Managing National Libraries in an interconnecting future: insights on an inclusive reference service and networking - the Singapore experience

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Abstract

In the context of the pervasive interconnected world and an increasingly rapid rate in the interconnectedness of people and electronic devices in the future, the National Library of Singapore has been working on several areas to respond to the changing lifestyles of the library user, and to test the limits of the possibilities that the interconnected world has opened up for librarians, information professionals and experts.

This paper focuses on the initiatives of the library in the past year, in re-positioning its reference and information services to meet changes in consumer lifestyles and technology innovations. It describes services that have been put in place which leverage on a collaborative reference network, where library customers can tap on the collective wisdom of a network of libraries, librarians, subject specialists, researchers and layperson researchers, to gain access to content residing at various locations and tap on the brains of people via a seamless and hassle-free reference service.

The paper also shares learnings of the National Library in leveraging on partnerships in enabling the library to do more than what it can do single-handedly.

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Introduction

Changing consumer lifestyles and technology innovations bring with them new possibilities for libraries. To stay relevant now and in the future, libraries must and will continue to take advantage of new and exciting opportunities. For Singapore, a tiny island city-state of 699 km^2, a population of 4 million and without many natural resources, this challenge seems an understatement.

Recent studies showed mobile penetration numbered 103.4 % of the population[1] and Internet broadband penetration numbered 63.7% of the population whilst dial-up penetration is 33.8 % of the population in Singapore [2].

The Nature of Reference Services

One of the key services provided by the NLS is the reference enquiry service. This helps library customers know the resources that the library can help them get for any information need that they have.

The need for reference information can occur at anytime to anyone. This spontaneous nature of the way a library customer thinks of a question to ask, when an information need arises, presents both a challenge and an opportunity for the library to offer its services.

Against this background, for the past year, the National Library of Singapore (NLS) has been exploring ways to leverage on technology to reposition the delivery of its Reference and Information Service (RIS). Three service objectives set were :

a. Service within reach – providing RIS wherever, however and whenever customers need it, with any device they have at hand. They can request and have the actual content delivered, all via any PC or handheld device that they hold in their hands.

b. Service as a lifestyle – making RIS available within the social space that customers are comfortable in, eg. Google, Yahoo!, MSN (GYM), without them having to leave their space in order to find the library's content.

c. Service as a team – providing RIS by leveraging on the collective wisdom and knowledge of the library community. Through an online collaboration platform, librarians from anywhere can come together digitally to collaborate in real time, discuss and simultaneously work on one enquiry using their respective email systems.

Inclusive Lifestyle (On the move, alongside the enquirer)

This section discusses the way the library allows for access and delivery of the library's reference service and collections via any handheld or internet-enabled device.

YouAsk@yourHandphone

The service that the library provides is designed to be always within reach of the customer (Always On, Always There) via SMS. With such a high penetration of mobile phones in Singapore and to meet the customers' spontaneous need for reference service according to their lifestyle, SMS was added to the range of the contact channels in addition to other existing channels such as the email, web enquiry form, phone, fax and post. Introduced in Apr 06, the SMS Reference Enquiry Service meant that customers on the go could easily reach us.

YouReceive@yourHandphone

As designed, the library's reply to the enquiry is delivered to the enquirer anywhere and anytime via SMS. For short answers, the reply will be in the SMS or email. For lengthy answers, the reply comprises a teaser and an URL. The URL allows a longer reference answer to be delivered and accessed anytime, anywhere, as long as the customer has an internet-enabled device. It is easy and convenient, and the privacy of the customer is maintained, with each URL being unique and kept in the SMS message.

With this service, the enquiry and the reply are portable and are always there for the customer. As long as the enquirer has access to the Internet, she can refer to and make use of the reply and resources as and when needed, anytime after the reply was first sent to her. The reply accompanies the enquirer wherever she goes, and is accessible anytime (Always On) and anywhere (Always There).

Seamless delivery of content related to enquiry

The service is further enhanced to enable the seamless delivery of the actual content of the recommended resources, whenever possible, via the Internet. From the list of recommended resources in the reply received from the library, the enquirer can select the items to be delivered according to their preferred mode of delivery, make their payment online and have the items delivered online too, if desired.

<u>RIS via GYM spaces</u>

Along the way, the library discovered very quickly that the majority of the young Internet-savvy enquirers do not spend their time in the library's world but in the GYM space as well as other online social networks. For this reason, the NLS is also providing the reference enquiry service in the customers' preferred lifestyle spaces. The enquirer can also discover the RIS, ask a question, and search the database of the library's past reference enquiries, all via the common space that many people spend their time in – the GYM space.

Librarians provide answers to questions in Yahoo! Answers, by selecting those questions relating to Singapore, where our core expertise lies. By doing so, the library found that it was able to give greater visibility to the rich library resources, and the capability of staff, as librarians were answering real questions asked by real people in the Yahoo space.

Inclusive Workstyle (Working together concurrently, not taking turns)

This Section discusses the way the librarians work with and learn from each other in the internet-enabled space.

<u>Wiki-like collaboration platform</u>

To facilitate the sharing of knowledge and learning from one another, and to improve the quality of reference service, a wiki-like collaboration platform was explored. Through this online platform, staff from different places could come together digitally to collaborate in real time, discuss and simultaneously work on one enquiry using their usual workplace email systems, to enhance the quality of the answer.

Staff handling the enquiry could rely on the communities of subject specialists formed, including those whom they may not personally know, to seek inputs pertaining to in-depth reference enquires. In the process, learning takes place as the initiating librarian continues to take ownership of the reply to the enquiry whilst getting and using inputs contributed by others in the community to enrich their replies. This improves the staff's capability in dealing with the more challenging reference enquiries.

In this set-up, the collaborative communities can be formed dynamically as and when needed, according to the subject matter requested for by the enquirer. Participating librarians and subject specialists can contribute resources directly into the answer in real time. Joint study reports, research papers can also be collaboratively prepared in real time concurrently. While the collaborations take place, interactions between staff and subject specialists are captured and archived to form part of the library's knowledge management data.

<u>Threaded emails and blogs as learning tools</u>

Through the platform, librarians and experts can help each other to respond to the enquiry anytime, anywhere. Once alerted by SMS and then via the Internet, the librarians and experts have access to the threaded emails that capture the contributions on a particular enquiry via a blog.

Contributors can view the entire discussion on the enquiry at any one point in time, in one click and on a single screen. At the same time they can also view the draft version of the reply while the librarian works on it. At any point, any contributor can add her expert opinion to the discussion that is captured in both the threaded email format and as a blog.

<u>Database of past enquiries</u>

The enquiries answered are subsequently packaged into a self-service enquiry database for librarians and users to access and to re-use thereafter. By making this database searchable, it reduces the time taken by librarians to identify and select the resources for any enquiry that they receive. This is expected to increase the use of the library's resources. Librarians and experts will also have access to past reference enquiries via GYM spaces or the NLS website.

When designing the workflow, the project team wanted to facilitate the learning of reference work between librarians and expert contributors. This will take place when anyone interested to learn from another can choose to view each other's contributions for a list of enquiries via a blog containing all the contributions made by any specified contributor so far.   They can also initiate a dialogue with the expert via the same blog to share and exchange knowledge.

For those who may not have participated in the particular discussions, they can learn by simply viewing the contributions and ideas by others via the threaded emails or the blog.

Workspace Anywhere (Office without walls)

This section discusses the way the library enables librarians to work in a time and space-independent environment.

One of the beauties of the set-up is that an SMS enquiry can be forwarded to a librarian anywhere, anytime regardless of where she is. Equipped with an Internet-enabled device, the librarian can access the full workflow cycle described above to conduct the whole process of search-gather-review-research-edit-contribute.   She can access the library's online catalogue, Internet resources, NLS' subscribed databases, and the NLS own created resources to support her reference work. When completed, she can transmit the reply directly

to the enquirer there and then via the NLS' SMS gateway. This anytime-anywhere environment enables the librarian to take charge of replying to an enquiry from wherever she is. She need not be in her office to perform her reference work.

As working on the reference and information service is time and space-independent, this opens up new possibilities for the library to tap on the pool of retired and other librarians, and subject specialists who may prefer to work from their homes, during their preferred hours.

If the librarian needs assistance, she can solicit help using the web-based threaded email system to initiate the discussion as described above. This takes place without having to drag librarians out of the environment that they spend most of their time, which is the librarians' respective email environments. We hope that this ease of use will encourage a higher rate of participation for collaboration.

NLS Partnerships

This section discusses how the NLS engages public, private and international partners to achieve its objectives in developing its functions, services and collections, as well as reaching out to the targeted communities. Three strategies are described to provide an insight to the past collaborations and future plans to enhance the partnership with these organisations.

Desired Outcomes of Partnership

The following are targeted outcomes for collaboration with the library's partners:

Content Development

As the NLS focuses on collecting both published and unpublished materials, especially on Asia-Centric and Singapore content, these partners will help support the library by promoting the legal deposit and heritage functions of the national library, and introducing potential donors of private collections to the library.

Service Development

Reference Enquiry, Search and Delivery Services will be made available to valued partners under preferential arrangements. Digital Library services, Inter-Library Lending, Collaborative Reference will also be offered to partners. Special services will be provided via the websites of partners so that their communities will benefit from the collections and reference services provided by the library.

<u>Audience Development</u>

Programmes, exhibitions and publishing projects will be jointly undertaken to reach a wider audience.

<u>Capability Development</u>

A network of Specialists and experts from within and outside of Singapore will be developed to provide advice for the development of collections and services.
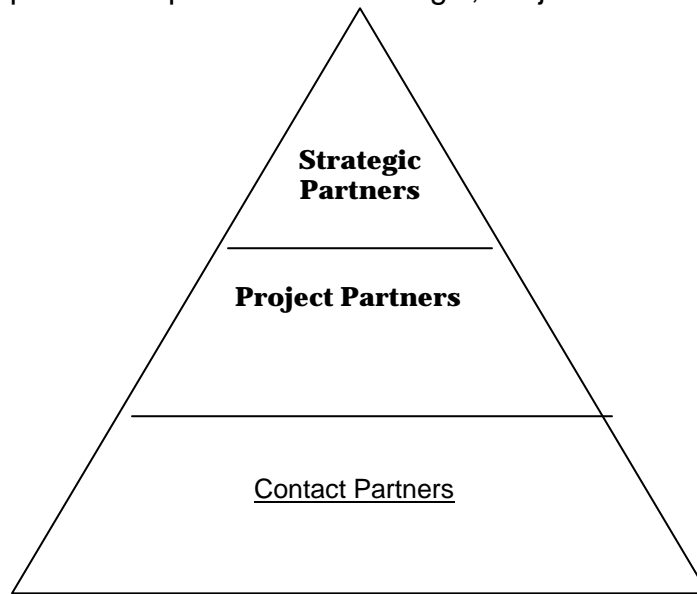
Three Strategies in Partnership development

<u>FIND IT Campaign</u>

This campaign is targeted at local organisations. Launched in Apr 2006, the campaign was supported by 16 partners from four targeted segments of Education, Business, Design and Heritage.

Specially-tailored talks for the partners were conducted for their members to help them understand how to make use of the facilities and resources of the national library.   Experts and Subject Specialists from these organisations were invited as panellists and facilitators to present in their areas of expertise, such as Singapore heritage, business and finance.

<u>National Library (NL) NET</u>

The NL Net is a scheme specially designed for the NLS' value-add partners. The targeted date to launch the scheme is end 2007.   Three levels of partnership will be implemented : Strategic, Project and Contact Partners.

Strategic Partners

Project Partners

<u>Contact Partners</u>

Strategic partners are committed to an agreed terms of engagement, and are accorded recognition and benefits suited to their needs. They would commit their contributions to the NLS during the period of engagement. These could be in any of the four desired outcomes described above. The tier two partners are Project Partners whereby a short-term partnership is forged for the duration of a joint project for mutual benefit. Contact Partners are agencies that provide contact addresses for NLS to promote its programmes and services to. They are not involved in joint projects nor in development of services or collections.

Legal Deposit (LD) NET

As LD is an important function of the NLS, the LD Net provides publishers, organisations and content producers a structure and a service to imbibe in them a sense of belonging.

The objective is to encourage them to contribute actively to LD. The scheme helps NLS to identify, manage and recognize supportive publishers, organisations and content producers by showcasing what they have contributed to the NLS and to the Singapore cultural legacy in general.

Next Steps

External collaboration

While we learn from what have been implemented so far, we plan to extend the collaboration platform to the library community within Singapore, Asean, the Asia-Pacific region and the world to tap on the unique knowledge and resources all around the world as soon as we are ready. We will use the networks and partnership that we have built so far, to help in this effort.

Co –creation of content

With the learning from the process of sharing and collaborating among library professionals, we are also considering extending this sharing and collaborating with users – the man on the street, in particular to co-create content, as within individual members of society is a wealth of talent, insights and possibilities based on what they know.

Access to content anywhere

We will also explore how we can seamlessly provide access to collections of other libraries and research institutions. In addition to accessing their respective catalogues, we would like to explore if delivery of selected content could be done. Again, we hope our partnership efforts will be helpful here in creating greater access to materials held by libraries in Singapore, the region and the world.

<u>Extending support to Singapore's research community</u>

In support of the research community, the NLS is also working on aggregating research expertise through collaboration. Profiles of researchers and research publications from Singapore's research community, starting from its 3 universities and 6 research institutes, are being aggregated and made available online.

Conclusion

The collaborative platform described above can easily be extended to librarians from libraries anywhere, as groups can be dynamically created, according to the subject matter of the particular enquiry at hand. This means that the collective wisdom of librarians and other subject experts within NLB as well as those from other libraries and research institutions from around the world can be tapped on to bring the best resources to within reach of the user, in a manner that allows the library customer, the library professional, and an expert community of any number to interact anywhere they are, so long as they have an internet-enabled device, be it a lap-top, a handphone or PDA. The whole cycle of a customer making an enquiry, to a librarian receiving it, working on the enquiry and delivering the reply and documents from anywhere is made possible as the platform that allows for this to be done is time and space-independent.

At this early stage of the development of this basket of services, it is not feasible for the NLS to make a good assessment of the full impact of the services. Initial feedback from librarians is positive, as they found that using the collaborative platform, they were able to discover knowledge experts that they did not know of, and they find the contributions from a pool of librarians helpful. Library customers are happy with the convenience of the SMS and email services. They are also happy that they are able to get a substantial list of recommended resources, plus links to actual articles that are given to them in the reply that they receive from the librarians, whether through the URL in the SMS reply or an email reply.

With the partners that we will continue to build through the NL Net and LD Net, we hope to leverage on our partners for the outcomes described above. There is a lot that we have to learn in building and networks and leveraging on them. As the NLS learns more along the way, the library will be happy to share more insights, findings and feedback from our learning journey.

<u>Footnotes</u>

[1] IDA Singapore. Statistics on Telecom Services (2006 Jul- Dec). Last retrieved 27 Mar 07. http://www.ida.gov.sg/Publications/20061205181639.aspx

[2] IDA Singapore. Statistics on Telecom Services (2006 Jul- Dec). Last retrieved 27 Mar 07. http://www.ida.gov.sg/Publications/20061205181639.aspx