Large Format Printing in the Stark Campus Library

A major role for the Stark Campus Library is providing information technology services to the campus community. In addition to the many online resources (including over 400 licensed databases, thousands of online journals, and tens of thousands of e-books), the library provides access to various types of physical technology such as laptops, netbooks, tablets, digital video and audio recording equipment, etc. To enhance this role and provide a service becoming more commonplace within higher education, the library proposes the addition of a large format printer. The library provides a central location, open more hours than any other academic unit on campus and is prepared to maintain and monitor the use of the printer. This proposal includes a cost estimate for the desired printer model along with a comparison to other models reviewed. It also includes a recommendation for a nominal fee for using the printer as well as a policy and procedures for using the printer. A separate proposal prepared by the Faculty Technology Committee describes the rationale and justification for having a large format printer in-house (as opposed to the current outsourcing to such services as FedEx/Kinkos). That proposal also recommends the same model printer (as did Network Services).

Cost Estimate

After reviewing several models of large format printers currently on the market, the library believes the HP DesignJet Z5400 PostScript ePrinter to be the most appropriate fit for our environment. The attached comparison of reviewed printers ranks the HP DesignJet Z5400 #1 for the following reasons:

- It supports two rolls. This allows print jobs from two types of media without having to change the roll. One roll could hold matte paper and the other glossy paper, for example. The printer also supports other types of media for printing banners (vinyl). Having two rolls will increase the printer’s efficiency.
- Although not the least expensive printer, it is also not the most expensive. Given the models reviewed, it is slightly higher in cost than the average but much less expensive than the only other model with two rolls.
- It supports print jobs up to 44 inches in width.
- All of the less expensive models only supported a single roll.
- It supports Postscript printing, making it more versatile. Other models do support Postscript printing but require add-on (upgraded) software to enable this common format. Print jobs originating from software not supported on campus could be saved as a Postscript (or PDF) file and printed by this printer.

The Faculty Technology Committee priced this printer, purchased through CDW with an academic discount, at $5,727.64. Amazon.com has it listed at $4,195. Given the complexity of the device and the needs reported by the Faculty Technology Committee, a yearly maintenance agreement would be a necessity.
Fees

This proposal recommends charging users a nominal fee of $1.00 per linear feet of paper used for the print job. Considering the cost of $.40 per sq. ft. for ink for the HP DesignJet Z5400, as determined by SpencerLab:


as well as the average cost of $.29 per sq. ft. for paper (3 different media were priced at Amazon.com), charging a fee of $1.00 per linear foot seems reasonable. Since a 42 inch wide roll contains 3.5 sq. ft. and it would not be practical to charge for only the amount of paper used for the print area (the printer prints by linear feet, not square feet), the cost passed on to the user is less than the actual cost of printing. The cost per linear foot ranges from $1.89 to $3.01 and averages $2.41, depending on the media. The user is only charged a simple $1.00 per linear foot to recoup some of the costs involved with maintaining the printer.

<table>
<thead>
<tr>
<th>Supply</th>
<th>Size</th>
<th>Quantity</th>
<th>Cost per Unit</th>
<th>Total Cost</th>
<th>Price per Sq. Ft.</th>
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</thead>
<tbody>
<tr>
<td>Ink Jets</td>
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<td>$110.00</td>
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<td>Matte Paper</td>
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<td>Glossy Paper</td>
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<td>Polypropylene</td>
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</table>

Ave Cost Per Sq. Ft. $0.69
Sq. Ft. in 1 linear foot of 42 in. wide roll 3.5
Ave Cost Per Linear Ft. $2.41
Cost to User $1.00

Policies and Procedures

The Library will adopt similar policies and procedures for the large format printer as it did when it implemented its 3D printer and scanner. Submissions will be made through an online form and print jobs will be mediated by library staff. The policies and procedures are attached to this proposal.