

Putnam County Public Library

Technology Plan

Fiscal Year 2019 through 2021



Putnam County
— **Public Library** —

(Library Director)

A. Tincher (Technology Director)

Adopted _____ 2019 by the Putnam County Public Library Board of Trustees

Technology Mission Statement

The Putnam County Public Library endeavors to be a community leader in helping to close the digital divide by being a central place for patrons to access tools and information while developing essential digital literacy skills. The Library will provide knowledgeable and trained staff who curate electronic resources, train and guide patrons in their use, educate and stimulate the public as to the role of technology in their lives, and use technology to do their own jobs more effectively.

Plan Objective

The library remains committed to building and maintaining a robust technology program that includes equitable access to myriad forms of information and content creation tools as well as providing an engaging and supportive environment in which to explore and experiment with new technologies. This technology plan will serve as a guide in the library's continual efforts to further integrate current and future consumer technologies into the daily library experience of its patrons and staff.

PART 1: Environment and Background

Infrastructure

The Putnam County Public Library has made significant improvements in its technology infrastructure over the past 5 years. At the start of 2014, the library maintained a fiber optic line offering 10mbps download speeds and 2 dedicated wireless access points. In June of 2014, the library's 10mbps fiber optic line was increased to 70mbps (ENA). Management of the wireless network was subsequently outsourced to ENA Air, including the installation/upgrade and maintenance of 4 new wireless access points. A network assessment report was then commissioned and executed in November of 2014 (Telemagen) and has since served to guide much of the improvement and expansion of the library's internal network. In June of this year we will be moving to 1 GB speed for our Internet (ENA).

Automation: Polaris Integrated Library System (Innovative Interfaces Incorporated)

PCPL is entering its 15th year with the Polaris integrated library system (a product of Innovative Interfaces Incorporated since its acquisition in 2014). Regular upgrades to Polaris have been maintained since its adoption in 2006. All circulating collections, including e-content accessed through Overdrive.com, are cataloged and searchable via the library's instance of Polaris. The staff at the library is looking to move to Evergreen which will reduce our yearly cost by \$00.00.

Website

In September of 2014, the library launched a new and vastly-improved website. PCPL commissioned WynWay Technologies to design and maintain the new website, which focuses heavily on ease of use (for both patrons and staff) as well as aesthetic appeal. Built using the WordPress platform, the site allows for easy uploading of library content including programming events and other calendar updates, featured collections and services, engaging multimedia files representing library activities and plans, staff and library board information and meetings minutes, and much more. The website is hosted remotely and is serviced by WynWay Technologies (now Distinct Web). The library purchased a customized and simplified domain name for the new website.

The following is an outline of the library's current local and remote services including network hardware/software paradigms and outsourced network services:

1. Network environment including local network hardware and software paradigm(s)

Putnam County Public Library maintains a Microsoft Windows Server Network Domain.

- a. Network Infrastructure Hardware
 - i. WatchGuard Firebox Firewall Appliance
 - ii. Dell 48 Port Gigabit Network Core Switch
 - iii. Microsoft Windows Domain
 - 1. Microsoft Windows Domain Controller
 - 2. Microsoft Windows Backup Domain Controller
 - 3. Polaris Production Server
 - 4. Cassie Server
 - iv. Expandable 4 terabyte network attached storage
- b. Server Software
 - i. Polaris Library Systems Automated Library Software

- ii. Cassie (virtualized)
Public computer patron authentication, print management, statistics collection, automatic reservations and waiting lists.
 - iii. Deep Freeze (virtualized)
Protects all public access computers preventing permanent configuration changes.
 - iv. Teamviewer
Teamviewer provides remote access to computers and servers to IT management staff.
- c. Specialized Client/Cloud Software
 - i. Windows 10 Pro
 - ii. Microsoft Office
 - iii. Google Apps for Work
 - iv. Adobe Creative Suite 6
 - v. Polaris Client
 - vi. ESET & Malwarebytes Antivirus
 - vii. WordPress

2. Current outsourced network services (who and what) and how they fit into the picture.

- a. Network Infrastructure (Telemagen) & (12 Point Technology)
Telemagen is a local Network Engineering firm that supplements the expertise of library Information Technology Manager and lends support during special projects or rollouts that require greater staffing than the library can supply. 12 Point was brought in March 2019 to assist with Networking issues as they are a local company and faster to respond.
- b. Website Design and Website Hosting (Distinct Web)
Regular website and database updates are maintained by library staff with some of the more complicated or time intensive web site duties outsourced to a local student run web design company called Distinct Web.
- c. Wireless Access is managed by Education Networks of America
- d. Network and Telephone Wiring is currently outsourced to local wiring company CinergyMetroNet.

Staff Workflow and Communication

In conjunction with the website upgrade in September of 2014, the library migrated from a locally-hosted email solution to Gmail. This move included the adoption of Google Drive as the primary means for internal collaboration and communication. Weekly website updates and staff/department content uploads are also managed through the library's Google account.

Scanning, Copying, and Printing

All networked printers are leased and serviced through Ricoh. Additionally, each department maintains its own dedicated local printer for staff use. The library maintains 3 copier/scanner/printer machines for public and staff use. In April 2019 two of the copiers were configured on the network so the staff can directly print to them, bypassing the coin operation.

Telephone Services

The library contracts with MetroNet for its telephone services. 18 office phones (including 1 cordless phone) are used by library staff on a daily basis. 3 long distance business lines, 1 alarm line, and 1 elevator emergency call line are maintained through a monthly service contract with the carrier. The overall telephone system and contract are reviewed annually.

The Imagination Portal and Integrated Technology

In October of 2014, renovation of PCPL's Children's Department was completed and the doors to the newly-christened *Imagination Portal* were opened to the public. The central idea behind the new space was to provide a rich technological physical environment that engaged young patrons in the world of media and content around them while encouraging a sense of play and experimentation with technology not traditionally found in public libraries. The introduction of a variety of new computers (including Apple iMacs and HP touch screen all-in-one desktops), large screen television monitors, wireless projection tools, game consoles, and a MIDI-capable digital piano has since contributed to a sense of "digital playground" in the department. The hope was to provide open access to these tools while simultaneously demystifying much of the technology for parents and other patrons.

For many patrons, the daily library experience has significantly changed as a result of the integrated technology introduced in the Imagination Portal. The mere act of adding new computers has attracted large numbers of patrons to the space. More significantly, an open-access policy regarding installation of software has facilitated a tremendous increase in creative game-playing within the library. As a result, young patrons frequently come into the Imagination Portal for the express purpose of playing Minecraft and other online games/environments. Large touch-screen desktop computers now serve as PAC machines and allow for easier access to the library's online catalog.

Library programming has also expanded and diversified as a result of the new space and the technology therein. Video game nights have been very successful not only in helping to legitimize video games as a literary and artistic medium but also in bringing strong numbers of teens and "tweens" into the library, many of whom had never come to the library before. Basic coding and computer programming workshops have also been introduced, while digital creativity programs involving timeline editing skills and multimedia project management have been planned for later this year.

Technology Support and Instruction

In July 2014, the library began planning for a series of free and open technology classes for the public. The goal was to address aspects of the digital divide within Putnam County as it pertains to basic computing skills. We are planning on continuing those studies for our patrons here at the library.

At the same time, the library introduced a new patron support service in the form of a technology help desk. Members of the Technology Department routinely staff the help desk (currently accessed through the Reference Desk and/or via email/phone) and post scheduled help desk hours on the library's website. Help desk support is provided both onsite (in the form of private consultations) and online/phone depending on circumstances. Patrons are encouraged to bring any computer or general technology

questions or problems to the Help Desk and often bring malfunctioning hardware in for troubleshooting assistance.

Plans are currently in place to schedule remote help desk hours through the Outreach Department. The tech help desk has met with tremendous success. There is also a noted correlation between tech help desk interviews and attendance at library technology classes.

The following is an outline of the staff and patron computing environment with regard to library-wide platforms, access paradigms, hardware peripherals, and user support/instruction:

1. Current staff and patron technology environment

a. Staff

- i. All library staff members have access to a Windows 10 workstation with Internet access and various local and cloud based productivity software
- ii. Select employees have access to laptops and/or tablet computers on an as needed basis.
- iii. High Speed Wireless Internet Access
- iv. Access to a mobile technology classroom consisting of 11 touch screen laptops, high definition short-throw digital projector, and mobile screen for library programming purposes.
- v. Access to high capacity color laser printing

b. Patrons

- i. 24 public workstations with filtered internet access
- ii. 6 touch screen all-in-one public access catalog workstations
- iii. Access to high capacity color laser printing
- iv. Community Help Desk
Patrons have access to a computer technician to help diagnose and repair patron computer and electronics. Currently our Community Help Desk is only during specific hours, three days a week.
- v. Wireless Internet
Our managed wifi service is a 70 gigabit per second 802.11 a/b/g/n and 802.11ac wireless service with seamless roaming between four different library access points.

2. Current/future technology training (staff) and education (public) program

a. Public Technology Education

The library currently offers 6 public technology classes, in three class tracks, that are 2 hours long with a 10 minute break. For hands-on classes, registration is required to guarantee a workstation and limited to 10 students. Students will not be allowed to bring their own computers. All classes will be available to staff members either at the scheduled public time or one-on-one by appointment.

Class Track 1: Computer Basics

1. Introduction to Computers (Lecture)
2. Introduction to Modern Operating Systems (Currently Windows 10) (Hands On)
3. Working with Office 365 (Hands On)
4. Working with Google Suite (Hands On)
5. Windows 10 for Seniors (Lecture and Hands On)

ii. Class Track 2: Internet Basics

1. Safety and Security on the Internet (Lecture Only)

b. Employee Technology Professional Development

Employees are encouraged to attend the public technology classes to fill in gaps in their technology education.

PART 2:
2019-2021

Goal 1: *The library maintains a robust technology infrastructure that provides for excellent patron services and reliable staff workflows while remaining flexible with regard to adaptation and adoption of emerging technologies.*

Objectives and Action Steps:

1. *Network* -maintain current network configuration (based on 2014/15 network upgrades); remain adaptable to developing network solutions; expand and enhance network accessibility for patrons and staff alike
 - a. implement regular updates to server software (portions of this are automated)
 - i. ex SQL server software
 - b. maintain current disaster recovery backup schedule (automated)
 - i. significant changes from environment described in previous technology plan
 - ii. cloud-based data backups for patron and collection data
 - c. maintain current battery backup schedule
 - d. anticipate 25% rollover rate for certain technologies
2. *Software* -explore emerging software solutions for network management; maintain current “disposable software” policy for patron computers and devices; emphasize cloud-based solutions wherever possible; remain adaptable to developing software solutions
 - a. implement regular updates to software instances across all machines
3. *Hardware* -invest in engaging and intuitive hardware solutions (desktop computers, wireless mobile devices, digital displays, projection solutions); adopt a flexible replacement schedule more consistent with the rate of technological change and trajectory toward ubiquity of related skills
 - a. update/replace printers as needed
 - b. seek wifi-enable mobile printing solutions
 - c. seek streamlined pay-to-print solutions for patrons
 - d. adopt credit card and/or PayPal solutions for patrons fines and fees management
 - e. offer mifi devices for Internet at locations that do not have them for patrons.

Goal 2: *The library enhances its status as an essential community resource for information access, the exploration of art and culture, and the consumption of media and entertainment through reliable and intuitive search and retrieval tools.*

Objectives and Action Steps:

1. Capitalize on current ILS functionality -
2. explore Polaris options not currently used by the library
 - a. review Polaris add-ons to improve searchability and mobile functionality for patrons
 - b. review use of Polaris portal and its function within the library’s website
 - c. continue to review and adopt modern cataloging features as deployed
2. Investigate future ILS options
 - a. research and review alternative ILS solutions (Evergreen)
 - b. seek web-based solutions to staff client operations

- c. explore alternative contractual arrangements for ILS services (including consortium-based options)
- 3. Enhance aspects of library web presence including current website
 - a. expand social media engagement
 - b. improve content management on weekly basis (uploads, layout, and event scheduling)
 - c. investigate alternative options for website management and hosting
 - d. earn money by advertisement on our webpage
- 4. Enhance patron access to computers and related technologies
 - a. explore digital signage solutions wherever appropriate, including additional wall-mounted monitors to replace paper/physical displays
 - b. integrate mobile technology throughout patron spaces for both on-site and circulation purposes (ex pre-loaded iPads for Overdrive access)
 - c. add at least 10 new patron computers to Adult Services department
 - d. review and refine Youth Services computer set up as needed
- 5. Explore and exploit new and exciting non-print collections and services
 - a. adopt reputable streaming solution for music (ex Freegal)
 - b. migrate to streaming solution for gaming (ex Steam)
 - c. adopt and promote next-generation media formats (ex BluRay, PS4/Xbox1) while maintaining existing format collections
 - d. host local gaming services (ex Minecraft server)
 - e. explore user-generated content collections idea (ex Youth Services digital creativity program on creating unique epub content and distributing/curating for general use)

Goal 3: *The library emerges as community leader in providing access to and support for technology and digital literacy skills development through engaging and meaningful technology services and programming.*

Objectives and Action Steps:

- 1. Help Desk and Instruction/Education
 - a. create computer class schedule to meet demand
 - b. review and update computer class curriculum
 - c. identify and establish remote computer support solutions
 - d. establish physical Help Desk location within the library
 - e. establish “maker space” (or public shop) for patrons with technology support needs
- 2. PCPL in the Classroom (Coordinating with Area Schools)
 - a. expand Overdrive Circulation Card program for teachers to include more schools/classes
 - b. work with school librarians/media specialists to identify and address gaps in current Overdrive collections
 - c. work with teachers on connecting parents with library staff to support mobile technology needs
 - d. increase library presence in schools through virtual research projects (ex Local History) and similar collaborations

3. Facilitate Technological Self-Reliance on the part of patrons
 - a. provide basic troubleshooting guidelines
 - b. design, curate, and promote Knowledge Base resource(s) via website and on-site
 - c. emphasize do-it-yourself services
 - i. review checkout/checkin model with self-checkout options in mind
 - ii. explore private computing spaces for patrons
 - iii. provide solutions for specialization (sophisticated technology use)

Goal 4: *The library maintains knowledgeable and confident staff who eagerly assist patrons with a wide range of technology needs and who remain flexible with regard to the adoption of new technologies within the library's service model.*

Objectives and Action Steps:

1. Professional Development -provide ongoing and meaningful professional development opportunities and solutions for all library staff
 - a. establish staff representation at annual library technology workshops/conferences (ex Computers in Libraries annual conference)
 - b. improve accountability for technology-specific training across departments
 - c. provide more in-house technology training and discussion
2. Staff Technology Support Services
 - a. maintain current "quick turnaround" standard for staff computer issues
 - b. hire additional Technology Support staff to address schedule gaps
3. Foster Culture of Creativity among staff
 - a. continue to encourage and facilitate online collaboration and communication across departments
 - b. seek and exploit opportunities for innovation in the use of technology in library programming, patron support, circulation, and technical services

PART 3:
Administration

Technology Funding

The library's operational budget (here referencing FY2018) contains 3 lines specific to technology spending. Specific allocations for each area are as follows:

Add additional 48 port switches, replacing current switch with a managed switch

Replace Firewall WatchGuard box with newer easier maintaining box.

Approx Cost May 2019 – 12 Point Technology

Unifi 48 port Gig managed switch Qty. 2 - 477.71 = 955.42

SonicWall TZ series with 3 year security Qty. 1 - 1,287.00 = 1,287.00

Business Labor Rate - Setup managed switches and firewall – 5hrs - 95.00hr = 475.00

Purchase 8 new Dell Workstations to replace the current HP models of 6200, 6300, & 8000 series.

They are at least 8 years old at this time with no warranty.

Approximate cost of the replacements would be:

CDW Site – June 2019 prices

Dell OptiPlex 5060 - SFF - Core i5 8500 3 GHz - 8 GB - 500 GB 758.26 X 8 = 6066.08

Dell OptiPlex 3060 - SFF - Core i5 8500 3 GHz - 8 GB - 500 GB 650.49 X 8 = 5203.92

Funding for Professional Development comes from the Friends of the Library organization and includes **\$1,500.00** annually for technology-related workshops, conferences, and on-site training opportunities.

The state library and regional library consortia offerings will factor into the overall presentation of technology PD offerings.

The library intends to prioritize equipment upgrades and new technology investments over the course of this plan. Funds allocated for specific products and/or services may be revisited.

Evaluation

This plan will be consulted continually as the library puts forth plans for further improvements and upgrades with regard to patron technology access, use, and skills development. The Technology Directory will meet monthly with the Director and Business Operations Manager to address key areas of concern and will use this plan as a guide in making decisions about technology spending and implementation.

The Library Director will consult with the library board semi-annually with regard to the goals, objectives, and action steps outlined in this plan. The Technology Plan itself will be reviewed and revisited in July of 2021 per date coverage indicated therein.

Approval

This plan will be submitted by the Director to the Board of Trustees for approval in June of 2019.