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The digital divide, the fishball maker and lifelong learning: NLB responds to the Clarion Call with information literacy programs

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#### Abstract

Singapore's digital divide has been identified by the Infocomm Development Authority of Singapore (iDA) to be represented by: mindset, income levels and the language barrier. Singapore's digital divide is also a socio-economic one, given that the island-city state has almost no natural resources and is dependent on its human resource for economic competitiveness. Amidst this, is a quiet struggle of the growing gap between older 'ageing' populations and the younger so called 'born digital' generation. The presenter will bring to the fore some of the factors that are causing the digital divide in Singapore and the proactive role of the National Library Board, Singapore (NLB) in reaching out to the heartlands and the unserved. Using the context of NLB's mission, which is to enhance the learning capacity of the nation and promote a gracious society, the presenter will share key and strategic findings from a "Readership and Learning Lifestyles of Singaporeans" survey that was conducted recently. The research commissioned a profiling of Singaporeans who are both users and non-users of the library. Resulting from this, the NLB responded with a series of outreach programs, of which the information literacy program played a key advocacy role to help change mindsets within society and reach out to non-users of the library. A series of thematic information literacy programs for blue-collar workers helped to retrain and reskill them with ICT skills to be re-employed. Various case studies of the 'Singaporean library-user experience' thorough a continuum of live.work.play will be elaborated

upon making special reference to a fish ball maker's experience of using the library. These vignettes of lifelong learning will contextualize the role of the library in turning the digital divide into digital dividends. The presenter discusses in detail the challenges and need to sustain information literacy programs especially in public and community libraries. Concluding remarks will deliberate on the need for information literacy programs to leverage on existing 'critical mass' agencies such as libraries for memberships and visitorship; community clubs for the social milieu; and schools to embed information literacy into the curriculum. By forming tripartite partnerships these social infrastructures can level the playing field to address the issue of the growing digital divide. NLB's symbiotic role of a social agency and a partner in learning has been to champion the cause of bridging the digital divide to offer information literacy programs for lifelong learning.

# 1 Introduction

# 1.1 The Clarion Call

Singapore is a knowledge-based economy, which has almost no natural resources, and the government places much emphasis on educating its people as its human resource. Lifelong learning in Singapore is seen within the context of creating an economically active workforce where Singaporeans need to renew, reskill and remain relevant. Singapore has one of the world's largest greying populations, which worries the government as the chasm of the digital divide deepens. Singapore's digital divide has been identified by the Infocomm Development Authority of Singapore (iDA) to be represented by: mindset, income levels and the language barrier. Thus the government is concerned to turn the 'digital divide' into 'digital dividends' especially amongst blue-collar workers [1]. Lifelong learning has become a national campaign where the government promotes the collaboration between different ministries, statutory boards and the private sector. Setting the directive at national level, programmes are cascaded into executable projects at organizational levels. Agencies such as the Ministry of Manpower (MOM), the Workforce Development Agency (WDA), the Infocomm Development Authority (iDA) and the National Library Board (NLB) have been instrumental in championing national lifelong learning programmes. NLB's role as a partner in learning will be elaborated upon in the next part of this paper.

# 2 data.information.knowledge

## 2.1 More than Key Performance Indicators (KPIs)

NLB sees itself as an advocate of lifelong learning as reflected in its mission statement, which is 'to expand the learning capacity of the nation so as to enhance national competitiveness and promote a gracious society.' It also strives to deliver a world-class library system that is convenient, accessible and useful to the people of Singapore [2]. NLB's tag line of 'knowledge, imagination, possibility', helps to foster creativity and innovation. The library has invested vast amounts of monies in IT infrastructure and has constantly re-engineered its services to establish best practice models. Acknowledging this was a case study conducted by Harvard University on the transformation of public libraries in Singapore where libraries are seen as celebrating learning and a place that promotes a vibrant and pulsating lifestyle [3].

For the financial year ending in 2004, the NLB had a critical mass reach where its network of 73 libraries welcomed an annual visitorship of about 31 million of who 1.1 million were active members. Its annual loans translated to 27 million. Enquiries translated to 2.3 million and online retrievals jumped to 4.7 million from almost zero a decade ago [2]. These achievements of key performance indicators was not enough as NLB realizes that there is always more that can be done especially to reach out to the unserved. Through a series of periodic surveys, the NLB takes the 'temperature' of its users regularly to ensure a service that is well positioned and relevant. Two surveys will be elaborated upon in the next part of the paper.

#### 2.2 Learning and Reading-Related Lifestyle Survey, 2000

In order to provide a relevant and timely library and information service, NLB conducted a national Learning and Reading-Related Lifestyle Survey in 2000, where Singaporeans' library usage patterns were surveyed [5]. The survey yielded the following snap shot results and a reading profile of library users emerged.

2.2.1. In Singapore, at least 73% of the population had some form of library memberships where most of the respondents were members of the public library (88%) followed by universities/polytechnics (21%) and school libraries (17%).

2.2.2. It was noted that at least 49% of Singaporeans purchase books they read as compared to 42% who obtained books from the public library.

2.2.3. Twenty-three per cent of respondents never visited the library and 28% of them visited the library less often.

2.2.4. At least 60% of respondents visited libraries with the sole purpose of borrowing books as compared with 14% who came into the library to make use of Internet facilities. Library visits were combined with other activities such as meeting friends (25%), dining (30%), shopping (27%), and children's extra curricular activities (27%).

2.2.5. For programming activities, library talks on self-improvement ranked the most wanted (41%) over topics such as education and careers (28%), parenting (28%) and new technology (26%).

Type of User	Characteristics
Upgrader	Keen readers of work-related and recreational materials holding strong beliefs regarding education and family with library as the first choice of information source
Active Information Seeker	A creative and unconventional group of people who are well-read, prefer non-work related books and have penchant for material well-being
Self-Supplier	The new generation who rarely frequent libraries and are less materialistic, with very flexible attitudes towards traditions and religions but nonetheless very well-read
Casual Reader	A group with a voracious appetite for reading, satisfied through regular visits to the library and by borrowing books on work-related topics and leisure
Narrow-focused Learner	These are likely students holding more than one library membership, whose reading habits are confined within their educational curriculum and are immensely computer-literate
Low Motivator	These laid-back individuals have little interest in reading or not likely to be attending any courses and are skeptical about family or benefits of reading for children
Facilitator	The older generation with weak reading habits but have a nurturing attitude towards children's learning and sees the important role of libraries and education since they had very little formal education
	Table 1: Library user types and characteristics [5]

2.2.6. The table below represents a profile of library users that emerged from the survey data.

#### 2.3 Readership and Learning Lifestyle Survey, 2003

The objective of this survey was to provide NLB with a better understanding of learning and reading behaviour in Singapore so as to meet customer's needs and expectations [5]. This was different from the earlier survey which focused on user profiling and segmentation. The sample size included 1,500 Singaporeans and permanent residents between the ages of 13-60 years. The survey focused on areas such as:

- Leisure time
- Learning patterns
- Reading Habits
- Public Library visiting habits

#### 2.3.1 Survey Findings

It was noted that at least 65% of respondents spent their leisure time at home enjoying the mass media like watching television (92%), listening to radio (64%) and reading (52%). Other activities included: surfing the Internet (17%), playing computer games (14%) and Internet chatting (5%). Compared with leisure time activities outside the home, respondents ranked, shopping and window shopping highest with 84% and visiting the public libraries amounted to 29%. Most of the respondents were from the 13 to 29 age group.

Responding to the question on learning behaviour, the participants ranked their purposes for learning as:

To increase general knowledge	83%
For my study/work	47%
For my hobbies	39%
To gain practical/useful knowledge that is not directly related to work	34%
To make me feel important	22%
To help my children in their education	20%
To enhance personal relationships with families, friends, colleagues	18%
To have self-respect/self esteem	17%
To raise my social standing	13%

#### Table 2: Purposes for Learning

Supporting this motivation to learn was their attitude to learning, where at least 83% noted that learning is fun and enjoyable. The need for continuous lifelong learning was endorsed by 94% of the respondents. The social milieu of learning was also recorded where just over half of the respondents preferred learning to other leisure activities and enjoyed learning with friends and family to help them enlarge their social circle. This will be seen later in the paper as a profile of a lifelong learner is presented as family learning.

An analysis on the sources for learning, participants interestingly ranked visiting the library as the last place (16%) as compared to reading books, journals, magazines and newspapers ranking highly on 91%. Twenty-five per cent of respondents found that they learnt from attending courses, seminars, talks and workshops. The issue of bringing more people into the libraries allows for more scheduling of programming activities in the community libraries. The library competes with other sources of learning such as the Internet which was supported where 29% of the respondents saw this as a useful source.

The main reasons given for the obstacles to learning is summarized in the table below:

No time	69%
Too tired	62%
Difficulty in maintaining motivation	36%
Too old/retired	24%
High cost of learning	19%
Don't know where/how to start	14%
Friends are not learning	12%
Not necessary/required for work	12%
Lack of literacy skills	11%
Disruptive to family life	10%
Problems in sourcing for learning materials	9%
No support from family	8%
Health problem	8%

#### **Table 3: Obstacles to Learning**

From this table it is clear that learning requires dedicated time and the problem of availability of free time to learn seems to be a factor. Motivation is another reason given. The library can play a proactive role in addressing some of the issues such as high cost, lack of literacy skills, don't know where/how to start, problems in sourcing for learning materials by demystifying the services and facilities it can provide. Library user education programmes can help create awareness amongst people who will realize the opportunities available in libraries as learning places.

For those who did visit the library, noticeable benefits are ranked in Table 4:

I had a comfortable place to think, read, write or study	80%
I found the information and reading materials that helped my children in their education	75%
I learned about new books, videos, music etc of interest	74%
I read for pleasure	69%
I learned more about a skill, hobby or other personal interests	67%
I found information needed for school and/or work	59%
I learned how to use reference sources	50%
The public libraries helped me to nurture a love for reading	46%
The public libraries offered me information on job and career development	30%
Public library is a place where I meet my friends	29%
I enjoyed a talk, lecture, programmes	21%

#### Table 4: Benefits of Visiting the Public Library

Data from a question on what library users do at the public library yielded some interesting results where the traditional function of reading (86%) and borrowing (79%) represented the higher rankings compared with responses and a place for the people to hang-out, and relax was 35%. Study and usage of the reference section was 27%. Respondents rated the use of OPAC higher (28%) than using the Internet and multimedia stations for online database access (23%). Seeking assistance from the librarian and visiting the café were lower on the rating being 19% and 17% respectively.

Data mining the survey results helped NLB to understand the library user and non-user better. The survey results highlight the role and use of the library in learning. The strategy adopted by NLB was to sustain the served, and reach out to the unserved with more emphasis on the latter. NLB in aligning its key performance indicators with its mission and core values, saw the importance of embracing lifelong learning as a key organizational focus area. NLB is better able to package and customize services for its library users more effectively given the survey results and therein lies the challenge to match user profiles and library services to suit their needs.

# 3 live.work.play

#### 3.1 Who is the Lifelong Learner in NLB?

At NLB, library users experience holistic integrated learning through the seamless continuum of live.work.play. Lifelong learning and learners can best be seen in the many walk-in users who visit the many branch libraries located in the community heartlands. Meet the Tan family in the scenario below as they experience lifelong learning in the library:

*Mr.* Tan aged 45 is an adult learner who works as a computer programmer and is pursuing a distance-learning course to upgrade his skills. He makes use of the library resources for his studies. Mrs. Tan, 43, is a homemaker who looks forward to having her cup of coffee in the library coffee shop. Their two children frequent the children's section and take advantage of the numerous Internet stations available in the library where they can surf the Internet at a cheaper rate.

One day, Mrs. Tan picks up a leaflet about coffee and is immediately stimulated to find more information about coffee. She goes to the on-line catalogue, searches for books on coffee and then borrows three books. She also reads on the library notice board, that there will be a free talk about coffee in the library. At this presentation, she meets other people of similar interests. During the talk Mrs. Tan learns about franchising opportunities for a coffee shop. For a start she borrows some books on franchising. However, she is interested in finding more information on setting up a business.

She approaches the librarian to find out if the library conducts such courses and to her amazement she learns about an information literacy course on business information resources on the Internet. Mrs. Tan picks up useful information on setting up a business and also skills on searching the Internet. She contacts the presenter she met and expresses her interest in the franchise. Within a month Mrs. Tan registers her company online and opens up a coffee shop in one of the branch libraries.

Seems very routine and everyday, but within that scenario are learnable moments and freechoice learning activities that take place.

The then Chief Executive of NLB, Dr Christopher Chia, once questioned, "When is a library more than a Library?" He went on to note how libraries in Singapore had been transformed to bring more people in and offered a wide variety of programmes and services that attracted both young and old alike. He added, "300 people enjoying a rock group at libarary@orchard, our comics collection snapped up within a week, a gentleman who became a millionaire after getting an insight into the fish ball making process at the library, a working journalist rebuffed by all cafes finally finding the perfect mix of caffeine, quiet and a power socket in our libraries – the past six years have been a dizzying stream of stories where people have found something they need at the library...libraries as an indispensable part of Singaporean life received the ultimate validation when residents of Sengkang, a new public housing estate, vote in favour of a library rather than a cinema..." [6].

## 4 knowledge.imagination.possibility

## 4.1 Delivering Lifelong Learning Programmes in the Branch Libraries

NLB enhanced its library programming for lifelong learning by translating the readership survey results and user profiling into thematic programmes at the different branch libraries. NLB's network of 73 community libraries acts as delivery nodes to attract users into the library. A programming team has been established to look into various programming events and activities for different target groups. By conducting programmes in the community libraries, NLB aims to

reach out to those in the 'heartlands', the unserved, and the uninitiated. For the last financial year ending 2004, a total of over 5,000 programmes were conducted attracting over 530,000 people into the libraries. Below is a sampling of some of the thematic programmes conducted in the community libraries:

- BIZ@the Courtyard: covers business related topics.
- Eco@Woodlands: creates awareness in nature and environment conservation.
- Chinese Medicine and Health@BMCL: focuses on traditional medicine.
- Health@Bedok: emphasizes the need for keeping fit.
- music@orchard: promotes the appreciation of the different forms of music to the youth.
- Self-Improvement@ the Library: covers tips on personal effectiveness.
- *KIDS Discover@MPCL*: an experiential interactive learning zone for children.
- Life Sciences@ the Courtyard: showcases latest developments in the biomedical and related fields.
- *wellness@orchard*: ways to maintain a healthy mind, body and soul.
- Mandarin Wellness@TRL: an ethnic language programme on wellness.
- Storytelling: encourages reading and literacy.
- Born to read, read to bond: promote parent child reading and development.

Library programming activities have proven popular resulting in a 'win-win' situation for both the library and the user. Not only do they improve their general knowledge listening to speakers, but also the library benefits by achieving its key performance indicators of visitorship, loans and memberships for the branches. Such programming events are usually tied in with book displays, booklists and a membership drive where the branch librarian takes responsibility for managing the programmes.

Other collaborative programmes that NLB has participated in included the *Speak Good English Movement*, a programme to promote the correct use of the English language; *kidsREAD*, a programme that encourage children from disadvantaged backgrounds to learn to read and the *National IT Literacy Programme*, a programme to promote infocomm usage. A few of these significant programmes will be elaborated upon in more detail.

# 4.2 Library@Office

Library@Office was targeted at working adults to spend more time reading as part of lifelong learning to acquire new knowledge and move up the value chain. At the launch a minister mentioned that the role of the library in providing access to resources helps stir people's imagination and creativity and making them more entrepreneurial. He noted that, "Mr. Lim Boon Chay is one such example. Mr. Lim, founder and managing director of local seafood manufacturer and distributor Thong Siek Food Industry, gained insights into the fish ball-making process from his visits to the library. A firm believer in lifelong learning, Mr. Lim scoured the library for fresh business ideas and new food production techniques and discovered a unique method of making better tasting fish balls. It was a pivotal point for him and the newfound knowledge took his business to greater heights. His company was recently listed as one of Singapore's 50 most enterprising homegrown companies. We need more entrepreneurial people like Mr. Lim who take a personal interest and responsibility to constantly learn and upgrade his skills and knowledge. A nation of lifelong learners create value-added activities and spurs the country into the next lap of sustained economic growth" [7]. Participating in such programmes have given NLB recognition by the minister and also the opportunity to start measuring the impact of its lifelong learning programmes on society.

## 4.3 National IT Literacy Programme (NITLP)

This was a collaborative project with the then, National Computer Board (now Infocomm Development Authority or iDA) who needed a permanent venue to offer basic Internet training to Singaporeans. NLB, on the other hand wanted people to be more than IT savvy and wanted to

step up training on basic information literacy for its customers to become more info savvy. The One Learning Place (OLP) pilot project was initiated. The Toa Payoh Community Library was picked as a site where an area of 430sqm was set aside with 136 PCs connected to broadband. The challenge was to train 100,000 people in 2 years (May 1999 to April 2001). The objectives of this project was to:

- promote an awareness and usage of Internet and electronic resources to the public;
- bridge the digital divide by providing hands-on training at an affordable cost; and
- groom Internet and information savvy human resource [8].

The courses offered targeted students, working adults, homemakers, and senior citizens. Courses were delivered in English and Mandarin. The cost of courses was \$20 as compared to more than \$100 charged by commercial schools. There were a total of 86,847 people trained from May 1999 to May 2001 (87%) of the target. The shortfall was due largely to limited capacity. When the pilot project ended in May 2001, OLP was set up in 3 other libraries representing the east, north and the west of Singapore. IDA developed an Infocomm Training Framework for different target groups and different levels of competencies. A curriculum was proposed and a tender for courseware development was called. The NLB's information literacy team designed and developed some of the courses. Titles developed included: Searching for Information, Emailing, Netiquette, and Internet Relay Chat. NLB was able to embed information literacy in the curriculum. The courseware was customized for different target groups, such as the senior citizens and homemakers.

#### 4.4 Information Literacy Programmes (ILP) in NLB

The ILP masterplan identifies core programmes for targeted users of the library. The main objective of ILP is info fluency where in a knowledge-based society, being IT savvy is not enough. The ILP team has worked with strategic partners to offer programmes which have recognized the role of the library in learning. Some of the programmes offered include:

- Be InfoSmart: A User Education and Orientation programme for the general public and students where they learn about library services, policies, and facilities.
- Thematic Information Literacy Programmes: The general public learns how to use the Internet to locate information resources on "hot" topics such as business, travel, crafts and hobbies, health and wellness.
- Basic Information Literacy Programme: Targets mainly students who learn how to use the Internet as a research tool more effectively. Evaluation and citation of web resources is also covered in this programme.
- InfoPaths: Pathways to Information: Corporate clients attend this programme where learn how to get the competitive edge by moving beyond being IT savvy to become info savvy so as to manage information in the knowledge-based economy.

Today, a suite of information literacy courses is available in elearning format given the more flexible options of learning. The portfolio of the librarian today has expanded to become trainer or instructional librarian, subject matter expert, courseware developer, and facilitator.

#### 4.5 NLB's Role in Value-Adding Lifelong Learning

Nurturing, promoting and sustaining lifelong learning have become a core value for NLB. Its holistic and integrated approach to lifelong learning is value-added in the following ways:

- Creating a yearning for learning where it serves as attractive nodes as its outlets are conveniently located and well equipped (both in terms of content and facilities) to encourage learning through serendipity, interaction and ideas generation.
- Encouraging learning and discovery in an informal setting to equip Singaporeans with skills to glean for information to stay informed and abreast of developments by offering professional staff as 'navigators' of information and a series of programming activities and events.
- Bridging and potential divide both social and digital between the haves and have-nots.
- Established infrastructure and reach by creating a facility that is conveniently located and
  affordable and accessible anytime anywhere to online information resources.
- Acting as a resource centre and a street corner university offering democratic access to all in an unintimidating learning environment.
- Partnerships with agencies such as academic institutions, government agencies, community groups serving the different ethnic groups, training providers, professional bodies and libraries.
- NLB strives to make learning accessible by taking learning to the learners. Using its advanced IT infrastructure as a conduit, elibraryhub (<u>www.elibraryhub.com</u>), NLB's digital library provides access to information resources 24/7/365.

## 5 Conclusion

A common denominator becomes evident in the road ahead as libraries evolve in the digital world of live.work.play. Libraries in the knowledge-based economy are libraries for the people, by the people. Libraries will become free-choice learning spaces where lifelong learning and providing an inclusive service will be hallmarks for success. NLB has already carved a niche as a partner in lifelong learning. Sustaining the already collaborative relationships and reaching out to the masses helps NLB achieve that critical mass. This paper illustrated how the critical mass in Singapore are those who need to be economically active and need to constantly renew reskill and remain relevant. The presented shared how library programming can be a catalyst that can bring about social, career and self-development changes. With libraries for life, there are opportunities for learning. The potentials of library and information services in the digital world is already being realized in NLB with elearning, the digital library www.elibraryhub.com which offers packaged econtent for access 24/7/365: learning anywhere, anytime, and for anyone whether you are a fishball maker, a housewife, a retiree or a yuppie!

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