Chapter 3
When Sales Talk Meets Reality: Implementing a Self-Checkout Kiosk

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ABSTRACT
Implementing new technology can be challenging when it involves multiple departments across an institution and relies on interoperability with more than one vendor partner. This chapter discusses the implementation of a self-checkout kiosk in the University of Nebraska-Lincoln (UNL) Libraries that also collects fine payments via credit cards. The process took eight months to complete and was interrupted because of several issues caused by miscommunication between vendors, the University departments, and Library staff, and it became further complicated by changes in credit card regulations. This chapter explores the issues that arose from kiosk purchase through implementation and provides recommendations that will help other libraries implementing new technologies.
INTRODUCTION

Convenience is important for modern library patrons, and they expect to transfer their shopping experiences to the library. Installing a self-checkout kiosk that allows patrons to check out materials and pay fines can be seen as a welcome addition to the library. It permits library users, who wish to be independent, the luxury of self-service. Self-checkout systems have been in place for over twenty years and are common in libraries. They are popular for two reasons: convenience for patrons and reductions of staff required for circulation duties. A self-checkout system can augment staffing at service points by allowing patrons to do their checkouts, thereby reducing staffing at established circulation desks or increasing the number of unmanned checkout locations. Libraries with RFID (Radio-Frequency Identification) tags can further streamline the process by automatically collecting patron and item information with minimal patron intervention because the information is not scanned but transmitted by the RFID chips embedded in the library cards and material.

Compatibility between the kiosk and the integrated library system (ILS) is critical for interoperability between the self-check device and patron information managed through the ILS. The self-check device must also be compatible with the institution’s collection. Will the system be able to pick-up the RFID chips? If a library isn’t using RFID, where are the barcodes located? Will it be easy for patrons to find them and scan them using the self-check device? Another issue is the handling of desensitizing of security targets inside pieces, for non-RFID systems. These anti-theft strips must be desensitized after check-out, but the desensitizer must not be so powerful that it desensitizes other materials set in proximity. Otherwise, materials may be removed from the building without checkout. Likewise, it is important not to desensitize, which demagnetizes, recorded media on cassettes, floppy disks, or video tapes. Desensitizing anything that is magnetically recorded can damage the material.

The UNL Libraries experimented with a simple self-checkout device that required multiple steps using parts that were pieced together for the check-out process. Patrons were required to use a handheld scanner to scan or type information into a keyboard attached to a PC with a permanent display set for checkout only. Patrons scanned or typed their UNL ID number, scanned or typed the barcode from the book, and then desensitized the book by placing it on a large desensitizer “brick.” Frequently patrons would skip the last step and would set the alarm off when they tried to exit the building. They would then be called back to the circulation desk to desensitize the book that was checked out. This process was unpopular, and librarians believed a self-checkout kiosk that reflected new technology would be more popular.

In late 2014, the UNL Libraries began exploring options for a kiosk that would allow patrons to check out books and pay fines. Credit card fine payment would
An Approach to Trie Based Keyword Search for Search Engines
www.igi-global.com/article/an-approach-to-trie-based-keyword-search-for-search-engines/181684?camid=4v1a