

**A Totally Self-Help Library – Prototype and Management :
The Singapore Experience**

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Abstract

Since 1995 when the National Library was set up as a statutory board, the Board has been experimenting with new services to improve service levels, reducing waiting time and to save customer time in the past 7 years. These include services such as the application of radio-frequency identification tagging to cancel books returned automatically without a staff doing it, a computer station that allows customers to check their loan records and to make payments using a cashcard, and a cybrarian service that allows a customer to speak to a librarian and be guided, without the physical presence of the librarian.

With these automated services in place, the National Library Board decided that it was time to experiment with a concept called the Totally Self-Help library, to allow the Board to try out the idea of running a library without any library staff onsite, yet provide the same level of service to the customers as one with a team of library staff onsite. This new library opened its door to the public on 1 December 2002. The paper describes the prototype, the operations and learning points.

Background

The National Library was a government department under the Ministry of Information and the Arts until Sep 1995, when it was converted to a statutory board called the National Library Board (NLB). Since then, the NLB has been experimenting with new services to improve its reach and to raise its level of services.

The Self-Help Library Concept was mooted for a year before the Board felt that the time was ripe for the concept to be tried out.

From the time the Board was formed in 1995, several new services were introduced in NLB's libraries to make library visits hassle-free, enjoyable and enriching. Due to heavy usage on weekends and during school holidays where queuing time could be as long as 45 minutes for returning a book and another 45 minutes to borrow a book, the NLB launched a concerted effort to install self-service machines to remove the queues. This effort was completed in 1998 when all libraries were equipped with 3M self-service machines for borrowing. 24-hour bookdrops were also introduced in all libraries to remove queues in returning and to enable customers to return books on loan anytime of the day or night.

The machines helped to remove queues. However, they did not help much in the returning function as staff was still needed behind the bookdrop to cancel loan of books returned.

Collaboration with a local technology vendor brought about a prototype of the radio frequency tagging (RFID) system which would allow for both the borrowing and returning functions to be automatically handled by the RFID system. This system reduced the returning function to zero queuing time as the loan of any library item returned via the RFID-enabled bookdrop would be cancelled as soon as the item was dropped into the bookdrop. As the book travels down the chute of the bookdrop, a RFID sensor would read the RFID tag and cancels the loan from the library loan system.

Other functions automated included the payment of overdue fines and other payments via a national cashcard used in Singapore, and checking of loan records online and in real-time. These are functions required by our customers often as many of them could not remember the books they had borrowed and had a habit of asking staff to check for them the outstanding items they owed to the library. With these functions, automated payment of fees to the library also became a breeze.

With all the above functions automated, the library asked itself if there were remaining library functions which needed to be automated in order for customers to transact every function on their own without the assistance of library staff.


We found two such functions: registration of new members and the enquiry service.

Work on these functions started as part of the plan to prototype the Self-Help library without stationing library staff onsite. This new library was to be called the SengKang Community Library (SKCL).




Registration of new members : This was an interesting development as the project team struggled with whether we would ask customers to produce their personal identification documents before the library would proceed to register them as new members. The project team decided to take a risk in implementing this new self-help service, and a decision was made not to ask the customer to show their identification documents to staff before activating the membership. Instead, library staff would monitor if there was any abuse of the system after implementation. Fortunately, to-date, there has not been any report of abuse.


A kiosk was designed to provide this new service, and focus groups were brought into the library to test the service before it opened to the public. Most customers were able to follow the user instruction on the screen without much assistance. Some feedback was gathered and improvements were made to the service before it was launched to the public on 1 Dec 02 when the library was opened officially for business.



How to use the Membership Registration Kiosk




- Select desired function on the touch screen by pressing on it.




- Select the supporting document you wish to use:

or



- If you are using a
 - NRIC / School Smart Card / Membership card, place the card into the slot with the barcode facing away from you. Remove the card when your NRIC number appears on the screen.
 - Birth Certificate (to register a child), enter the Birth Certificate number as shown.



- Collect your membership card at the end of the transaction, if you request for a card.

Remote enquiry service – Cybrarian service

The other service that was developed for this new library was the Cybrarian service. This uses the idea of a PC-based co-browsing service where the librarian sits offsite in another library, while the customer making his enquiry would ask his question from a kiosk at the library, wherever it is.

The NLB had experimented with this service in 1998 at another library using the video-conferencing facility. When first tried out, both the librarian and the customer could see each other on the screen that they both were looking at. However, feedback from the customers was that they would prefer not to see their own faces nor the librarian's faces on the screen when using the service.

With this customer feedback, the team decided that the second iteration of the cybrarian service would not include the cameras to capture the faces of the customer and librarian, and only the telephone and the co-browsing facilities were provided. Two such stations were installed in the library to provide customers with a remote enquiry service in the SengKang Community Library.



Management and Operations

Since the library has no Customer Service counter onsite, it has a minimum number of full-time staff - who take care of the financial and administrative work at the library - as compared to a library of similar size which could have up to 17 full-time staff. There are only

2 para-professional staff and 7 support staff who manage the collection - simple processing and shelving of library collection.

During its opening hours from 11am to 9pm daily, there would be at least one staff at the library with the other staff concentrating on publicizing the library services to schools and other community institutions. The manager who runs another branch library oversees the operations of this library and the two para-professional staff. The manager was able to do the supervision offsite with the help of web cameras installed at the library.

Professional librarians from the region where SengKang Community Library is part of, assisted with the collection development activities. The librarians will ensure that collection meets with customers' demand.

The collection maintenance work, including shelving, shelf-reading and weeding are done by full-time staff as well as part-timers trained to provide the service. Most of these part-timers are housewives who can work on flexible hours. The number of part-timers who work at the library varies according to the need for services during peak and non-peak hours. This worked out very well as more part-timers could be scheduled to work during the busy periods.

The IT support was provided offsite through a remote monitoring system set up in the library. The system will notify staff via email of any IT problem as and when it happens, and they will re-start the system, recover the PCs and capture the details of recovery work done in the log for tracking purposes.

A team of 12 volunteers help the library provide onsite assistance to customers, including onsite support for IT services, user education at the various self-help services and storytelling sessions.

A concierge counter at the entrance of the library provides onsite service if any customer requires it. For enquiries on library services and materials, the concierge will usually bring the customer to the cybrarian kiosk, so that the customer can speak to and get assistance from the staff on duty at a remote site. The concierge service is outsourced to a security firm and the officer is fully trained to help with directional enquiries and to assist in handling simple requests from customers in the library, e.g. lost of items or feedback on noise.

Results of the prototype

On the first day of the opening of the library, over 12,300 people visited the library, borrowing a total of 13,900 library items. 128 new members registered themselves, and 255 enquiries were made via the Cybrarian service.

It was interesting to note that the usage levels were about the same as any other new library opening, even though the library had no staff onsite.

Feedback from customers was mostly positive. There was some feedback about the noise level. However, this was expected, as the first opening day usually drew larger than usual crowds.

The NLB is tracking the effectiveness of this library. So far, usage has been very encouraging, and enquiries from the library are still comparable to other similar libraries in the system.

Conclusion



The Totally Self-Help library is an interesting and exciting prototype for the NLB. While the NLB does not intend to implement this concept in every one of its 22 libraries, it is planning to implement it in a few other libraries in shopping malls to reduce the operating costs.

As for the Cybrarian service, we would like to extend this as a service that can be provided anywhere round the island, and in time to come, anywhere outside Singapore, where there is demand. This service would allow our customers to reach us from anywhere without visiting our physical library, yet be guided in their search for information, online and in real-time. It will also allow our librarians to work from home or from anywhere, so long as they have connections to NLB resources.

The initial success of the prototype gives us the confidence to move further in this journey to bring library services to more people in a more accessible manner. There is a lot more to do, we realize, and we will continue to explore other ways to make the access of information to our customers a hassle-free, fun and enriching experience.

The current project that we are working on is to find an easy way to direct our customers from the online catalogue to the bookshelf where the library item is shelved, so as to reduce time taken by the customer to find the item when he is using our collections. This, we hope, will increase the satisfaction of our customers when using our services.

We had this prototyped at one of our upgraded libraries in December 2003, and is now making improvements to the service, before rolling the service out to all our other libraries.

We will continue to explore new possibilities, including using digital media, to reach our customers, and for our customers to reach us.