



Technology Plan

2018-2019

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Introduction

Background

At the April 2018 Board meeting, the Board adopted the following elements of the new strategic plan:

Mission

Adding value through collaboration

Purpose

To increase members' efficiencies and savings

Vision

Libraries will be sustainable and relevant through the changing 21st century

Values

Collaboration

Efficiencies and Savings

Responsiveness

Transparency

To the extent possible and practical, all Library Connection efforts, including this Technology Plan, should be constructed within this framework.

Current Technology Assessment

Current technology for Library Connection mainly consists of common office technology. Each of our eight staff members has a desktop computer, one of which is an iMac. There are four other Windows desktops in the workroom. One is dedicated to maintaining an office LAN, and its drive is the staff's shared space. Another is used for Express Lane testing, but is available for other uses. A third also drives our flatbed scanner. The Windows PCs use either Windows 10 or Windows 7. The iMac is maintained on the latest iOS.

Staff desktop PCs are replaced every three to four years. Most staff have two monitors, having retained their old monitor when they acquired a replacement PC. Staff are allowed to take home their old PCs if LCI has no projected need for them and if they are completely depreciated.

LCI has four laptops of varying ages, one of which is a Macbook Air. The Systems Librarian for Public Services and the Executive Director have iPads. Our Public Services Support Specialist, for his support of OverDrive, has various tablets, nooks and kindles.

Other large office equipment includes a large flatbed scanner, network printer, a copier, a projector, and several desktop printers. Small equipment includes peripheral devices such as barcode readers, receipt printers, a portable inventory barcode scanner, and a camera for testing the capture of patron photos for inclusion in patron records.

We are connected to the Internet via a CEN 10 GB backbone. We have a network switch, maintained by CEN, and a firewall maintained by CCAT.

Each staff member has an iPhone 6 in lieu of a landline handset. At the end of our first year's contract for iPhones, we qualified for phone upgrades. We retain the older 5cs as a replacement pool, eliminating the need for insuring staff phones against loss or damage.

LCI has a three to four-year replacement schedule for staff desktop computers. Our move to cell phones not only allows staff to be available even when out of the office, but ensures we will get the latest phone technology every two years or so. We have noticed a significant decrease in the need for our office copier and our office printer. When either device needs to be replaced, we plan to get a combination printer/copier. Our fax machine has been disconnected. We can send outgoing faxes with scanned documents sent via open source software. We have no need to receive incoming faxes.

As part of our Disaster Recovery Plan, we have taken steps to be non-dependent on both location and specific hardware. All staff desktop computers store their information a Microsoft cloud using OneDrive. This enables staff to access their files and data from anywhere an internet connection is available. All staff have tested working from home using OneDrive. There is no need to concern ourselves with making backup copies of our files nor with restoring files in the event of any device failure. Even our office network is on OneDrive.

Our Financial Officer has spent the past two years making all financial functions paperless. Almost all of our vendors now submit invoices electronically, and all payments are made electronically. All our financial information is stored in the cloud.

As mentioned earlier, we have also moved from land lines to cell phones. This gives our staff greater flexibility—while on duty, their phone can always be with them. It also permits us to plan for decentralized operations when warned of potentially damaging weather. Under storm threat, all staff can take their phones home with them.

While we cannot plan for all future technological developments, between our contingency line in our budget and our ability to ask for the use of reserve funds for justifiable unforeseen needs, we are able to meet future contingencies.

Currently our Sierra/Encore ILS is hosted by our vendor, who assures us that adequate steps have been taken to avoid a catastrophic data loss. Their building is dedicated to data hosting, and is far more secure than LCI's building.

That said, Innovative hosts our data at a single site, which remains vulnerable to attack or physical disaster. It would be better if they mirrored our site at other locations, so a loss of building would not even be noticed by us. That, however, would raise the specter of response time delays. To our knowledge none of Innovative's competitors offer anything more robust than they do. Innovative does maintain offsite backups of our data.

Our remaining vulnerabilities are the onsite firewall and routing through us to CEN that some of our libraries maintain. As CEN upgrades its circuits to fiber, almost all of our libraries will choose to route themselves through their towns directly to CEN.

RFID

With the primary goal of interoperability among member libraries, ensure that all Radio Frequency Identification (RFID) vendors used by libraries can read all of the RFID tag formats of other member library collections. Also use the purchasing power of our consortium to strive for lower costs of tags, equipment, and automated materials handling for participating libraries. Standards including ISO 28560-2, SIP2, SIP3, and LCF/Library Communication Framework should be followed by vendors. Compatibility with our existing ILS is a necessity.

Reports & Decision Center

The increased ability to get SQL-created reports produced by LCI staff fulfills part of our needs. However, the need for library administrators to produce on-demand reports which allow for an increased quantitative analysis of library collections and usage patterns still remains. Decision Center is now usable and LCI has conducted training sessions for staff from all member libraries. Our goal is to get Innovative to address the remaining contractually identified bugs and address other issues as uncovered.

Shared e-content

LCI currently provides access to a shared collection of e-books, e-audio, streaming video and online magazines through the Overdrive platform. This collection is available to all full members and also affiliate members who join specifically for the e-content.

Collection development for e-content is the shared responsibility of all member libraries and fees are based on sharing the cost for content and hosting/access.

LCI recognizes the importance of user experience for the success of our e-content collection and will devote resources to improving the ease of discovery, access and use of this collection, along with providing centralized tech support for member libraries and their patrons.

LCI will devote resources to improving integration of these e-resources into our Encore catalog. We are working with the Connecticut State Library to deploy the Library Simplified (eGo) app among all our member libraries, and providing continual feedback to vendors and publishers on the issues of access, discovery, and pricing of e-content for libraries.

LCI will continue to explore additional opportunities to leverage our purchasing power and shared catalog to provide appropriate e-content at affordable prices to all members. When appropriate, prospective products will be vetted by the Technology Committee or the UX Committee and the Finance Committee before being recommended to the Board of Directors.

Member support

Bibliographic Support

Library Connection has two experienced catalogers (one is part-time) managing our bibliographic database. Our staff works with materials vendors to set up and support the acquisitions functionality in Sierra. We also work with major vendors to set up their ordering profiles to facilitate the ordering of materials by library staff and the loading of vendor supplied bibliographic records into Sierra. We also monitor vendor supplied records and send them to OCLC for batch upgrading to full OCLC records after items associated with these records enter circulation.

Records that cannot be batch upgraded by OCLC are upgraded by manual searches by our staff. We also do original cataloging when needed and contract out original cataloging when needed for foreign language materials.

Our staff also monitors vendor supplied records before they are loaded into our database to avoid loading duplicate or mismatched records and to ensure that series records are loaded properly. We also have an ongoing project to find and eliminate existing duplicate records.

We load catalog records for shared digital content and support the loading of catalog records for non-shared digital content by our member libraries.

We provide documentation and training on cataloging procedures and standards to ensure accuracy and consistency in our bibliographic database.

We support the maintenance of the holdings of LCI member libraries in OCLC's database and the Connecticut State Libraries union catalog (findIT CT).

Information is shared with member libraries – and by member libraries with our staff - via the Bibliographic Services Committee.

Public Services Support

Our public services team supports our libraries' circulation services. They maintain the tables that control circulation functionality and help libraries analyze and resolve circulation issues. They support the OPAC and develop customizations for Encore. Customizations have enabled persistent scoping of patron searches, provided carousels of new and featured books, and in general made Encore more user friendly. Ongoing enhancements are supported by the UX Committee and Circulation Committee.

LCI also provides patron support for digital content.

Training

Library Connection staff train and support library staff on all new processes. LCI has developed custom documentation and maintains it on our website. We have recently completed Decision Center training for staff from all member libraries and are running a virtual session for anyone who was unable to attend the classroom sessions. We cannot train all staff at every library and instead take a train the trainer approach.

Reports

We support the reporting capabilities of Sierra. We have developed instructional documentation, and, via our helpdesk, assist library staff having difficulty with specific report situations. LCI runs monthly reports for our libraries on holds, circulation, items, and patrons. We develop custom SQL reports as needed by libraries and maintain a library of SQL reports that many libraries find useful to run.

Network management and support

As all libraries using fiber no longer route their internet traffic through Library Connection, the need for our network support has diminished. However, we do monitor our libraries' internet traffic through CEN, receive notification when CEN service is down, and support libraries having network issues. We also work with Innovative to resolve response time issues for our libraries still using DSL or cable connections.

ILS support

We act as advocates for our libraries in addressing bug fixes or desired enhancements to Sierra/Encore functionality.

Group purchasing

While we refer most group purchasing negotiations to the Connecticut Library Consortium, we do negotiate for pricing with vendors who offer discounts tailored to library consortia.

LCI PCI DSS Compliance Policy:

- Library Connection's policy prohibits storing of credit card information electronically.
- Credit card merchant accounts must be approved by the Executive Director.
- Management and employees must be familiar with and adhere to the PCI-DSS requirements of the PCI Security Standards Council.

- All LCI employees who access, handle, or maintain credit card information must sign a statement that they have read, understood, and agree to adhere to Library Connection's Payment Card Industry Data Security Standard Compliance Policy.
- All member libraries must inform patron service personnel of Library Connection's Payment Card Industry Data Security Standard Compliance Policy and must have a mechanism (such as an addition to their policies or a sign on all public service desks) declaring that library employees are prohibited from accepting credit card information or processing credit card payments on behalf of library patrons. Employees must always direct patrons wishing to make credit card payments at the library to enter their own credit card information on designated public terminals.
- Library employees may assist patrons with disabilities in entering their credit card information onto LCI's payment website, but only at the request of those patrons. Assistance should not be volunteered to patrons who do not request it.
- Any proposal for a new process (electronic or paper) related to the storage, transmission or processing of credit card data must be brought to the attention of and be approved by the Executive Director.
- Library Connection must conduct an annual self-assessment against the requirements and submit results to the merchant bank and the Board of Directors.
- Access to the cardholder data environment must be restricted to only those employees with a need to access and controls must be in place to protect the cardholder data environment.
- Credit card information must not be entered/stored on any electronic device-this includes member libraries' and Library Connection's network servers, workstations, laptops, tablets and cell phones, except those workstations set aside for public access to Encore.
- Credit card information must not be transmitted via email.
- Credit card numbers must NOT be entered into a web page of a server hosted on Library Connection's network.
- Sensitive cardholder data must be destroyed when no longer needed for reconciliation, business or legal purposes. In no instance shall this exceed 3 business days. Secured destruction must be via cross-cut shredding in house or with a third-party provider with certificate of disposal.

- The Executive Director must approve each merchant bank or processing contract of any third-party vendor that is engaged in, or proposes to engage in, the processing or storage of transaction data on behalf of Library Connection – regardless of the manner or duration of such activities.

PCI DSS compliance for Express Lane

Our contract with Innovative included the provision of PCI DSS compliance for Express Lane. This was unavailable at the time of contract, but was to be made available as soon as developed. The provision of PCI DSS compliance ended up as one of the issues in our contract amendment negotiated last year.

Innovative elected to provide PCI DSS compliance for Express Lane through a third-party vendor—Comprise Technologies. Comprise has developed a device capable of reading magnetic stripes or embedded chips and has worked with Innovative to integrate the device's functionality with Sierra. As part of our on-going discussions with Innovative, we have received a free Comprise reader to test at LCI and are currently working with the West Hartford Public Library to test its functionality and interoperability with Sierra. If this operates to our satisfaction, Innovative will provide a free device to every library wanting to use it with Express Lane. However, since the card reader would be within the library, each library using this solution would need to establish its own PCI DSS compliance.

Mechanisms for achieving goals

Professional development

Library Connection strives to provide excellent service to its members through a process of continuous improvement. All staff are expected to keep current with the ever-changing array of technologies used by libraries and are therefore encouraged and supported in their continuing education and professional development endeavors. LCI will provide the means and opportunity to attend workshops, training sessions and professional conferences relevant to staff members' current job functions and future potential. Whenever appropriate, relevant new skills gained during professional development should be shared with fellow LCI co-workers and member libraries through formal and informal means, such as meetings, reports and discussion.

LCI staff are responsible for self-assessing their job related skills and coordinating with their supervisor to identify training opportunities that will address deficiencies and build on strengths. The Executive Director is responsible for assisting staff in identifying training needs and adopting flexible scheduling and budgeting processes that allow for professional development without negatively impacting day to day business.

Budget

Library Connection's current operating and capital budgets are sufficient to maintain the current levels of service to members, provide up to date technology tools to its staff, and progress towards the goals delineated in this document.

The Executive Director will work with the Finance Committee and the Board of Directors to ensure that future technology needs, including professional development, receive adequate funding.

Future Goals

Sierra/Encore Integrated Library System

Work with Innovative to keep Sierra/Encore updated to the most recent stable versions. Explore Sierra Mobile Worklists for staff. Work with Innovative to achieve our desired hold functionality. Continually assess options for patron mobile access. Continue to work with Innovative to refine catalog customization and adding digital content to the catalog. Explore the possibility of getting our enhancements to Encore accepted as part of the official Encore release.

Evaluation of progress

The Technology Committee is charged with reporting progress towards meeting the goals in this plan to the Board of Directors no less than twice a year. Significant accomplishments or serious obstacles should be conveyed to the Board immediately, without regard to a formal schedule of updates.