking an educational lead. However it is also clear from some of the comments on the returned questionnaires that persuading university administrators and faculty that the world of information has moved beyond the current capacity of most individuals – students and academics included – to recognise and use it productively still challenges us all.

The internal library culture

At the end of the questionnaire three questions were asked about innovation and the library's mission, staff development and budgetary provision. A short paper like this cannot attempt to identify why and how, and to what effect, libraries innovate. This is an area, building on the seminal work of Clayton and others, which requires more research. However the relative lack of positive responses to the three questions begs the question as to how focused libraries really are on developing a culture of innovation and enterprise within their staff.

There are, of course, those who question the 'guru drivel' and the managerial preoccupation with passing buzzwords and phantom panaceas such as 'empowerment', 'reinventing', 'thinking outside the box', 'the cutting edge', 'enterprise culture', 'learning organization', 'knowledge management' and 'innovation'.

One librarian who has recently and amusingly done so is Will Marley in the May 2000 issue of *American libraries*. He castigates a job advertisement for a cataloguer.

In addition to the usual requirement - MLS degree, two years of experience, three languages, computer programming skills, and a willingness to take a vow of poverty - they were asking for someone who could 'think outside the box.' It made me wonder what they were up to. Did this library want to create a new classification system, maybe a marriage of Melvil Dewey and Shiyali Ramamrita Ranganathan?

Think about it. Do you really want your cataloger thinking outside the box? Maybe I'm old fashioned, but I want my catalogers to be *inside* the box, cranking out work so that the new books can get on the shelf and into the hands of patrons. I don't want them thinking up new subject headings or creating an 11th class for the Dewey Decimal System. I want them properly applying existing principles, with speed, accuracy, and efficiency - not creativity. Not only do I not want them out of the box, I want them belted to their seats and the doors to their boxes bolted. It's fashionable to praise the daring innovators of our world and take ordinary but productive workers for granted. The irony is that the workers are successful precisely because they stay in the box - quietly and modestly doing their jobs in a tried and tested manner in order to serve others and make the world a better place in some small way. My point is that in a world gone mad for the new, too little respect is given to traditional values and to those who live those values.

Of course, one group in the library profession does need to get out of the box. It's always good when our managers leave the box to attend a three day seminar on getting out of the box. Those are probably the most productive three days in the library because the managers are not there to interfere with their 'out-of-the-box' theories.

Many of us at this IATUL conference are library managers. If Marley is right, in our absence our libraries will be having a very productive week this week. *Ergo* in the interests of library productivity, we managers should all go to more conferences preferably those requiring long, business class, travel.

Marley might be reassured that less than 20 per cent of respondents to the survey claim that their mission statements or strategic plans specify the development of an innovative organization. The web search of university and library mission statements revealed that specific reference to innovation is unusual worldwide. This must surely change. In a presentation on organizational learning and knowledge flow earlier this year to the University of South Australia's Academic Board, the University President Professor Denise Bradley made an observation which is applicable to any university, and its library, seeking a place in the 21st century.

We must be an institution which readily changes to incorporate new ideas and new ways of doing things. More ambitiously, we aim to initiate and lead major change - through our academic programs and our research and development. For this to happen we must all concentrate more effort on understanding and, when necessary, changing the institutional culture. We will do this by

sensing and understanding the environment to prepare ourselves for early adoption
bringing together the intelligence and creativity of our staff so that we can engage in continuous learning and, thus, *innovation*applying what we have learned to enable us to take timely and purposive action

The only examples of wording supplied by libraries in their responses to the survey questionnaire which are consonant with Professor Bradley's words, are:

Our mission is to foster quality learning, teaching and research for the University and its communities through *innovative* and effective access to resources and excellence in service Southern Cross University, Australia Vision statement includes 'foster staff who are innovative information specialists'. Critical success factors include 'Continuous learning, innovation and readiness for change'. Values include 'We embrace and reward enterprising and innovative ideas' University of Wollongong, Australia

The Library is committed to meeting the needs of users by taking a leadership role in linking the University to information in a rapidly changing environment. The Library develops *innovative* strategies to select, organize, provide access to, and preserve information resources and the education users about their utlilization

Northwestern University, USA

The mission of the University of Toronto Library is to foster the search for knowledge and understanding in the University and the wider community. To this end, we shall provide *innovative* services and comprehensive access to information founded upon our developing resources as one of the leading research libraries in the world *University of Toronto, Canada*

Whilst the above will not be the total of academic libraries worldwide which have chosen to specify innovation in their statements of intent, to date a very low percentage have done so. Similarly it is unlikely that many libraries have staff development programs focused on innovation and enterprise, and even fewer have specific budgetary provision to facilitate innovation. The same would be true of many universities.

These limitations do not, of course, curtail innovation but they do nothing to stimulate and facilitate it. Many of us would empathise, and agree, with the words of Jüri Jäärs, Tallinn Technical University Library, Estonia in his survey response:

Innovation activities have high priority in the library strategic development plan, but there is nothing in our budget for these activities (for both staff and equipment). It was possible to realize the innovations described here only thanks to the grants and extra funding from different foundations, funds and institutions.

So the source of motivation for library staff cannot be the money. It must be something like the sense of mission or high professional awareness. And of course, from 1995 we started regular staff

training sessions on the general topic of information technology and its impact on the librarian and end user. Concerning the attitude of staff towards innovations, we never have had essential problems.

Does innovation need managing?

The critical question then is, should and can the development of an innovative enterprise culture be left to the 'sense of mission or high professional awareness' common in libraries? Or does it require a more managed context?

Amanda Sinclair, Professor of Management at the Melbourne Business School, here in Australia, has summarised the dilemmas and contradictions in a recent article. She argues that innovation necessarily derives from creativity, that the central ingredient for creativity is intrinsic personal motivation, that creativity requires active resistance to closure, and that the discipline of management is therefore inimical to creativity.

Intrinsic motivation exists in inverse relation to extrinsic motivation: as extrinsic motivators strengthen, intrinsic motivation weakens. The more people perceive they are being controlled by management via extrinsic factors - salary bonuses and sanctions, share options, performance management incentive plans, ever more complex repertoires of carrots and sticks - the more their intrinsic appetite can dissolve.

...Controls, routines, histories and habits - in short, organization - undermine creativity.

Academic libraries are no different to their universities in having to follow the pervasive trend to accountability and performance management dictated by governments, bureaucrats, public opinion and university governing bodies.

Although most academic libraries would pride themselves on client service proactiveness and responsiveness often ahead of the institutions of which they are part, they have tended to minimise the variation and unpredictability in what they offer, and have generally achieved a state of what Sinclair calls 'stunted, suffocating by predictable innovations'. Instead, if we are to heed Sinclair, academic libraries should be aiming to identify what no existing user has ever dreamed of, something which electronically is now well possible.

The consensus of the literature on innovation is that new organization rather than no organization and how much a learning organization it is, will be a major influence on the implementation of innovation.

Sinclair thus proposes that organizations which promote creativity and innovation typically have a number of features:

good people - colleagues with whom relationships develop over time
a sense of pride and meeting creative command structures
outcomes need to be perceived as valuable and contributing to people's lives

- smaller, because large and faceless organizations 'rarely inspire innovative performances'

This last point of Sinclair's seems plausible but, from the research, interactions between size and successful implementation are more complex than might be assumed.

Many libraries would have a close fit with Sinclair's organizational profile, but their leaders still need to:

encourage opportunity focused, not evaluative thinking
provide leadership which helps create and share a vision and which models or demonstrates innovation. Innovative behaviour, while highly personalised is not an attribute one is born with but something which can be learned and communicated
consciously address the obstacles to creative innovation
see themselves as likely to be rewarded for success and not penalised for failure by their institutions
find ways to forgo surveillance of the process in favour of trusting and supporting people to produce interesting outcomes
relish uncertainty, ambiguity and risk
ensure all staff who have identified innovative ideas and opportunities know how to exploit the opportunity
most importantly, think about how to relax these sophisticated and complex control systems which dominate our time

These principles apply equally to universities and their leaders as a whole, and therein lies what at times seems to be an irreconcilable conundrum. The core of this conundrum is the need for overt public accountability in institutions which are often so large these days that much process and control goes into minimising risk and developing an integrated institution which in perception, and hopefully reality, is heading in more or less the one direction. Yet that very control and those very processes will be a barrier to innovation. In this situation the ability of individual leaders to stimulate, engage and empower an organization with a vision of a desirable and achievable future becomes very important.

As they do so, Clayton observes from his analysis of the literature, it needs to be borne in mind that:

...much of the confusion about the impact of organizational characteristics on innovation is due to the conflicting requirements for initiation and implementation of innovation ... This certainly applies to characteristics such as complexity, low formalisation and low centralisation. The evidence associating these factors with successful implementation is slight.

Despite this, the internet stimulates innovation so splendidly because it is that open, neutral platform which physical, as opposed to virtual, universities, can never be. Yet the attempt has to be made, for as 16th century English philosopher, essayist and statesman Francis Bacon observed in his treatise *Of innovations*:

He that will not apply new remedies must expect new evils; for time is the greatest innovator

Academic libraries often lead their institutions in areas such as client service and feedback, staff development and asserting the importance of information literacy. Imaginative leadership in innovation can, and should, be another of their contributions. However this first requires more libraries to develop a specific vision of innovation, because it is this which will strongly influence the culture of the library, resources for innovation and those responsible for its implementation.

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