

# ***Realising its Future through Collaboration with Government, Industry and Community: The Experience of Singapore's National Library Board***

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Keywords ( 關鍵詞 ) : Singapore National Library Board; Library 2000; Library 2010; National Libraries Singapore Planning; Collaboration

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## **【摘要】**

本文介紹新加坡國家圖書館(National Library Board of Singapore, 簡稱 NLB)與產、官、社區合作, 制訂長程合作計畫之經驗, 分別制定<<Library 2000>>與<<Library 2010>>。NLB自1994年起的前十年與其他機構合作制定<<Library 2000>>, 其願景包括的核心策略要點, 如圖書館運作與服務創新、顧客群擴大、網路基礎發展與建置以利內容與專業知識的交換。而<<Library 2010>>的願景則明確地表達NLB的領導性與支援性角色, 自此, NLB在驅動新加坡知識資源合作與促進學習上扮演領導者的角色。

## **【Abstract】**

The National Library Board of Singapore (NLB) has employed collaboration with government, industry, community and other libraries as a pivotal mechanism to realize its visions – the Library 2000 and the Library 2010. The objectives of collaboration for the first ten years of NLB from 1994 were driven

by key strategic thrusts of the Library 2000 vision. They included innovation of its library operations and services; enlargement of its coverage of customers through programming and promotions; and development and building the basis of a network for exchange of content and expertise. The Library 2010 vision articulates both leadership and supporting roles for NLB from 2005 onwards. Since then, NLB has made inroads into playing leading roles in empowering Singaporeans with knowledge resources and fuelling their learning journeys.

## INTRODUCTION

National Library Board of Singapore (NLB) was established on 1 September 1995 with the mission to continuously expand the learning capacity of the nation. NLB oversees the management of the National Library including the Lee Kong Chian Reference Library (Singapore's national reference library), three regional libraries, 19 community libraries, 18 community children's libraries, as well as over 30

libraries belonging to government agencies, schools and private institutions.

NLB has established on the onset, the importance of collaboration and engagement by observing that “as Singapore evolves into a knowledge-based economy and society, we recognize that there are many stakeholders, each with different strengths to contribute. As a provider of national and public library services, we will play a leadership role in strategic projects and initiatives that directly impact our mission and objectives. At the same time we will complement and support the work of other agencies that contribute towards ‘Knowledge Singapore’” (National Library Board, 2005)

### Library 2000 and Library 2010 Reports

The role of collaborator and partner with government, industry, community and other

<b>L2000 Strategic Thrust</b>	<b>Objectives for Collaboration</b>	<b>Target Groups for Collaboration</b>
An Adaptive Public Library System to bring library and information services closer to the community	Development of innovative library services	Industry and Business
Symbiotic Linkages with Business and Community to capitalize on the strengths of business and industrial communities	Outreach to target communities through programming, promotions and campaigns	Government, Associations and the Community
Global Knowledge Arbitrage leveraging on rich ethnic and cultural background and traditional links with the East and the West	Building of Networks for Content Exchange and Expertise Development	Libraries and Institutions

The building of an adaptive library system went beyond the establishment of a multi-tiered library system in NLB’s experience. The challenge was to develop innovative solutions to transform the library-going experience and its main service transactions into a seamless process.

Secondarily, the building of symbiotic linkages with businesses and the community was done to leverage on their connections to their respective constituents which in turn were NLB’s target

libraries is a familiar one for NLB. This has taken root since the inception of the Report of the Library 2000 Committee (L2000) published in 1994 (Library 2000 Review Committee, 1994) to serve as a masterplan to develop library services in Singapore over the subsequent 10 years.

L2000 resulted in the building of an extensive public library infrastructure. Collaborating with other agencies was pivotal in developing the innovative services and promotional programmes that contributed to this statistical phenomenon.

### Objectives of Collaboration

The objectives of collaboration for NLB’s ten-year development from 1994 to 2004 were governed by some of the L2000 key strategic thrusts:

customer segments. This was done through collaborative programming and promotion campaigns.

Finally, NLB embarked on a pro-active strategy to engage libraries and institutions to build a network for exchange of content and for expertise development and hence establish a role for itself in global knowledge arbitrage.

The objectives of collaboration to fulfil the L2000 vision were hence three-pronged: to

innovate its library operations and services; to enlarge its coverage of customers through programming and promotions; to build the basis of a network for exchange of content and expertise.

The subsequent Library 2010 (L2010) report published in 2005 sets out the next set of strategic directions of NLB for the next 5 years in “bringing the world’s knowledge to Singapore to create a positive social and economic impact” (National Library Board, 2005). To achieve this, the report outlined the different levels of roles that the board could play including a leadership role and the role of a valued collaborator and partner.

This paper will study the three-pronged collaboration strategy employed by the NLB in fulfilling its L2000 vision. Additionally, it will cover burgeoning areas of collaboration that the NLB has embarked on following the publication of the L2010 report.

## DEVELOPING INNOVATIVE LIBRARY SERVICES IN COLLABORATION WITH INDUSTRY AND BUSINESS

A significant amount of effort to fulfill the L2000 vision was in the building of a library system. Hence by 2004, NLB had built 73 libraries compared to the 15 libraries in 1994 when the report was published. However, in order to increase the usage of these libraries, NLB needed to transform the library system into one that was convenient, accessible and useful.

### **Developing the Electronic Library Management System (EliMS)**

The first challenge was to increase dramatically the efficiency for the main library transactions of loans and returns of its collections. In 1994, a library user could spend up to 60 minutes at a time on a weekend to return or to check out materials at any of the NLB library service counters staffed by library assistants and technicians. In order to achieve its eventual loan rate of more than 30 million per year, it needed to adopt a technology that would enable

the convenience and immediacy of an efficient self service. NLB set itself the target of reducing the time to check out materials to under 15 minutes.

To that end, NLB sought a technology that could afford an exponential increase in speed and versatility beyond that of the dominant technology used – the scanning of barcodes. In particular, NLB recognized the potential of Radio Frequency IDentification (RFID) technology to achieve that.

At that time, there were no off-the-shelf applications that it could purchase. So NLB discussed and developed prototypes with a number of research institutions and innovation solutioning providers. Eventually, NLB with ST LogiTrack (a Singaporean company) developed the technology and first prototyped it at one of its community libraries in 1998. The arrangement with ST Logitrack was such that the technology was co-developed with NLB providing the domain knowledge of library operations and user behaviour and ST Logitrack providing the R&D expertise and resourcing.

On 22 August 2000, NLB and ST LogiTrack signed an agreement to install the world’s first EliMS using the RFID technology to all NLB’s new, upgraded and existing libraries. This led to the successful grant of a patent in December 2000. By 2001, all newly refurbished libraries had ELiMS installed.

The mutually beneficial collaboration model was built such that while NLB benefited from the industry expertise of an external firm to develop the technology into a full-fledged library application, ST LogiTrack developed a product system that it could and did successfully market to other libraries around the world.

### **Developing a Learning Experience at the Library**

NLB also sought opportunities in national government initiatives to collaborate with the industry in developing learning services in its libraries.

In 1998 when NLB was upgrading one of its libraries – the Toa Payoh Community Library – the opportunity arose to set up a training centre

for information literacy. Eventually NLB worked with 11 other collaborators where NLB provided the infrastructure and the facility in the upgraded library while the other parties provided the equipment and the development expertise.

The 124-seat ONE Learning Place training centre was launched in May 1999 and spawned two other centres in its other libraries. All three centres were then adopted by the National IT Literacy Programme (NITLP) in June 2001 to equip Singaporeans with essential computing and internet skills. The three centres were major cornerstones for equipping 350,000 Singaporeans with aforesaid skills over three years.

The scheme helped libraries to reach out to library users who were then increasingly alienated by the advent of technology in the seeking of information and knowledge.

Other alliances with businesses to attract more diverse clientele include working with a commercial operator to launch the first eLibrary at e-station, a commercial online electronic edutainment centre in 2000 with 20 stations providing eLibrary services with the centre's other gaming services. Resources include streaming of video and CD-ROM titles, electronic books and an online Reference Enquiry service. NLB also worked with a local company to develop a students' virtual community on its website as well as Kids Discover! – a thematic multimedia learning park in one of its community libraries.

## EXTENDING THE LIBRARY'S REACH THROUGH COLLABORATION WITH THE COMMUNITY

NLB embarked on a two-pronged strategy to extend its reach to its target customer segments by partnering with notable associations and personalities in their respective communities to curate programmes that would draw their attendant audience, as well as the contribution of expertise and eventually content from those same communities.

## Multi-Tiered Programming for Diverse Communities

NLB partnered with community organisations to develop programmes that would appeal to their constituents. These programmes are multi-tiered running the entire gamut from more intimate small group activities to larger scale festivals and campaigns.

At the more intimate level, NLB built discussion-based groups such as the *Writers' Circle* which was formed at the Marine Parade Community Library in 2000 to promote interests in literary activities. Facilitated by a core group of literature enthusiasts, members of the public are welcome to share tips on writing and comment on selected literature.

To reach out to the professional and research sectors such as the engineering, IT and life sciences, NLB has also partnered with organisations such as the Imperial College Alumni Association to hold a series on life sciences which provided a platform for notable researchers and enthusiasts in the field of Biomedical Sciences to gather and impart their expertise on this industry. The Association has also helped to launch a series at the National Library entitled *Grid is Good* where the breakthroughs in grid computing were showcased.

On a larger scale, NLB runs the *Asian Children's Festival* and has partnered with organisations such as the National Book Development Council so as to reach out to the publishing community, and the People's Association.

In 2005, it launched *READ! Singapore*, the first ever nation-wide campaign to encourage Singaporeans to read. Adapted from the highly successful "one book" projects in cities such as Chicago, Houston and Seattle, *READ! Singapore* was initiated to foster an appreciation of books and literature, promote lifelong learning, and help people rediscover the joy of reading.

The campaign attempted to influence the "unreached" group – community of non-users and non-readers. This was done through collaboration with organisations such as the Singapore Taxi Academy and Taxi Operator

Association where 100 taxi drivers congregated to discuss books. The result of such collaboration helped develop longer term entities such as a reading club among taxi drivers.

### **Building Content and Expertise with Communities**

To collaboratively build content with communities, the *NLB Online Repository of Artistic Works* (NORA) was launched in 2005 in the eResources Collection of the NLB website ([www.nlb.gov.sg](http://www.nlb.gov.sg)) as a collection of works by local contributors, and a source of reference for people interested in Singapore literature and the arts. This was also the first time in Singapore that a comprehensive collection of unpublished and out-of-print artistic and literary works by local writers and composers have been made available to the public through an online platform.

It also became the rallying point for prominent Singapore writers to deposit their unpublished works with the National Library. The initiative was first mooted by members of the artistic community who eventually played a huge role in making a call to their community constituents to make the first contributions to the repository.

Another project that fostered the development of resources was the "*Huayinet*" ([www.huayinet.org](http://www.huayinet.org)). NLB is one of the 9 member institutions that form the Inter-Agency Committee on Chinese Overseas Databank and Research Collection. The others are Chinese Heritage Centre, the Chinese Library of the National University of Singapore, the Department of Chinese Studies of the National University of Singapore, Institute of Southeast Asian Studies Library, National Archives, Nanyang Technological University Library, Singapore Federation of Chinese Clan Associations, Singapore History Museum, Singapore Press Holdings Resource Centre. The Committee launched the "Huayinet" on 11 February 2000 - a resource portal for scholars, researchers and institutions.

## **BUILDING A GLOBAL KNOWLEDGE ARBITRAGE WITH LIBRARIES AND INSTITUTIONS**

Redefining the boundaries and roles of the library, the NLB has forged many partnerships with other renowned local and international institutions to share databases, collections, expertise and other resources. These strategic alliances helped expand NLB and the nation's learning resources and its competitiveness by creating easy access to a world of information.

### **Building a Southeast-Asian Knowledge Base**

#### **Congress of Southeast Asian Librarians (CONSAL)**

The Congress of Southeast Asian Librarians is a regional grouping of librarians from ASEAN (Association of South East Asian Nations) countries. Formed in 1970, it promotes cooperation in librarianship, bibliography, documentation and related activities. Represented by libraries and librarians in the ten ASEAN countries, CONSAL provides a forum for idea and knowledge exchange between library and library-related professionals. CONSAL holds a conference every three years on a rotating basis. Singapore hosted CONSAL in 2000 when the CONSAL Secretariat was inaugurated with Singapore as the host country.

NLB was also chosen then to host the CONSAL Secretariat which coordinates and manages the CONSAL approved projects. These include the *Resource Sharing and Depository Collection Project* which gives access to national bibliographic information, study of preservation and depository methodologies and comparative study of legal depository laws. The second project is the *Copyright Project* which provides guidelines for fair use and an exploratory study on a regional rights management system. A third project is the *Coordination of Regional Training* programmes to ensure high visibility of the training environment in the region. The lead country for the above-mentioned projects is Singapore.

**CONSALWeb** ([www.consals.org.sg](http://www.consals.org.sg)) connects this community while facilitating access to information, training and knowledge sharing. The enhanced web hosted by NLB was launched in April 2001. For the first time librarians have a platform through which they can interact and learn. It provides access to useful tools and information resources for librarians to plan and develop libraries of the future. Information and library vendors and market players can also use the platform to interact with librarians and orientate librarians online with their latest products and services. Professional services include discussion groups and forums for communication and sharing of information, directory of librarians and libraries in the region, etc. In addition, the site also offers an information exchange platform for the CONSAL Management Committee represented by librarians from each member country. Other key services include a resource centre, which provides information such as alerts, reviews, and databases that would assist librarians to develop a knowledge base supporting the region-wide library community.

#### **Other Collaborations for Regional Activities**

**e-tlas** (Emerging Trends in Library and Archival Services) 2001, the region's think-tank conference on library and archival services, drew Asian librarians and archivists from Australia, Brunei, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Thailand and Vietnam to Singapore in April 2001. The conference was jointly organised by NLB, National Heritage Board (NHB), Reeds Exhibition Companies and supported by CONSAL. Similarly, NLB had worked with agencies such as Reeds and to organize **CONSAL XI** in 2000 for the Congress of Southeast Asian Librarians.

The creation of the a digital library infrastructure by NLB is the basis for the development of the **ASEAN InfoNet** (AINet), which aims to bridge the information gap among ASEAN member countries by establishing a rich shared information resource base. It will link a wide spectrum of socio-economic and cultural resources in the region to enable libraries, governments, businesses

and citizens to access and exchange a wide range of information and knowledge.

#### **Beyond Southeast-Asia**

NLB has also signed Memoranda of Understanding with libraries such as the British Library, the Russian State Library, the National Library of China and the Shanghai Public Library. These have resulted in staff exchanges with its attendant transfer of expertise as well as collaboration in the provision of services.

#### **National Library of China and Shanghai Public Library**

NLB and each of the two Chinese libraries respectively signed MOUs in 1997 for mutual access to each other's materials and resources (including library catalogues and electronic databases), interlibrary loans, document delivery, and other information retrieval arrangements. Co-operation is also extended to the sharing of skills through exchange programmes and visits. Additionally, the relationship provided access to the more than 30 million titles of books of the 2 libraries, through interlibrary loans.

NLB in conjunction with the Shanghai Library and the World Book Fair Working Committee, organised the *Manuscript and Pictorial Exhibition on Chinese Cultural Celebrities* at the Singapore International Convention and Exhibition Centre from 9 to 18 June 2000.

Established on 28 May 2001, the *Virtual Reference Desk* (VRD) of the Shanghai Library (SL) is the first cooperative online reference service in China. Its mission is to provide high-quality professional reference services and knowledge navigation to researchers and general public. It is a collaborative effort between SL and other academic libraries, research libraries and related institutions in Shanghai as well as NLB, Hong Kong Lingnan University Library, Macau Central Library and Macau University Library.

#### **British Library**

On 18 March 1998, NLB signed a MOU with the British Library to establish a fast and efficient document delivery link between the British Library Document Supply Centre. Other areas of collaboration include exchange visits, staff

training attachments, exhibitions, digitization of library materials. Singaporeans can gain access to the vast collection of journal articles of the British Library through the Inside Web database. A selection of digitised rare and unique historical materials on Singapore residing in the British Library was also made available via the eResources Collection of the NLB website ([www.nlb.gov.sg](http://www.nlb.gov.sg)).

### **Russian State Library**

On 8 March 1999, NLB signed a MOU with the Russian State Library (RSL) that paved the way for closer co-operation between NLB and the RSL, which had a relatively strong Asian collection.

### **Library of Congress and National Library of Australia**

NLB engaged in a Joint Acquisition Programme to acquire ASEAN materials with LC (Jakarta Regional Office) and National Library of Australia (Jakarta Office).

In addition to these initiatives, NLB has over 200 exchange partner national libraries/institutions overseas with which it has exchange arrangements to acquire collections from their countries.

## **THE VALUE OF DEEP COLLABORATION**

The deliberate strategy to engage partners from government, industry and community has yielded returns in the operations, services and activities of the National Library Board in fulfillment of its objectives for collaboration to achieve the L2000 strategic thrusts.

In the development of innovative library services to bring library and information services closer to the community, NLB has managed to achieve an increase in loans from 10 million to 25 million from 1995 to 2001 (Hallowell, Knoop & Neo, 2001). This was made possible with the increase in efficiency with the development of the ELiMS in collaboration with NLB's industry partner ST Logitrack. From 1994 to 2001, the innovation resulted in the reduction of materials' checkout time from 60 minutes on average to 3-14 minutes (De Meyer & Garg, 2005). As the former Chief

Executive Dr Christopher Chia noted, this was achieved without a corresponding increase in staff.

Further, the collaboration with the One Learning helped NLB to enroll more than 100,000 Singaporeans in training courses. More heartening than the numbers was the diversity of the people that traverse the categories of age, race, occupation and education levels. Homemakers and senior citizens make up 12% of the people trained and the centres were particularly popular with the very young and the very old with 10% of the trainees more than 50 years old and 16% less than 12 years old.

In the outreach to target communities through programming, promotions and campaigns, NLB's partnerships with business and industry communities rose to more than 200. The number of programmes rose from 4000 in Financial Year 1997 with 173,000 participants (NLB Annual Report, 1998) to 7275 with 606,902 participants in 2005. Again this would not have been possible without the deliberate strategy to leverage on the reach and expertise of its partners.

In the building of networks for content exchange and expertise development, NLB's effort after the L2000 report was to build the basis for a global knowledge arbitrage. This is expected to continue to be developed with the L2010 vision.

## **BEYOND LIBRARY 2000: THE COLLABORATION STRATEGIES FOR LIBRARY 2010**

For L2010, NLB's focus will be on building *Libraries for Life* to support the development of strong social capital in Singapore which will help to weave the fabric of a strong knowledge-based society; and *Knowledge for Success* which will create the knowledge dividend Singapore needs to be a competitive, productive and innovative knowledge-based economy.

### **The Roles of NLB in Singapore's Knowledge Team**

L2010 outlined three leadership roles and three supporting roles for NLB to play in moving Singapore forward successfully into the knowledge age.

In its leadership roles, NLB envisages itself playing the roles of an architect in setting guidelines, standards and framework for other agencies to follow in providing access to knowledge and information; of a builder to establish and run its libraries and promote information literacy; and of a catalyst to promote lifelong learning, and Singapore writing and publishing.

In its supporting roles, NLB envisages the roles of a partner to work informally with other organisations towards their agreed objectives for instance in the management of library services; of a complementor to complement the work of schools, community groups and other arts and culture organisations; and of a supporter to complement the work of other agencies in their main functions.

### **As a Leader in Empowering Singaporeans with Knowledge Resources**

NLB has fostered relationships with different government agencies to reach out to its different communities.

To target the local industrial and business communities, NLB has partnered with respective business and enterprise promotion agencies in supporting their work in different parts of the business development process.

With SPRING Singapore – Singapore’s Standards, Productivity and Innovation Board which works to enhance the competitiveness of enterprises - NLB has provided reference services through an online enquiry connection via the Enterprise OneStop Portal. With IE Singapore – the International Enterprise Singapore which spearheads Singapore's efforts to develop its external economic wing - NLB has received collections and also established an enquiry referral service.

For the tertiary student community, NLB has collaborated with the Singapore Tourism Board, Education Services Division, on the provision of enquiry service for the international students on its STB Education Services website. Further, it

has developed a relationship with the Public Service Commission – who amongst other functions awards and manages scholarships for the Singapore Government - to direct enquiries pertaining to further studies to the NLB.

### **As a Leader to Fuel the Learning Journeys of Singaporeans**

With the opening of the new National Library Building in 2005, NLB has embarked on an audience development programme to build programmes that will enhance the learning process of Singaporeans through collaboration with diverse professional associations and communities.

In 2005, NLB launched its first partnership with a professional body with the signing of an MOU with The Institution of Engineers, Singapore (IES) to bring a wealth of engineering information and knowledge to professional engineers, students and the general public. Collaboration will focus on areas such as the building of an engineering repository at the national reference library – the Lee Kong Chian Reference Library – and providing engineering education and knowledge talks and seminars at NLB’s public libraries.

To encourage local collectors to come forward with sharing their collections as well as to create learning experiences, NLB has also collaborated with local agencies to showcase local collections. Hence the NLB and the Singapore Literary Society collaborated on an exhibition of local private collections of the great Chinese classic novel “*The Dream of The Red Chamber*”. Together with the exhibition in 2006, National Library also published a bibliography on the novel and its influences.

As another example, NLB partnered with researchers who had worked in the National Library. In 2005, a family of researchers - the Shepherdson Family – built on their research conducted at the National Library and their network to launch with NLB Singapore's First Genealogy Exhibition. Titled “*Who Am I? The Joy of Discovering Your Family History*”, the exhibition provided a one-stop resource for family history research in Singapore.

## CONCLUSIONS

The publication of the L2000 Report and the ensuing formation of a new statutory board, National Library Board, that was headed by an able management team led by the founding Chief Executive, Dr Christopher Chia, were instrumental in transforming the national and public library landscape of Singapore into one that is technologically innovative and engaging to her stakeholders through various forms of initiatives and collaborative efforts. The mission of NLB will no doubt continue to evolve through the appointment of her second Chief Executive, Dr N Varaprasad in 2004, and through the strategic thrusts outlined in L2010.

This paper has provided a review and examples of the initiatives adopted by NLB in their three-pronged collaboration strategy to engage industries, businesses, communities and other information institutions and agencies around the world. A peek of what lies ahead for NLB through its leadership and supporting roles clearly demonstrates its firm belief in engaging the many stakeholders closely through new programmes and initiatives and reinforces the important and continued need for collaboration to ensure future success.

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