



Managing Printing Services

A SPEC Kit compiled by

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December 1999

Series Editor: Lee Anne George
Production Coordinator: Peter Budka

SPEC Kits are published by the

Association of Research Libraries
OFFICE OF LEADERSHIP AND MANAGEMENT SERVICES
21 Dupont Circle, NW, Suite 800
Washington, D.C. 20036-1118
(202) 296-2296 Fax (202) 872-0884
<<http://www.arl.org/olms/infosvcs.html>>
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ISSN 0160 3582

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SURVEY



Executive Summary

Introduction

For many research libraries, increased access to electronic information has resulted in increased demand for printing services because many library users like the capability to print the results of online searches, copies of full-text documents, and PDF versions of electronic journal articles. And although research and education deal increasingly with electronic information, paper output is still desirable for some functions. Consequently, managing printing services can be a significant activity for research libraries. When libraries decide to purchase new computer workstations, they usually need to decide what to do about printing.

The impetus for this investigation was a short, informal survey of ARL directors in the fall of 1997 in which over 80% of the respondents indicated that they were charging or planning to charge for printing in some way. This development was in stark contrast to the results presented in SPEC Kit 183, *Provision of Computer Printing Capabilities to Library Patrons*, April 1992, in which seven out of 77 libraries indicated that they charged for printing.

The SPEC survey for this Kit was distributed to ARL members in the fall of 1999. The survey was designed to gather information on how ARL libraries currently provide printing services to their users and how the costs of those services are covered. Of the 122 members surveyed, 62 answered this survey, for a response rate of 51% of the membership. Included in the responses was information on main, law, medical, and branch or other campus libraries, representing Canadian, national, U.S. private, and U.S. state research libraries. Of those responding to the survey, only one library indicated it did not provide printing capabilities for all or some of the public computer workstations within library buildings. The library landscape for printing has changed dramatically in the last decade, as this SPEC Kit shows.

Policies

The ubiquitous nature of printing in research libraries can be first seen in the responses to the question on policies. Since nearly two-thirds of the institutions reported no written policy statement (39 respondents), the reader might assume that printing is so commonplace that no policies are necessary. Less than one-quarter of the responding libraries (14 institutions) have a written policy statement on printing, although a smaller percentage of respondents is in the process of developing such a statement. An examination of the policies provided by survey respondents reveals that they focus on the how and where of printing and provide brief statements on fees or quotas, if instituted. Instructions for users were also provided as part of the printing policy information. From examination of institutional websites it can be seen that printing is often managed in conjunction with photocopy services, and, for several institutions, the policies and practices of printing and photocopying appear on the same web page.

The survey addressed all of the libraries within an institution. Sixty percent of the respondents indicated that their printing policies are not consistent across the various libraries, however, which offers one explanation for the lack of written policies. In several cases, the policies differed because of differing administration of the main, law, medical, and branch libraries.

The lack of library policies is not seen as a problem, according to 21 respondents (40%), since those institutions follow campus printing policies, which are readily available from such departments as academic or campus computing services, information technology services, or photocopy services. The 32 respondents (60%) who reported that library and academic printing policies differ indicated that those policy differences are usually related to fees, with student fees supporting free printing from computer labs in some cases and libraries providing free

printing and computer labs charging in other cases. As one respondent indicated, the major reason for differing policies is: "We are under different administrations." However, libraries have been working with campus partners to try to develop more consistent policies for students and faculty.

Printing Volume

Slightly over two-thirds of the responding libraries (39 or 70%) indicated that they had a printing volume of less than one million pages. Further analysis determined that neither the size of the population served nor the size of the collection had an effect on the amount of printing for this set of respondents. However, of those 39 libraries, 32 (82%) charged for printing in some way. Of the nine libraries that had two to four million pages printed in the last fiscal year, three charged, three did not charge, and three were planning to charge. Of the three respondents with the highest printing volume, two did not charge and one was planning to charge.

The quantity of printing has increased during the last five years for 43 (73%) of the respondents. For 13 (22%), it decreased, and only 3 (5%) indicated that the quantity stayed the same. Of those for whom printing increased, more equipment and available resources were reported as the major factors for the increase. On the other hand, eight of the thirteen (62%) respondents that experienced a decrease in printing have instituted charging, and nine of that group (69%) identified their encouragement of the use of downloads or emails as another factor contributing to the change in quantity. One respondent reported that using pink paper resulted in less printing.

Technical Capabilities and Staff Support

Networked printing with laser printers from computer workstations is the dominant printer configuration for respondents to this survey. Libraries that still have either local or networked dot-matrix printers are planning to move to networked laser printers as quickly as possible. The number of public printing workstations has increased for 42 respondents (69%), decreased for 12 (20%) and stayed the same for 7 (11%). Comments from respondents indicate that the decrease in printing stations is generally attributed to the change from local dot-matrix to networked laser printers. A further analysis of the comments shows that computer workstations or terminals increased

as printers decreased for most libraries. Only those institutions in which new or remodeled facilities were being equipped reported an increase in printers.

The 1992 SPEC Kit gathered data to make statistical comparisons on the ratio of students to terminals, printers to OPAC terminals, students per CD-ROM workstation, etc. This survey did not attempt to make such comparisons, since local configurations and remote access through campus networks and the Internet would likely make such comparisons arbitrary. Also, in analyzing the data, no correlations could be found between printers and population served, size of collection, or printing volume. In terms of total equipment, the responses ranged from 1 to 120 dot-matrix, 1 to 115 laser, and 1 to 33 ink jet local printers. For networked printers, the ranges were: 1 to 76 dot-matrix, 1 to 264 laser, and 1 to 2 ink jet printers. Twenty-eight respondents averaged 21.4 dot-matrix printers; seventeen respondents reported an average of 21.2 laser printers. For networked printers, 53 institutional responses resulted in an average of 31.5 laser printers—the most popular type of printer.

By far, the most popular brand of printer is the Hewlett Packard Laser printer in various models. Other popular brands include (in order) Epson, Lexmark, Panasonic, Okidata, and Canon. Several other brands and models were reported by one respondent each.

Primary responsibility for maintenance of the printers, such as replacing paper and cartridges, often falls to the staff at the closest service desk. In many cases, maintenance is outsourced, but staff can be called upon to help with troubleshooting. Other respondents indicated that they have procedures in place that begin with staff troubleshooting and continue with calls to the service provider. Other staff with primary responsibility for handling maintenance include information services staff, reference desk staff, and photocopy services staff.

Network printing is administered by the library for 34 (56%) of the respondents. Eighteen respondents (30%) manage network printing using UnipriNT. Twenty-three respondents provide color printing (at an additional cost), and 20 provide postscript drivers as special printing options. Nearly all (58 respondents or 97%) indicated that they provide the nonprinting option of downloading files to user-supplied diskettes, and 88% (53 respondents) provide the option for users to email files. Virus protection software is provided by 90% (53 respondents).

Costs and Cost Recovery

Just over 60% of the libraries (35–37 respondents for each category of user) do charge some fees for printing. Fifteen institutions indicated that they provide no free public printing services. An additional 7% of the libraries are planning on charging. For many research libraries, there is a “mixed model” for charging (a term provided by one respondent) in which dot-matrix printing is free and laser printing is charged at \$.10 per page usually. Payment is handled through ID, debit, vend-a-card, or cash cards and is generally made when items are picked up at the print station. Some free printing services are provided at certain locations such as instruction laboratories or special terminals for printing citations from the online catalog.

No limit is placed on the amount of printing by 52 respondents (85%), but some respondents indicated that excessive printing probably would result in a staff member suggesting alternatives, if the situation was brought to their attention.

Thirty-five respondents (63%) indicated that all of their printing costs are covered, most of them by the library budget. The costs for consumable products (paper, printer cartridges, etc.) are most often covered by per print fees (43%) or the library budget (34%). Software and hardware maintenance, along with staff support and any new projects or equipment, are also more likely to be covered by the library budget (60%) or per print fees (25%).

Evaluation

Only eight of the respondents (13%) have conducted a formal evaluation of their printing services, but an additional 16 (27%) have plans for such an evaluation. For some institutions, the evaluation will be conducted in conjunction with the other campus printing (usually computer) services. These evaluations often incorporate issues concerning technical configurations, contract services, and fees. Information on the cost effectiveness of the service can be gathered from sources such as records of supply costs or logs that document printer availability and repair records. Few evaluation documents were provided by respondents, but the ones included in this SPEC Kit provide guidance for those who wish to undertake an evaluation. Readers are reminded that user surveys are a good source for gathering information about library printing services.

Issues and Trends

Printing services are continuously changing with the rest of library technology, and, as this SPEC Kit shows, the associated costs are managed quite differently at the end of 1999 than they were during the first part of the decade. The move to contract out more services and charge fees for networked laser printing is a current, dominant trend. The expense of printing technologies combined with limited library budgets have pressured libraries to make these changes, even though some hardware costs have declined.

More changes are foreseeable. It is likely that individual research libraries will soon measure the cost effectiveness of delivering printing services at all, as their campus or institutional technology environments change. For some institutions, there will be a strong need to provide consistent policies to their user populations, and it is probable that, as printing services are increasingly contracted out, more formal evaluations of those services provided will be conducted.

In contrast to the general increase in printing volume, some printing services may see a decline in volume as more users work remotely, even though more resources are made available electronically. This may help those libraries that are reluctant to charge users for printing and hope that tools (laptops, personal digital assistants, etc.) will make it easier for users to manage the results of their electronic research, so that printing on a large scale will not be needed and the costs can be more easily absorbed. Only time and technology can tell what will happen, when another investigation is made into this topic at a later date.