Singapore Memory Project: The Journey and Lessons Learnt So Far

Schubert Foo*, Chris Tang**, Judy Ng**

*Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore

**National Library Board, Singapore
Brief introduction

• Engineering background (Mechanical Eng)
• PhD in Materials Engineering
• Worked in R&D (Power generation industry)
• Switched to IT – programming (CITP, CEng)
• Academia – from IT(CS) to IS (Info Studies)
• Taught and researched in LIS, Info Systems and KM (> 20 years)
Research

• Digital Libraries
  - Task-based approach to digital library design and implementation
  - Automatic Chinese thesaurus for info org & improved information retrieval
  - Multilingual search and retrieval – Chinese text segmentation
  - Reusable digital objects (metadata*) for creating virtual exhibitions
  - Information retrieval using bibliometrics (co-citation analysis)
  - Collaborative querying for information retrieval
  - Search results interface design, presentation and visualisation
  - Mobile user interface design (context-aware*)

• Information Environments
  - Integrated information environment for interaction and value adding
  - Information literacy (general and specific*)
  - User trust in virtual online environments*

Plus others... including new areas sentiment analysis, social digital heritage, dynamic metadata

* Current PhD projects
1 Introduction

Library 2.0 - socially rich, multimedia enabled, user originated and communally innovative environment

Case study of a Singapore national project facilitated by National Library Board, Singapore known as the Singapore Memory Project (SMP) – to be launched in 2012/2013
SM is a national multi-Agency project to collect, preserve and access Singapore’s knowledge assets to tell the Singapore story.

Presentation addresses key approaches, concepts and ideas behind the project to help identify learning points.
Tasked with responsibility to oversee both the National Library and Public Libraries of Singapore.
Public Libraries

• 3 Regional Libraries (Woodlands (North), Tampines (East), Jurong (West))

• 22 Public Libraries (including Shopping Mall libraries)

• Also manages 7 libraries of government agencies, schools and institutions
3 The Singapore Memory (SM) project

Sustainable long term national programme to enable the cultural and intellectual memory of the nation to be collected, organised, preserved, discovered, researched, augmented and created.

National digital collection of knowledge assets about Singapore to be built and augmented over time.

Requires wealth of resources in research and academic institutions, public agencies and non-government organisations

Collectively to tell the evolving Singapore story from its pre-founding days to current developments in all sectors of life in Singapore.

→ SingaporeMemory.SG – a national web portal
SM Structure and Framework

NLB plays facilitative role under the Ministry of Information, Communication and Arts (MICA) direction as a whole-of-nation collaborative initiative.

Involves libraries, heritage agencies, research institutions, people, private and public sectors.

Directed by Steering Committee of diverse members.

http://farm4.static.flickr.com/3078/2883725611_976dee931d.jpg
Involves 40 institutions and agencies to provide content and synergistic activities.

Bottom-up whole-of-nation collaborative partnership is an important lesson and learning point in this project.
More than 1.5 years of interest-generation, value-proposition, dialogue, discussions, support and commitment

Sharing of important super-ordinate vision and goal to develop the nation’s memory in a sustainable way.
→ Project presented to MICA
→ Parliament endorsement and approval.

Require buy-in and commitment of stakeholders for success of this project.

http://www.inoct.net/blog/wp-content/gallery/singapore-memory-1/singapore_chinatown_1.jpg
SM Output

Collection of knowledge assets on Singapore along a 6-point SM Content Continuum
Content - all format, any language, Singaporeans and non-Singaporeans, any institution and agency, local & abroad, official and unofficial.

Utopian scenario
Any person, community, group or institution who has ever experienced Singapore in any way or has any material on Singapore will engage actively in the contribution, discovery and creation of content for SM and become advocates of SM to encourage and catalyse more contribution, discovery and creation.

Ease of access to Singapore content

Intangible outcomes – Singapore identity (both internally by her people, and externally by the world).
Major Areas of SM Development

Three major areas of development

1) Building of national knowledge assets
2) Enabling discovery of existing and creation of new knowledge assets
3) Seeding education opportunities and knowledge communities to grow and sustain these assets.
(1) Building National Knowledge Assets

4 focus areas

Little Known Singapore

i. Singapore Stories - from content in research and academic institutions, public agencies, people organisations and with individuals to tell stories about Singapore.

ii. Beyond Print and Published Materials - other formats that can be digitised including multimedia items and rendering of artifacts.

iii. Beyond Content in Singapore - content developed outside Singapore but which speaks about Singapore.

iv. Beyond Official Content - personal narratives and accounts by Singaporeans about their memories and experiences.
(2) Enabling Discovery and Creation of Knowledge Assets on Singapore

Disseminated in a borderless manner through all forms of channels including social media.

Aim is that SM content can breed more content through enabling research and creation, and deposit.

http://www.bpurcell.org/images/nlbclustering/NLBconfig.jpg
(3) **Seeding Education Opportunities and Knowledge Communities**

SM should help to build an understanding of all things Singaporean for Singaporeans – all age groups.

Non-Singaporeans such as expatriates who are interested in Singapore will also be targeted to use and contribute SM resources.

Knowledge communities, web media and other shared platforms can be engaged to collaborate, build and further communicate the content about Singapore.
SM Value Chain

• Sourcing of Knowledge Assets about Singapore
• Preservation, Organisation and Conservation
• Digitisation
• Access and Discovery
• Knowledge Assets Creation
• Project Management
• Audience Development & Knowledge Communities
SM Network

SM envisioned as facilitator to catalyse, enable and scale up complementary activities from communities, agencies and organisations.

The Long Tail of the Singapore Memory Network
Resources collected from Major Contributors (as of June 2010)

• Photographs
• Private papers
• Oral history recordings
• Multimedia
• Contemporary memories
• Newspapers (1800s to present)

Long tail contributions important to ensure users’ buy-in, active participation and contribution to grow resources over time.
SM Proliferation Programme

To engage a broad range of stakeholders to ensure that the nations memories are being captured in stories, productions and national showcases in both virtual and tangible forms.

Memory seen through the eyes of many - government, private, key figures and the general public – with key dates, milestones and events.

SM uses 3 key platforms for proliferation programme.
Platform 1 : Add to Singapore Memory

Participatory platform that will encourage the researchers, students, families and the public at large to contribute perspectives, stories and memories in the form of videos, photos, writings, web links and even documents.

Themes would be developed for Add to Singapore

Examples: Founding of Singapore to the present day – people, places, food, culture and events.

Add to Singapore Memory App

Virtual deposit platform with a home site as well as applications to be developed in other social media sites.

Uses multiple points of awareness and access to support contribution → comprehensive and convenient means to permeate project’s reach and coverage.

SingaporeMemory.sg + NHB story.sg or yesterday.sg sites + Singapore Tourism Board’s YourSingapore.com site + .... + links to social media sites
Conceptual mockup of the Add to Singapore Memory App
Roadshows

Physical form like Britain’s well known Antiques Roadshow to receive contributions from the public that are less tech-savvy.

Historians and story-builders will interface with the general public keen to share and document their stories and experiences about Singapore.

http://www.flickr.com/photos/snapsg/sets/
**Thematic Contributions**

Add to Singapore competitions or campaigns built around various themes.

Examples:

*“Who am I?”* - seek and ask Singaporeans to encourage documentation of their responses and possibly create a family tree.

*‘This Is My Home’* - photographs with their families at their homes.
Platform II: Mad about Singapore (Audience & Community Engagement)

Programme to catalyse a movement for people and communities that are passionate about different aspects of Singapore.

Sharing of passions to infect Singaporeans or even visitors to Singapore.

Idea prototyped by NLB in the past
Examples:
Bus-Chasers, Temple-Crawlers, Neighbourhoods, Streets, Buildings, and Literature

SM Proliferation will not just be a top-down government-driven initiative but one that is owned and contributed to actively by the community.
Platform III: Made in Singapore
(National & Personal Storyboards)

One key tenet of SM is for content to breed more content.

Made in Singapore – expresses notion that what is showcased is distinctively made in Singapore.
Ranges from personal stories from simple YouTube video, Flicker photo story to 3D online experience of Singapore.

Curated and non-curated.
SM aims to showcase one major story
– virtual + physical exhibition from 2011 to 2015

Examples
Pioneers of Singapore – both celebrated and unsung.
Raffles in Singapore – using 20 to 25 unpublished letters of Raffles (founder of Singapore) to trigger the new generation & researchers on Singapore founding stories

Engagement of Memory Operatives with dual roles
(1) to collect and document stories on virtual platform +
(2) community builder for SM.
SM Virtual Discovery and Engagement
(Other ideas)

The Singapore Memory Compass

Ubiquitous service to appear with the presentation of every content
→ Enable user to launch into discovery process
→ Provide user with to add content

• Search
• Browse
• Guide (Curated links and contents)
• Add
Conceptual mockup of the SM Compass

Search & Browse. SM Compass

Conceptual mockup of the SM Compass
Other ideas to complement SM Compass:
1. The BaGua History of Singapore
2. The Singapore Memory Matrix
3. The Singapore History Experience

**BaGua History of Singapore**

BaGua Model shows history of Singapore through matching the time periods to 2 levels of the Browse by Topics

http://www.bartlettdesigns.com/images/bagua2.gif
Conceptual Mockup of the BaGua History of Singapore

Matching Browse

Each Time Period matches that of Browse by Time Periods

Each Topic matches that of Browse by Topics through Topics in Bagua might be made more intuitive e.g. Food, Fashion, etc

Show The BaGua History of Singapore
Matching of the 3 levels of the BaGua’s concentric circles in the derivation of a Singapore milestone
The Singapore Memory Matrix

Presents memories as a function of perspectives and time.

Event in time can be represented from multiple perspectives from different experiences.
Any one entry point selected on the matrix will yield a constellation of other possible content framed by time and/or perspective.
The History Experience

Utilizes Google Streetview concepts.

Spatial landscape geo-tagged with information to key location markers. Explore by time, by type (Monument Guide, Historical Events Guide)

Each marker could be tagged with tourist information, historical information, or information related media such as stories, videos, poems, events, people, trails, photos, and so on.
Many approaches covered are preliminary concepts subject to evaluation, assessment refinement and change.

Concepts recognise and attempts to harness the virtual Library 2.0 environment for user engagement.
Important Factors for Success of SM Virtual Component

1) Discovery and Engagement
   • Provide access that is as ubiquitous as possible to SM content as permissible by rights of the content.
   • Provide discovery services
   • Engage users at each point of their discovery process

2) Augmentation and Creation
   • Provide avenues to add content upon encountering SM content or from anywhere else on the Internet.
   • Provide avenues to create content through repackaging or new inspired content to *SingaporeMemory.SG*.

3) Assets Collection
   • Provide content management system - continually build and preserve content
5 Conclusions

SM project success depends on:

• its ability to be socially engaging
• varied content from different perspectives to capture memories of the nation
• harnessing multimedia to provide realism and richness
• developed on a physical and virtual platform that is culturally in tuned (e.g. BaGua)
Some Lessons Learnt

• Bottom up, all of nation approach for a national scale project - no short cuts
• Sustainable funding
• Clear in vision and design for implementation
• Consider value proposition for all stakeholders
• Engage community where they feel most comfortable (physical and/or virtual)
• Adopt appropriate and engaging technologies
• Build on sound foundation (e.g. standards and metadata)
• Have good and relevant user engagement plan
Scale and scope of SM project facilitated (and led) by library professionals demonstrates the demanding and changing roles as well as the potential of librarianship (education and training for the future.)
-- Thank you --

For more information, please contact

Schubert Foo
sfoo@pmail.ntu.edu.sg
Content Exposure for Discovery and Use: Singapore Infopedia and NewspaperSG

Need to expose content via popular search engines to maximize chance for users to get direct access to the rich content within their social space.

Examples

**Singapore Infopedia** is an encyclopedic database of articles on Singapore’s history, culture, people and events known as the Singapore Infopedia.
Includes 1500+ articles plus list of recommended resources for further reading. Applied SEO techniques and re-design of the website architecture to enhance discovery of these electronic content via search engines 24 by 7. Page hits rose from average 300 to 400 pages/month to 150,000 to 180,000 pages/month (450 fold increase)
Interactive Infopedia map provides alternative way to navigate Architecture and Landscape collection

Searchable from Google Maps or Google Earth – providing another means for access and discovery

Use of Web 2.0 tools → blogs (Infopedia Talk) and sharing of contents to allow users link Infopedia content to social media tools such as Facebook, LinkedIn, Digg, Delicious.
NewspaperSG – an online resource of current and historic Singapore and Malayan newspapers

NewspaperSG is an online resource of current and historic Singapore and Malaya newspapers. You can search our digital archive of English language newspapers published between 1831-2006, or find information on over 200 newspaper titles in the National Library’s microfilm collection.

Digitised Newspapers + Newspapers on Microfilm + What’s Next

Enter Keyword(s):

Advanced Search | Browse by Newspaper Titles | Search Tips

Digitised Straits Times (1845 to 2006) + born digital copies beyond 2006. Retrieved newspaper display provides options for article view or full view, a table of contents, and linking to social media sites.

NewspaperSG website (http://newspapers.nl.sg/)
Examples illustrates the importance of content management, design for maximize exposure, and engagement with the users to support their search, access, use and contribution.