

106 Washington Avenue, Oshkosh, Wisconsin 54901-4985

#### MEMORANDUM

**DATE:** October 19, 2015

**TO:** Oshkosh Public Library Board of Trustees

**FROM:** Jeff Gilderson-Duwe

**SUBJECT:** First Floor Service Model – Back to the Future

## Service model proposal:

I am seeking library board support to resume a model of service that was in place in OPL before 2009. The major features of that model are as follows:

- A greater reliance on using staff to assist customers with check out of library materials;
- A reduced emphasis on self-service check-out technology;
- Switching back to optical barcode scanning technology and away from radio frequency identification (RFID) technology for inventory control; and
- Abandoning the ineffective and intrusive automated library materials security system.

OPL's present public service model emphasizes self-service checkout using RFID tags for inventory control and materials security. Staff monitor customer use and intervene when someone is in obvious need for assistance or when they are asked for assistance. Staff also must resolve any issues that may cause the materials security gates to sound an alarm as a customer leaves the library.

## Background:

I am bringing this proposal forward at this time because the technology (hardware and software) upon which we based the present public service model is obsolete. The nearly seven-year-old hardware is failing and the software, we are told, will soon be incompatible with changes to the shared Winnefox library automation infrastructure.

Whether we maintain the present public service model or change it, the time has come to replace the technology. The library spent about \$125,000 to purchase the hardware and software needed to implement RFID-based checkout and security. That amount does not include the cost of RFID inventory/security tags or of annual maintenance contract fees. We can expect a similar expenditure on new hardware and software if we decide to continue the present model of public service.

## Staff-mediated check out versus self-service checkout:

I support the proposal from our Head of First Floor Public Services, Ruth Percey, to rely more heavily on staff for checking materials out than we have done these past six years. Although our statistics consistently indicate that more than 75% of our check outs have been done on the self-service equipment, Ms. Percey believes that at least one-third of those actually require staff intervention (e.g., to renew an expired card or collect a fine).

She contends that many of our library customers have never become proficient in using the self-service checkout technology, and that increasing staff involvement would be welcomed as a service improvement. Even six years after implementing this technology, we still see customers struggle – taking too long to enter card and PIN numbers and puzzling over how to use the RFID antenna.

Ms. Percey recommends that we place two staffed check out stations at the Circulation Desk, and that we continue to provide two self-service check-out stations for those customers who prefer that method. She proposes that we continue to staff the desk presently called "First Floor Customer Service" to support library card registrations, computer use and other library service information functions.

# Abandoning RFID technology for inventory control and materials security:

I am recommending that OPL stop using RFID technology for check out, check in, and materials security. As mentioned above, we believe that many of our customers have never become proficient at using the RFID antennas to check out their library materials.

When we recommended this technology in 2008, we had hopes that it would allow fast check out of multiple items, easy inventorying of on-shelf items, and automation of materials check-in procedures. Upon implementation, it quickly became clear that customers would never be entirely self-reliant, causing us to create a permanent staff service point near the self-service check out stations. Multiple items check out was technically feasible, but remains slow and snags on common daily occurrences like expired cards and trying to check out items that have holds placed on them. Hardware to read RFID tags of on-shelf library materials proved expensive and were reported to be unreliable. Prospects for automated check in (and automated material handling systems) were thwarted by the need to sort incoming materials for return to all Winnefox libraries.

Some of the current members of the library board will remember that I have never been enthusiastic about installing an automated library materials security system. It has been and still is my opinion that these systems are ineffective at preventing determined thieves. From time to time, we have had a rash of thefts from the library, mostly of entertainment DVDs. We have typically discovered the theft when library staff or the cleaning crew found the underside of a study table or shelf covered with torn-off RFID tags. Staff vigilance, surveillance video recordings, and a close partnership with the Oshkosh Police Department have enabled us to identify several of these thieves and to recover some of the materials stolen from the library.

I would go further. This system is not only ineffective at preventing theft, but the 100 or so false alarms that it sounds every business day have created the worst customer service problem that we now have at OPL. Whether caused by customer error or by the fault of the technology, the "security bit" on the RFID tag is frequently not set correctly, forcing staff to stop the customer and ascertain whether all of their materials have been properly checked out. This shifts staff from "helping" to "enforcing" mode, interrupts the customer who believes she or he has checked out in good faith, and frequently turns what had been a happy library visit into an annoyance.

One of the primary justifications for installing the library materials security system in 2009 was the risk of theft of valuable library reference books and rare local historical materials. These are no longer relevant. In response to changing information-seeking patterns in the digital age, OPL has withdrawn most of its printed reference books. And the addition of six new locking cabinets have added a significant amount of secure storage for our local historical materials.

I believe that we will improve customer service at OPL by abandoning this ineffective and expensive system. I recommend keeping the security gates in place for the time being, since they are providing value to the library as a visitor counting device. However, I propose to turn off the alarm speakers so that we may cease annoying approximately 100 library customers each day, and concentrate on helping them enjoy the library.

#### Summary:

Adoption of RFID-based self-service and security has proven to be a mistake. The quality of the customer experience in our library has suffered under the present model of public service. Many customers find RFID self-service checkout and security to be difficult to use, unreliable and a hindrance to their enjoyment of the library. And, finally, the technology to sustain this model is expensive – it will require expenditure of about \$150,000 in 2016 and of similar amounts every 5-6 years thereafter if we opt to continue.

I believe it is time we emulate those retail establishments that have reduced their commitment to self-service check out in favor of the improvement to customer service that is possible with staff involvement. I also believe it is time we abandon the balky and unreliable RFID technology in favor of the more stable and widespread optical barcode technology.