SMS at Monash University Library

Presentation to CAVAL Forum, June 2007

Ian McGregor Lending Services Librarian

www.lib.monash.edu.au
Background

• Coolcampus summer initiative October 2004 to use an SMS to email gateway to replace the ageing TTY (telephone typewriter) service for communicating with hearing impaired students.
Project objectives

• Test usage of SMS communication with students
• Collaboration with ITS in providing an integrated service delivery between voyager and the my.monash portal (where users sign up for the SMS service)
my.monash portal

• Users can select:
  – Units they are enrolled in
  – Email
  – Weather
  – Ask.monash
  – Pay fees
my.monash portal (2)

- Other content includes:
- Monash University Lectures Online
- Loans details
- Customised library information (subject pages, and closest library)
Time frame

- Library SMS database created and tested with connections from my.monash - May 2006
- MessageNet SMS service provider contacted and accounts arranged - June 2006
- Library SMS code installed and tested on library servers - May-July 2006
Time frame (2)

- Testing of systems through my.monash and MessageNet completed in September 2006
- Testing of SMS to email gateway as a means of communicating with hearing impaired students - June-July 2006 [Not completed]
- Demonstration and discussion with Lending Services Committee - August 2006
Time frame (3)

- Communication plan implemented, including brochures and publicity on the library web site - July-August 2006
- Live testing with library staff – July-September 2006
- Live usage with students & staff - September-December 2006. Used for courtesy reminder notices, holds notifications and overdue items
- Email notices from Voyager are still sent out in addition to SMS notices
Time frame (4)

- Evaluation of project with LMC - December 2006
- Re-launched SMS system in Semester 1 2007 for holds notifications only
Library SMS notifications

About the service

The Library SMS service offers you the opportunity to receive reminders regarding items ready for pickup via SMS messages sent directly to your mobile phone. Messages will be sent one day after an item is available for pickup. Please note, however, there are a number of factors which may affect messaging:

- Due to the uncertainty of SMS messaging, the library cannot guarantee that you will successfully receive these SMS messages.
- There may be times when the library is closed, which may delay the sending of SMS notification messages during this trial phase.
- You will still receive email notification of your loans details in addition to the SMS service.

This is currently a free service. The cost of transmitting the SMS message is borne by the library.

Please note that your registration will automatically expire at the end of the current semester, at which time you may register again for the new semester if you wish to continue receiving this service.

If you have any comments about this service please use the Feedback button found at the top of every my.monash page.

Privacy notice

Monash University Library will use an external SMS service to provide this service. By registering for this service you will be authorising the library to provide your mobile phone number to the SMS broadcasting service. Monash will ensure that this information is provided in confidence. However, Monash cannot be held responsible for the security of the message sent to you. You are advised to keep your phone in your possession at all times until you have read and deleted the message.

Conditions

- This service can only send reminders to mobile phones with an Australian mobile network prefix.
- The mobile phone must be in Australia at the time the message is sent in order to receive it.
- Please note that you do not have to keep your mobile phone on to receive sent SMS messages; they should appear when you next turn on your phone.
Library SMS notifications

Thank you, you are now registered to receive Library SMS reminders.

Please note that your registration will automatically expire at the end of the current semester, at which time you may register again for the new semester if you wish to continue receiving this service.

Return to Library
Technical details – SMS Registration

- MySQL database of users populated by my.monash portal
Technical details – Circulation input file

- Windows batch file retrieves the overnight circulation file (crcnotes.SYS.inp) to a dedicated PC
Sample Circulation Notice

02|97.2||28|Smith|John||8974 W. 117th Street||||Kansas City|MO|76763||(290) 932-0371|10/15/1999|Endeavor
Library of Information|Main|2200 E. Devon|Suite

- Each record in the is made up of two pieces: a base segment and a suffix.
- All fields must be present and pipe-delimited. The pipe for a given field must be present even if the field is empty.
- Each record will be a line-feed-terminated string.
Technical details – Update registered patrons

- Make-Table query (MS Access) pulls down the MySQL table and links it with the Voyager patron table
  - Linked via institution id
  - Table created uses voyager patron id
Technical details – Update registered patrons cont’d…

• Make-Table query produces PatronMobileNo table
• PatronMobileNo table and the circulation notice file are used to determine who receives SMS notifications
Technical details – Java SMS program

- The SMS java program reads the circulation notice file into the MS Access database.
Technical details – Java SMS program cont’d…

- The SMS program matches the SMS users with any notices they may have.
Technical details – Java SMS program cont’d…

• The notices are emailed via smtp to the SMS provider
• Format of the message:
  – Subject: mobileno@messagenet.com.au
  – Body: message
Technical details – Java SMS program cont’d…

• The provider converts the notices to SMS and sends them out to the users.
Library SMS service

Monash University Library - Dear Simon, "Union organiza..." is ready for pickup before 24/02/2007. Log in to my.monash for more details.
Evaluation and analysis

- Usage statistics:
- Trial for 9 weeks from 28/9/06-30/11/06
- 1082 people registered
- 2416 messages sent out via SMS
- Total cost for SMS messaging of $733.95 (each message was 15 cents)
Usage

• Percentage of SMS vs email notifications:

<table>
<thead>
<tr>
<th>Date</th>
<th>Email recipients</th>
<th>SMS recipients</th>
<th>Percentage sent via SMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 November 2006</td>
<td>904</td>
<td>45</td>
<td>4.9%</td>
</tr>
<tr>
<td>6 November 2006</td>
<td>1371</td>
<td>60</td>
<td>4.3%</td>
</tr>
<tr>
<td>28 October 2006</td>
<td>1693</td>
<td>83</td>
<td>4.9%</td>
</tr>
<tr>
<td>23 October 2006</td>
<td>1545</td>
<td>53</td>
<td>3.4%</td>
</tr>
<tr>
<td>17 October 2006</td>
<td>1586</td>
<td>56</td>
<td>3.5%</td>
</tr>
</tbody>
</table>
Hold item available notices

- **SMS recipients**
  - ** mode (highest)

<table>
<thead>
<tr>
<th>Days until borrowed</th>
<th>Number of borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>70 **</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>39</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

- **Non-SMS**

<table>
<thead>
<tr>
<th>Days until borrowed</th>
<th>Number of borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>278 **</td>
</tr>
<tr>
<td>3</td>
<td>155</td>
</tr>
<tr>
<td>4</td>
<td>127</td>
</tr>
<tr>
<td>5</td>
<td>107</td>
</tr>
</tbody>
</table>

- Highest number borrowed after 0 days (sms) compared with 2 days (email)
Overdue notices

- **SMS**
  - ** mode (highest number)

<table>
<thead>
<tr>
<th>Days until returned</th>
<th>Number of borrowers</th>
<th>Days until returned</th>
<th>Number of borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10 **</td>
<td>0</td>
<td>164</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>238</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2</td>
<td>244 **</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>3</td>
<td>180</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>4</td>
<td>175</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>5</td>
<td>235</td>
</tr>
</tbody>
</table>

- Highest number returned after 0 days (sms) compared with 2 days (email).
Due (courtesy) notices

- **SMS**
- ** ** mode (highest)

<table>
<thead>
<tr>
<th>Days until renewed or returned</th>
<th>Number of borrowers</th>
<th>Days until renewed or returned</th>
<th>Number of borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>51</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>1</td>
<td>65</td>
<td>1</td>
<td>1076</td>
</tr>
<tr>
<td>2</td>
<td>38</td>
<td>2</td>
<td>3204</td>
</tr>
<tr>
<td>3</td>
<td>61</td>
<td>3</td>
<td>3443</td>
</tr>
<tr>
<td>4</td>
<td>145 **</td>
<td>4</td>
<td>3981</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>5</td>
<td>5736</td>
</tr>
<tr>
<td>6</td>
<td>23</td>
<td>6</td>
<td>7111 **</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>7</td>
<td>2865</td>
</tr>
</tbody>
</table>
Fines notices

- Only 25 people received fines notices and their behaviour varied.
- During the trial, the much lower number of days to return overdue items, indicates a significant shift in behaviour and this will have some effect on fines revenue.
- The reduction in the most common (mode) number of days to return overdues from 2 to 0 days, represents a significant shift in behaviour.
- And the average number of days to return overdue items from 32 to 5 days, is also a factor (numbers were small though).
Survey of users

- William, a Library staff member, modified the code to send out a single question via SMS
- Question sent on 28 November 2006, just before the SMS service closed.

“Monash University Library. Dear Jo, our SMS service is concluding for 2006. Did you find it helpful and would you subscribe again? Yes / No?”
User survey - results

- Sent to 727 people via SMS
- 256 replied (35%) - most straight away
- 248 replied ‘yes’ (97%)
- 8 replied ‘no’ (3%)
- Some yes replies:
  - “Yes would subscribe again - prefer SMS rather than email alerts.”
  - “Yes but it can b improved by sending names of the items due or ready 4 pick up.”
  - “Yes but only if it is free because i check my email often enough.”
Conclusions

• Service was very popular
• 97% of users were satisfied
• Positive effect on user behaviour (so it must be relevant)
• Inexpensive (we think – depending on the real take-up this semester!)
• We will expand the notices to overdues, courtesy notices and fines notices if take-up isn’t through the roof
• Engagement with our users in a new, cool and ‘technical-savvy’ way