**OWLSnet Print Management Comparison Models**

**Print Management Server**

All print management services reviewed in this document will require a single print management server at OWLS (Microsoft Windows Server OS). This server is estimated to cost between $4,000 - $12,000 depending on the selected print management service, total number of library locations, and the estimated number of potential users. The server would be used to house and manage all the printer drivers for the printers at the OWLS and NFLS member libraries, and run vendor specific print management support applications.

Again, depending on the number of library locations and potential number of users, two servers may be required. A combined application/print server, and a separate MSQL database server may be required to handle the workload. Both servers can be virtual machines housed in a single VMWare host server.

**Princh**

 http://princh.com

Princh is a cloud-based printing solution that allows users to print and pay from mobile devices, laptops, and your library public PCs. No accounts, usernames, or passwords are required. Princh has a very simple and intuitive user interface that can provide multiple payment options including: Cash, Credit Card, and PayPal. Additional hardware is not needed at the libraries for these payment options. Princh HQ is located in Aarhus, Denmark. Remote technical support is included at no additional charge and will be available between the hours of 6am-3pm CST.

PROs:

* Mobile printing included.
* Clean, easy to understand user interface.
* Affordable payment option for licensing.
* Extremely simple installation.
* Does not require additional hardware for credit card option.
* Vendor support is included.
* No user accounts, user names, or passwords required
* Smaller investment in print management server at OWLS

CONs:

* No coin-op self-service cash payment option.
* No local vendor support. (minor issue)
* Fewer options for customization (than PaperCut and LPT:ONE)

Payments: Cash, and optional electronic payments (credit card [patron enters cc number in Princh client] and PayPal). Electronic payment options can be added at no additional cost. Self-service coin-op release stations are not available with Princh so library staff must handle cash transactions.

Self-serve release: Yes, a dedicated library owned Android tablet can be used by the patrons as a self-service document release station. Libraries can purchase an Android tablet, and a secure tablet case (through OWLS) at a cost of about $300-$600 depending on tablet model. This self-service release station can only be used for non-cash transactions (e.g. credit card and PayPal). Patrons wishing to pay with cash must still pay the library staff who would then release the print job from a library Staff computer.

Printing options: App (Android, iPhone), Web URL (Windows, Apple, and Chromebook compatible) , and Public PC Client (for library owned public use computers)

Cost option #1: $0.15 cents per document. Princh will recover 15 cents for the first page of each printed document. Libraries can optionally charge patrons a higher fee for first page to recover the 15 cent Princh fee, and then can charge a lower standard fee for following pages. All libraries must agree to participate for OWLS to qualify for this cost option.

Cost option #2: Reoccurring annual fee of $15,000 covers all locations which is about 50% off their standard pricing of $33,510 per year. Princh would like us as their first customer in Wisconsin.

Mobile options: Included (Android, iPhone, URL for laptops)

Installation/Setup: Very easy

Set different prices for different jobs?: Yes – B&W and Color.

Vendor Support: Yes, at no additional cost.

Track costs by library?: yes

Credit card option: For libraries offering that option, patrons will need to enter their CC info in the Princh app or client. A CC reader (hardware device) is NOT an option.

**Papercut NG**

https://www.papercut.com/

PaperCut is a full featured print management system that is currently in use by 2 Library Systems in Wisconsin (South Central, and Winnefox). It is highly customizable including the use of optional coin-op and credit card reader document release stations (kiosks). Along with cash and credit card payments there is also a PayPal payment option available for an additional fee ($495). PaperCut users (library patrons) are required to create a PaperCut user account with a username and password. PaperCut can be locally supported by MBM in the Fox Valley at an hourly rate.

PROs:

* Mobile printing included.
* Coin-Op self-service option available (additional cost).
* Flexible full featured options.
* User fund balance option included.

CONs:

* Ongoing vendor support is not included. Available at an hourly rate.
* User account (username & password) required.
* Requires largest server investment. (2 servers at OWLS)

Payments: Cash can be payed to librarian at circ desk who in turn can release the print job. Self-service coin-op boxes are available at additional cost. Credit Card, and PayPal options are available at additional costs.

Self-serve Release / Payment: Available at additional cost...

* Coin-Op Solution (coin and bills):
	+ $2,000 (startup cost for hardware)
	+ $3,350 (estimated startup cost for licensing, installation, and training) Note: some of these costs may be shared with OWLS.
	+ Reoccurring annual costs: $350 + hardware repairs (parts and labor)
* Credit Card (coin, bills, and credit card) Kiosk:
	+ $5,298 (startup cost for hardware)
	+ $3,350 (estimated startup cost for licensing, installation, and training) Note: some of these costs may be shared with OWLS.
	+ Reoccurring annual costs: $350 + hardware repairs (parts and labor)

Printing options: app (Mobility Print for Android, iPhone, Windows laptops, and Chromebooks). The Mobility Print app must be installed on BYOD and requires patron to create and enter a username and password to see list of available printers, submit print jobs, and release print jobs. Web URL, and Public PC Client (for library owned public use computers) are also included at no additional cost.

User Fund Balance: (Included) It is possible to allow patrons to add $$ to a fund balance so when they print the costs can then be deducted from their fund balance. If a user fund balance option is allowed, then it is recommended to install the PaperCut Client on library owned public computers. The PaperCut Client can help patrons manage their PaperCut fund balances. (A note from BOB at MBM) *Papercut only maintains the available funds, not the actual transaction. All financial transactions are done via 3rd party (PayPal for example) and the basic data is transferred into papercut. (There are) No pci compliance issues. The 3rd party would want/need to be pci compliant.*

Public PC Client: A PaperCut client is available but, based on a demo we saw, we may not want to use the client if the fund balance option is not a chosen PaperCut feature. It adds an additional level of print management complexity to the patron’s experience with minimal usable benefits, especially if a cash only based PaperCut print management option is selected. The PaperCut Mobility Print application can be installed on the library owned public computers (by OWLS or NFLS) in place of the PaperCut Client.

Costs: First year – cash only option which means patrons pay cash to librarians at circ desk. First year startup cost is $860 per library location. For example: 45 locations [not incl. APL, KIM, LIT, BIR, GOO] x $860 = $38,700.

Ongoing annual software upgrade assurance is $200 per library location (45 locations x $200 = $9,000 per year)

One Time Professional Installation Services Fee: $560 - $1120 per location (x2 ?). I would estimate that OWLS would need to pay this fee for the installation at OWLS, and for one member library. It is possible that installations at additional member libraries could then be handled by OWLS and NFLS.

Vendor Support: After initial setup MBM charges $140/hour for support.

Mobile options: Included (apps for Android, iPhone, and laptops)

Installation/Setup: Much more involved than Princh.

Set different prices for different jobs?: Yes

Track costs by library: Yes

Credit card option? Yes, the use of credit cards is an option in PaperCut which would require additional software, and hardware costs. A self-service card reader is required. (Prices listed above)

It’s important to note that OWLS has been informed that credit card transactions would never be stored on the centrally located PaperCut server at OWLS. So again, there are no PCI Compliance issues with PaperCut.

**Envisionware LPT:ONE**

https://www.envisionware.com/lptone/

LPT:ONE is a full featured print management system that is currently in use by the Appleton Public Library and the libraries in Kimberly and Little Chute. It is highly customizable including the use of optional coin-op and credit card reader document release stations (kiosks). LPT:ONE users (library patrons) are NOT required to create an LPT:ONE user account. But they will need to enter an identifier (name , phrase, number...) used to identify their print job at a release station (self-serve or circ desk).

PROs:

* Coin-Op self-service option available (additional cost).
* Flexible full featured options.
* Smaller investment in print management server at OWLS

CONs:

* Mobile printing NOT included (higher priced option).
* May not have the best user experience when library offers multiple printing options.
* User fund balance option available.
* Ongoing vendor support is not included. Available at an hourly rate.
* User account (username & password) required (with Fund Balance option).

Payments: Cash can be payed to librarian at circ desk who in turn can release the print job. Self-service coin-op (coin/bill acceptor) and credit card reader options are available at an additional cost.

Printing options:

* Public PC Client that can be installed on library owned public computers. (Included)
* MobilePrint Service: (additional fee of $625 - $725 per site / per year)
	+ PrinterOn app for Android, iPhone
	+ PrinterOn Web Portal for Windows, Apple, and Chromebook laptops

Startup costs: First year - cash only option which means patrons pay cash to librarians at circ desk. A
per library, first year startup cost is roughly $306 + $23 per public PC client installation (not including Mobile Printing). So, if a library has 7 library owned public Internet computers the estimated startup cost would be roughly $306 + $161 (7 PCs x $23) = $467. Again, as mentioned above, there is an additional fee for mobile printing.

An estimated TOTAL startup cost for both OWLS and NFLS System libraries would be roughly (based on 45 libraries – not including APL, KIM, LIT, BIR, GOO) :

* Cash only LPT:ONE for 45 libraries (at $306 each) + 375 total PCs (at $23 each) = $22,395
* MobilePrint Service for 45 libraries (at $725 per library) = $32,625
* TOTAL = $55,020 (first year startup cost for 45 libraries)

Please note that these are initial estimated costs. OWLS was told that total startup costs could be reduced if we have a good number of buildings included in the project.

Annual renewal costs would be calculated as 17% of TOTAL software startup cost.

* $22,395 x 17% = $3,807 in this example (not including mobile printing).

There is also an annual renewal fee of $725 per library location for Envisionware’s MobilePrint Service.

And, there is also a 12% annual renewal fee based on the total hardware startup costs (Coin-Op, and or Credit Card Kiosks).

Estimated total annual renewal fee for 45 library locations would then be estimated as (not including purchased hardware Coin-Op and Kiosks):

* $3,807 for cash only LPT:ONE print management
* $32,625 for MobilePrint Service
* TOTAL Estimated Annual Renewal Fee = $36,432

There is also a $1000 per library location installation/training fee. But I would anticipate that the installation/training fee could be as low as $2000 in total as OWLS and NFLS PC support staff would receive the training and then take care of the rest of the installations.

Hardware Costs (Coin-Op and Kiosk stations):

Adding Coin-Op and self-service Kiosk stations will add an increased cost for startup for each location choosing this option.

* Coin/Bill Acceptor: $2,875
	+ Also adds 12% to the annual renewal fee.
* Credit Card Reader: An available option, but OWLS didn’t not receive a quote.
* Copy Payment Manager (Software for kiosk-based payment): $595 (first site)
	+ $195 each additional site

Additional options:

Authentication and Accounting Module (AAM): $3,995 (Startup fee) + 17% annual renewal fee

AAM provides added services for online accounting (credit, debit), fine payment, and allows patrons to keep funds on account.

Installation/Setup: Assistance with installation and setup is estimated to be about $1000 for the LPT:ONE cash only option (no hardware). This is based on the idea that the OWLS/NFLS support staff would be trained at the first 1-2 libraries. And then OWLS/NFLS would complete the installation work at the rest of the libraries.

It is likely that there would be additional installation and training costs for the Coin-Op and Credit Card options.

Set different prices for different jobs?: Yes

Vendor Support: Local within the

Track costs by library?: Yes, with the optional Authentication and Accounting Module (AAM)

Credit card option? Yes, the use of credit cards is an option in LPT:ONE which would require additional software, and hardware costs. A self-service card reader is required.