Mobilizing Staff with Mobile Technologies

A STUDY OF MOBILE TECHNOLOGY USE BY UNIVERSITY STUDENTS WAS EXPANDED TO INCLUDE LIBRARY STAFF, RESULTING IN IMPACTS THAT ARE STILL BEING FELT.

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In 2008, the University of Maryland (UMD) launched an initiative to study whether mobile technologies can enhance students' educational experiences. During the first two years of the Mobility Initiative, 280 freshmen were loaned either an iPhone or iPod Touch device to use inside and outside their classes. (The iPod Touches available at that time were essentially iPhones without a phone or camera.) The iPod Touch has Wi-Fi capability that allows it to search the Web wherever wireless access is available. UMD's Wi-Fi coverage is very robust, making Wi-Fi-enabled devices quite popular among students.

In March 2010, the university's director of public services learned that the Mobility Initiative had been expanded to include more than 70 "second generation" iPod Touch devices, which had been distributed to students in classroom settings. He saw an opportunity to expose library staff to mobile devices at no cost to the libraries. (The UMD Libraries had been slow to embrace and adopt mobile technologies.) At his request, the Office of Information Technology agreed to loan 55 iPod Touches (8GB, with ear buds/microphones) to the libraries for two months. The endeavor was named the Mobile Technologies Pilot.

A small coordinating group of four librarians was established to develop learning outcomes, identify pilot participants, create a list of applications ("apps") that would be pre-loaded onto devices loaned to the libraries (see Table 1), and manage the distribution and return of the devices. The group also developed a list of weekly activities geared toward moving participants from becoming familiar with a mobile device itself to exploring library-related applications that already exist or could be useful for the UMD Libraries to investigate developing in the future (see Table 2).

The initial goal of the project was for public services librarians to become familiar with mobile technologies, but it quickly became apparent that other library divisions would benefit from the experience. Therefore, all individuals with their own iPod Touches or iPhones were invited to opt into the pilot, and

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some individuals chose to share devices. The only requirement for opting in was that staff use an iPod Touch or iPhone, since other devices (such as a Blackberry or Android) could not be supported.

At its start on 24 May 2010, the pilot comprised 84 participants (40 percent of the total staff). The pilot included librarians and support staff as well as representatives from all divisions: Public Services (PSD), Technical Services (TSD), Information Technology (ITD), Planning and Administrative Services (PASD), and Collection Management and Special Collections (CMSC).

Establishing Outcomes

As one of its first orders of business, the coordinating group identified the following three learning outcomes:

- Pilot program participants will be able to use applications on the iPod Touch.
- Pilot program participants will identify parts of the public Website that need to be "mobilized."
- Pilot program participants will identify service points/library services that would benefit from having access to mobile devices and recommend whether iPod Touches would be useful as those devices.

The coordinating group also acknowledged early on that communication is key to a successful project. Several methods of communication were implemented:

Pilot resource guide and blog. A resource guide (libguides.shadygrove.umd.edu/mobilepilot) and blog (libi.lib.umd.edu/groups/mobile-technologies-pilot/mobil-technologies-pilot) were created for program participants so they could share information and learn more about their devices. The resource guide listed weekly activities, provided links to useful resources and apps, and shared answers to frequently asked questions.

Group e-mail list. An e-mail list was created to send messages to participants each week. The messages suggested activities for the week (see Table 2) and contained other logistical information.

In-person meetings. Six group meetings were held during the pilot, including three voluntary clinics designed around the following themes:

- *Troubleshooting* (9 June 2010). This clinic provided an opportunity for participants to raise technical issues they had experienced with their mobile devices as well as share useful, interesting, or entertaining apps they discovered.
- *Reports from the Field* (22 June 2010). Participants from PSD and CMSC reported on their explorations of mobilized Websites and databases and gave a demonstration of the NAXOS music library.
- *More Reports from the Field* (7 July 2010). Participants from ITD, CMSC, PSD, and TSD reported on their experiences with mobile devices. These experiences included a "pilot within a pilot" held in the Maryland Room (which houses special collections), where iPod Touch devices were used to "page" student employees to the service desk when needed. Other report topics included a demonstration of a preliminary mobilized Website for the UMD Libraries and an overview of accessing e-books in the catalog and on mobile devices.

A farewell meeting was held on 20 July 2010. Pilot participants returned their devices, reflected on their experience with them, and begin identifying possible next steps. Summary reports from the clinics and the farewell meeting were posted on the blog.

Surveys and Responses

To gather additional feedback and determine whether the learning objectives had been met, two surveys were distributed to all participants—one at the

Table 1: Apps Included on iPod Touch Loaner Devices

Default apps included on iPod Touch devices:	*Additional apps identified by Coordinating Group:*
• Mail • Photos [Caveat: the devices do not contain a camera, but participants can download photos] • Contacts • YouTube • Stocks • Maps • Weather • Voice Memos • Notes • Clock • Calculator • Settings • iTunes • Music • Videos • Safari • App Store	• Google [Includes Reader, GMail, Google Books, Google Earth, Maps] • DukeMobile • University of Texas • DCPL • CDL (International Children's Digital Library) • Worldcat • ELMS Mobile • NML (Naxos Music Library) • Musee de Louvre • The White House • Stanza • Amazon Kindle • Yahoo (personal e-mail access) • Comcast (personal e-mail access) • AIM (Free Edition) • TweetDeck • Skype • Foursquare • Facebook • LinkedIn • The Weather Channel

Note: If a pilot participant using a loaner device wanted to add apps (free or paid) to their device during the pilot, they were free to do so – but they needed to create their own iTunes account to do so. They also understood that any apps added to devices would be deleted when the loaner devices were returned to OIT.

end of the pilot, another eight months later. The post-pilot survey measured progress toward the three learning outcomes. Fifty-two survey responses were received, for a 62 percent response rate. The responses revealed the following:

- Pilot program participants will be able to use applications on the iPod Touch.
  - Nearly all respondents (96 percent) reported that as a result of the pilot, they felt they were able to navigate effectively on an iPod/mobile device.
  - Forty-four percent of respondents indicated that as a result of the pilot, their navigation skills on an iPod/mobile device had improved "a great deal." An additional 42 percent reported their navigation skills had improved "somewhat."
- Pilot program participants will identify parts of the public Website that need to be "mobilized."
  - Of the 52 respondents, 46 provided suggestions. The three most frequent responses were the catalog (32 responses), the portal to electronic journal holdings and subscription-based research databases (19 responses), and library hours (14 responses).
- Pilot program participants will identify service points/library services that would benefit from having access to mobile devices and recommend whether iPod Touches would be useful as those devices.
  - The two most frequently noted service points/services identified as potentially benefitting from access to mobile devices (based upon 46 responses) were the Reference Desk/Terrapin Learning Commons (9 responses) and student paging (6 responses). The three most frequently suggested devices to investigate (based upon 38 responses) were the iPad (14 responses), iPod Touch (11 responses), and iPhone (5 responses).

To determine the long-term impact (if any) of the pilot, a brief follow-up survey was distributed in April 2011, eight months after the program ended. While the response rate was lower than that achieved with the original survey, with 38 responses completed (45 percent of the pilot participants), the results indicated that the pilot had some noteworthy effects on participants.

For example, 29 individuals (76 percent of respondents) indicated they had purchased a mobile device as a direct result of participating in the pilot. Further, 47 percent of respondents indicated that the pilot changed the way they did their work. One respondent noted, "It encouraged me to start using the technology and to identify new technologies to assi[s]t me in my everyday job responsibilities."

In addition to those individuals who purchased mobile devices, several library units purchased them to use in their work. One respondent indicated that the pilot "reduced the time pages have to spend in the Maryland Room, making better use of student work hours." Another respondent commented, "Although I did not get a device for myself, I did get one for my unit. The device is helpful in working on some of our projects, like scanning QR codes, e-mailing pictures from the renovation, etc."

Recommendations and Actions

As a result of feedback obtained during the Mobile Technologies Pilot, the coordinating group made the following observations and recommendations, which were shared with the Library Executive Committee in November 2010. Several of these recommendations have since been acted upon.

- During the pilot, it became obvious that the libraries needed a venue for individuals to try out and discuss emerging technologies in a safe, non-threatening environment. The coordinating group recommended the development of such a venue, and in early 2011 the Emerging Technologies Discussion Group (ETDG) was formed as "a gathering place for librar[y] staff to exchange ideas on new technologies and to promote discussion on their impact on workflow and enhancing services provided to users." The group is open to any library employee with "an interest in the fascinating challenges of emerging technologies." The ETDG meets monthly, with staff from throughout the libraries giving presentations on technology tools they have found useful. The group also sponsors Webinars.
- The coordinating group also supported the development of a mobile version of the libraries' Website, complete with specific features such as operating hours and contact information. The group further recommended that any new discovery tool(s) (including the catalog) acquired by the UMD Libraries include a mobile version. A mobile Website, first demonstrated during the pilot, was launched later that year (www.lib.umd.edu/m/).
- Future activities like the Mobile Technologies Pilot should involve students and faculty users of library services.
- The libraries should consider purchasing mobile devices like iPod Touches and/or iPads to enhance services at service points. (The Maryland Room and McKeldin Late Night Services purchased such devices.)
- The libraries should assess the circumstances under which devices like iPod Touches might be distributed to library employees. Personal digital assistants (PDAs) were previously distributed to staff with a demonstrated need. iPod Touches may be an appropriate PDA replacement for staff.

The ability to locate e-book resources within ResearchPort (the portal to journal holdings) and the catalog was raised as a serious problem during the pilot. Discussions on this issue were initiated by key stakeholders. An online guide was released to help improve user access to e-books (lib.guides.umd.edu/e-books).

Lessons Learned

The Mobile Technologies Pilot was the first such large-scale pilot attempted by the UMD Libraries. Throughout the pilot, the coordinating group learned several valuable lessons that may be useful for others to consider before embarking on such a project.

Pre-pilot. Although the coordinating group did not encounter many individuals who were unwilling or unable to participate, they found that not everyone welcomed the prospect of getting a free device to use. Some saw it as additional work and voiced their concerns.

Group members learned that characterizing the pilot as a means of better understanding library clientele was the most productive way to introduce the pilot to staff. They also learned to remind participants that events such as the clinics were not mandatory, but could be useful in helping them gain more from their Pilot experience.

Two coordinating group members had no prior experience with iPod Touches. These members were given their Touches before the pilot started so they could become familiar with the devices, a decision that proved extremely beneficial.

Pilot. The loaner devices, although pre-loaded with apps by the Office of Information Technology, still required personalization (setting logon protocols for e-mails, connecting to the campus Wi-Fi, etc.) by each pilot participant. The devices were distributed and personalized in two large group meetings; in retrospect, it would have been more effective to break into smaller groups to better provide assistance. IT experts were on hand to help troubleshoot, for which the participants were grateful.

Although activities were suggested for each week, it helped to remind participants that these were optional. Some participants went well beyond the initial intent of the pilot to explore their devices and became key supporters of the Emerging Technologies Discussion Group.

One of the most successful aspects of the pilot was the active engagement of participants in the clinics (some of the participants made presentations). This activity greatly increased participant interest.

Table 2: Mobile Device Pilot Project Suggested Weekly Activities

Week	*Dates*	*Tentative Weekly Activities*
1	5/24-5/28	• Device distribution. Meetings: 5/24, 3-4 and 5/27, 11-12.
2	5/31-6/4	• Become familiar with your iPod Touch. Read p. 1-11 of the Norfolk State University guide (http://www.nsu.edu/ipod/ipodpdfs/iPodTouchTraining-andReferenceGuide.pdf). • Learn how to navigate on your device; launch an app already loaded. • Rearrange the apps on your screen (see the FAQ section for instructions). • Have wireless at home? Connect to your home wireless. • Check your e-mail (and try responding to one).
3	6/7-6/11	• Create an account in iTunes (see the FAQ section for instructions on how to create an account without giving your credit card). • For those who have accounts in Gmail, Yahoo, Skype, Foursquare, LinkedIn and/or Facebook - have you set them up on your device? If not, try it! • Use the Safari browser to check out your favorite website. Is it mobilized? (Easy to read on your device?) • Check out the Google Earth app on your device and locate your home (or favorite vacation destination). • Update apps if necessary (see the FAQ section for instructions).
4	6/14-6/18	• Navigate through the UM Libraries website using Safari. • Search Aleph. Repeat the search in WorldCat (use the WorldCat App). • Search the mobilized ASU Summon catalog: asu.summon.serialssolutions.com. • Check out NCSU mobile (m.ncsu.edu) and WRLC mobile (m.wrlc.org) • Check out the Texas and Duke Mobile apps. Do they have the most relevant info?
5	6/21-6/25	• Search mobilized databases (see the Mobilized Databases and Apps section for a list of suggested databases). • Compare the mobilized vs. the regular version of the same database. • Check Research Port for mobilized databases. • Going to ALA (6/25-6/29)? Try using your device at the conference. Ask your favorite vendor if their services are mobilized.
6	6/28-7/2	• Use your iPod Touch in the stacks. How well did it work? Did you lose connectivity? • Check out UM apps (UM Buildings, UM Info, UMServices) • Did you use your device at ALA? Would you like to report on your experience?
7	7/6-7/9	• Have you used Foursquare? Have you become McKeldin Mayor?
8	7/12-7/16	• "Check out" an eBook on your iPod Touch. (Check out this video for using Stanza: http://www.youtube.com/watch?v=SZmm8-8n3Tw)
9	7/19-7/23	• Check an eBook from the catalog.
10	7/26-7/28	• Time to say goodbye to your device!

Long-Term Impact

The Mobile Technologies Pilot had a much longer-range impact than anticipated. Its legacy lives on today through initiatives such as the mobilized UMD Libraries Website and the ETDG, and in the activities of all who have integrated mobile devices into their everyday lives and routines.

The pilot's impact is best summed up in the words of one of the participants, who noted, "I thought it was a great way to introduce people to mobile technology and to get others who are familiar with the tech to really start thinking about how people interface with it and where the libraries can fit in." **SLA**