# LIBRARY TECHNOLOGY BUYING STRATEGIES

EDITED BY



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#### MARSHALL BREEDING

## Preface

have devoted most of my professional energy throughout my career to technologies that support the work of libraries. I am delighted to pass along some practical advice in this *Library Technology Buyer's Guide*.

The prospect of moving to a new automation system can be daunting. When do the benefits of moving to something new surpass the deficits of keeping the incumbent? Can the products on the market deliver what libraries need to survive and prosper? Are those based on open source more flexible than the proprietary systems? What about those deployed in the cloud? These and dozens more questions arise as libraries enter a selection process. In consultation with Patrick Hogan, senior editor for ALA TechSource, I edited this volume and wrote several of its newly updated chapters to offer guidance in finding answers to these questions and in providing the background and perspective among the many options available today.

I have been intensely involved with library automation systems for more than thirty years. It has been interesting to see these systems progress from the mainframes era, through the phase of client/server systems, and more recently into web-based platforms. My perspective has been informed through my twenty-seven-year career working with technology from hands-on to administrative and strategic levels at Vanderbilt University Library, through opportunities to work with dozens of libraries of all kinds as a consultant, and through countless writing and research projects. These experiences have given me information and perspective across the spectrum of topics in library technology which can potentially benefit others in the field as they evaluate and eventually purchase new systems.

Acquiring an automation system has never been more complex; new categories of products have emerged that may or may not be a good fit for any given library. Resource management and discovery may be implemented together or separately. Products from several different vendors or created through open source projects populate each category. This volume was assembled to guide libraries in identifying the best technical infrastructure, whether in the form of a single comprehensive product or multiple components. Even though the number of choices has narrowed, libraries face tough choices among product categories and competitive options. It is important to face any evaluation process armed with independent information to balance the content provided by organizations as they promote their products.

My aim is to provide substance beyond the buzzwords and hype. Chapters will outline some of the major trends seen in the library technology field. Some themes covered include the new genre of library services platforms, the ongoing advancement of integrated library systems, the role of discovery services, and basic technology trends such as cloud computing.

The content especially benefits anyone in a library facing an immediate or upcoming process to select a new automation system or discovery environment. Administrators or managers who don't necessarily come with a deep technological background will learn about the types of technology products available and what functionality might best suit their organization. The book will help new systems librarians or other practitioners who need to rapidly acquire practical information related to tech products and the vendor community. More experienced technologists can update their awareness of the current offerings and may benefit from the procedural overview of the RFP (request for proposal) process. Students of library and information will likely face the prospect of reviewing or changing systems at some point during their career, and this volume can add an element to their education to help them adeptly manage that process. Libraries make significant investments in their strategic technology infrastructure. Those with current or future involvement in selecting components of that infrastructure can benefit from this book to gain the knowledge they need to make informed and responsible decisions.

# **1** Introduction to the RFP

his chapter explores a traditional request for proposal (RFP) and explains its component parts. Regardless of how you plan to write an RFP, this section outlines the essential information you must share with a vendor, and what you need to request.

## SECTIONS OF THE RFP

This chapter presents an outline structure for a typical RFP, developed as a comprehensive statement of requirements for a midsized public library purchasing an integrated library system (ILS). Since this chapter's original publication, library automation has changed significantly in a couple of relevant ways. First, library services platforms have emerged as a new class of product. While the ILS continues to persist strongly in the public library sphere, the

Nikki Waller was managing editor for ALA TechSource, 2000-2003.

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academic arena has seen a dramatic shift toward the library services platform. The change started through the use of index-based discovery services in tandem with existing ILS, often supplemented by an electronic resource management system. The library services platform diverges considerably from the ILS model, managing print and electronic resources through a more unified, web-native, multi-tenant platform. Chapter 7 covers library services platforms in depth. A second change has been the trend toward resource sharing among libraries, which is covered in chapter 3. Libraries pursue deeper collaborations in collection development, cataloging, and sharing of resources, which are supported by a shared technological infrastructure. Finally, the ILS is increasingly hosted by the vendor or deployed as software-as-a-service.

For each section of the RFP, this chapter also isolates the large questions that the library must ask itself, as well as vendors. You may find sample RFPs to work from, whether from colleagues or posted to the Web. The outline here is only one example of structure. It is meant to guide you in a way of thinking about this initial step in procurement. Even if the details don't apply to your current situation, pay attention to the type of information being shared and gathered.

#### **SECTION I**

#### **Instructions to Bidders**

This first section is the most narrative and allows the library to tell some of its recent history, as well as outline its plans for the future. This section should explain briefly why the library is seeking a new system, and what functionality it desires from the new system. This section also sets forth basic rules and criteria for the vendor's response.

#### 1. Introduction: Who are you and why are you here?

This item introduces the library to bidders. Create an accurate picture of your library, including the number of holdings, staff members, area population, and registered users. Give vendors a clear idea of the daily life of the library: how many visitors enter each day and analytics on web activity, how many volumes circulate, how many staff members are on duty, and where staff are allocated.

Writers must strike a balance between offering too much detail and being too scant. What should emerge from the introduction is a strong sense of the library's mission and direction, as well as concrete figures about the library's working capacity, facilities, and current systems. Be sure to give a thumbnail sketch of the library's computerized infrastructure as well: how many computers are in use, the networking environment, and what, if any, major hardware purchases are in the offing.

#### 2. Critical requirements: What do you really want?

The essential items that must be present in any bidding vendor's system are listed here. After scanning the list of critical requirements, a vendor should immediately know whether its ILS product meets the library's most basic needs.

Specifications in this item address not only available modules but also alert vendors to what other modules must be supported in the near future. The library states any plans for implementing other capabilities, such as a separate discovery interface. The library also may stipulate that a vendor must be able to support these additional modules in a mandated period of time, usually one year from the contract date. Any other planned expansions in the library's holdings also should be discussed in this section. In addition, the library can set forth rules to guide the demonstration process for the bidding vendor's product.

In this item, you are not seeking to answer questions—the library is giving the vendor the simplest possible definition of what is desired.

#### 3. Scope of the project: What will the new system accomplish?

This section functions as the library's problem statement; if the library seeks to accommodate a growing user population or improve service in a particular way, state it here.

#### 4. The role of the RFP: How does this document work?

This item states what is included in the RFP and how the library weighs each item in its request. The library should provide an explanation of the codes that accompany each requirement. Whether the library uses an RFP based on declarative statements or an RFP based on checklists and open-ended questions, codes give a vendor a clear idea of the library's priorities and how price quotations should be listed in the bid. For example, specifications might be coded with the following symbols:

- + An essential element that is generally available market-wide. The absence of this element is a severe disadvantage.
- \* A highly desirable element and a major factor in comparing the responses of vendors.

No mark indicates an important element that will be included in the evaluation of responses, but which is not deemed essential or highly desirable.

- An element of interest, but one that would be passed over in favor of a lower bid price. Should be bid as a deduct alternate.

#### 5. Responses to RFP: How to answer the questions

This item indicates how the vendor will mark its response. You may want to warn against vagueness in answers and state that they will be read as negative responses.

#### 6. Exceptions: What does the vendor lack?

If the vendor does not meet the specifications set forth in the RFP, the vendor must specifically address this discrepancy in its proposal.

#### 7. Definitions: What does this mean?

The library clarifies terms that will be used throughout, and how vendors will understand their meaning.

#### 8. Proposal submission: What are the rules of engagement?

The library specifies how the vendor will submit a bid and to whom the vendor can direct questions. Establishing authorized contacts for the vendors within the library is important—all communications with vendors during the bid process should be formal, so that the library does not compromise the terms of the open RFP process. These rules must be specific and clear to both vendors and library staff; the library also indicates penalties and consequences for not adhering to these guidelines.

#### 9. Quantities, appropriation, and delivery: What do the numbers mean?

The library states that quantities listed throughout the RFP are estimates only. These estimates do not guarantee what the library will purchase when a selection is made.

#### 10. Prices: How much?

The library states where and how prices will be listed in the bid, and under what (if any) conditions a vendor may resubmit prices after proposals have been opened.

#### 11. Bid bond: How do we know you're serious?

The library requires that a bond equal to a certain percentage of the bid amount (usually 5 percent) must be submitted with the proposal.

## 12. Noncollusion affidavit: Will the vendor work independently?

The library requests that vendors adhere to any attached document stating the vendor's intention not to confer with other vendors about the pricing or structure of the bid.

## 13. Comparison of proposals and discrepancies: What if the numbers don't add up?

If, when comparing products, the library finds a discrepancy between the itemized price and the total price of a system, the library will assume the lowest figure.

#### 14. Nondiscrimination

The library requires that all its contractors fully abide by nondiscriminatory practices.

#### 15. Project schedule: When will the system be ready?

The library requests a detailed project schedule for the first phase of implementation.

#### 16. Guarantees and warrantees: If it breaks, who will fix it?

The library specifies what assurances must be present in its chosen system.

#### 17. Installation: When and how?

The library states that the vendor must abide by specifications for installation listed later in the RFP.

#### 18. Award of contract: How do you know you've won?

This item informs vendors of the procedure for awarding the library system contract.

#### 19. Selection criteria: What is important to the library?

This item plainly explains how the library plans to evaluate bids. Criteria include vendor responsiveness, five-year costs, conformity to standards, past performance of the vendor, and so forth. Discuss any areas of particular

concern here. If the viability of a vendor is especially important, the library should explain how it assesses viability (such as the number of installations, financial criteria, and size of development staff).

Some libraries may place importance on a vendor's market strategy, that is, whether the vendor will continue to provide adequate service in the library's market segment. Address those concerns in this item.

## 20. Rejection of proposals

The library reserves the right to say no to anyone it pleases.

## 21. Financial statement: Is the vendor healthy?

If the library requires a selected vendor to provide an audited financial statement, stipulate it here.

## 22. Proposal costs: Who pays for the postage?

The vendor must bear all costs of preparing the proposal and may not pass them along to the library in the bid.

## 23. Contract: What holds up in court?

This item lists which documents will constitute the legally binding contract between library and vendor (usually the RFP, the vendor's response, the negotiation summary, and any other additional materials).

## 24. Lease options: What are the other options?

This item requests not only purchase price quotes from the vendor, but system or hardware-only lease prices as well.

## **Mandatory Proposal Form**

The library creates a mandatory proposal form to aggregate basic cost and legal information in a single document. This form helps the library compare between the basic prices of each vendor's product. The bidding vendor must fill out this form, which requests cost breakdowns, discount totals, projected maintenance costs, and delivery dates.

## System Requirements

In sections II through VI about system requirements, the library seeks information about a proposed system's functionality. The major question

addressed throughout is: can the proposed product accomplish what the library needs?

In the introduction to these sections, the library should define key terms used throughout, explain any symbols that appear, and give vendors instructions to code their responses. Defining and requesting adherence to a standard response code from vendors allows librarians to easily compare responses among vendors. This code also eliminates the possibility of waffling in a vendor's response.

The library also should state what minimum percentage of its specifications (90 to 95 percent is most common) vendors must meet to remain in consideration. These specifications are presented as a numbered list of specifications in the model RFP; modeling many of these specifications into a checklist is a good idea for tightening the document and facilitates easier comparison among vendor responses.

#### SECTION II

#### **General System Requirements**

#### A. The system: What are you shopping for?

In this section, the library defines the basic traits of the system it seeks: what the procurement consists of, hardware requirements, hosting and models (such as software-as-a-service), installation basics, system size, configurations, speed, supported platforms, web-based interfaces, peripherals, data lines, security, language, training, service, and certain standards. Several of these traits are also specified in more detail later in the RFP, but this section addresses the library's most general needs.

As a mature class of products, nearly all ILS products handily meet basic requirements. Rather than asking vendors what they support, this section can be better constructed as a narrative or bullet-point list that clearly states that these requirements are assumed capabilities of any ILS product.

Checklists also are useful for articulating general requirements. At the end of such a list, however, provide space for the vendor to indicate full compliance with these requests, as well as space for a vendor to explain any gaps in compliance. Vendors need a place to explain their "no" responses; their systems may have eliminated the need in one area by meeting it in another.

#### B. Modules: What functions are desired?

In this section, the library lays some ground rules for what will be included in the vendor's bid, along with basic assumptions about the bid. ILS systems are increasingly vendor-hosted or delivered through software-as-a-service, and libraries increasingly expect web-based interfaces for both staff and public interfaces. The procurement document should address applicable standards,

including MARC21, Dublin Core, RDA, Z39.50, SIP2, NCIP, as well as emerging standards such as BIBFRAME. Libraries should consider what APIs are exposed in the system and the protocol (e.g., REST or SOAP).

The library must specify which modules it seeks and how the modules will be bid. The base bid is the price quote for the system components that the library is certain of purchasing. Below are examples of what might be included in a base bid. See "Additional Resources" at the end of this chapter, which references websites with current RFPs.

- Acquisitions interface to vendor ordering systems, such as GOBI3
- Electronic resource management
- Cataloging interface to bibliographic services, such as OCLC Cataloging, SkyRiver, or other utilities
- Circulation with backup
- Inventorying
- Web-based patron access catalog
- Strategic functionality such as e-book integration
- Report generator
- Any other modules are quoted as options. Modules most commonly quoted as options include:
  - Interlibrary loan tools
  - Enhanced catalog data
  - Enhanced library service products
  - Materials booking
  - Special files
  - Telephone patron notification/renewal
  - Patron self-charging

In this section, the library also asks the vendor for information about any other modules the vendor has in development or in current release. These other modules also should be quoted as options in the vendor's response.

Most libraries are choosing vendor-hosted products or platforms deployed by software-as-a-service, therefore concerns such as required hardware no longer apply. In the past libraries would stipulate that no hardware or software replacement would be needed to accommodate any of the vendor's other modules, and second, any version changes in the library's operating systems should be included in the vendor's maintenance program.

Finally, the library also should request a detailed account of the financial and human resources committed to software development, with a breakdown between staff working exclusively on the ILS and staff working on various companion products.

#### SECTION III

## Detailed Functional Requirements: Do the System Functions Fit the Library's Needs?

In this section, which is the overwhelming bulk of the RFP, the library tells the vendor precisely what it expects the system to do. These requirements describe the entire function-by-function capability of the ILS.

The model RFP that accompanies this issue extensively covers this territory—in most cases, more than 80 specifications are listed below each function.

These detailed requirements comprise the boilerplate content common to many RFPs. Given the current state of ILS development, the majority of these detailed requirements are now generally accepted in all competitive library management systems:

- Bibliographic file
- Cataloging and authority control
- Acquisitions
- Serials control
- Circulation
- Inventorying
- Patron access catalog
- Interlibrary loan (often quoted as an option)
- Information and referral file
- Materials booking (often quoted as an option)
- Special indexes and files (often quoted as an option)
- Management reports
- Report generator
- Interfacing and network capabilities

#### SECTION IV

#### **Minimum Hardware Requirements**

In this section, the library tells the vendor what hardware configurations the system must work with.

#### A. General conditions: What hardware runs the library system well?

The library describes its database size in detail (such as the number of bibliographic records, annual interlibrary loan totals, number of registered patron population) as well as a projected expansion size (usually 25 to 30 percent) that the proposed product must accommodate. The library also asks the vendor for sets of technical and user documentation, and outlines conditions for upgrades to accommodate additional concurrent users.

#### B. Backup hardware, library data, and redundancies

The library requests information about the disaster planning and recovery process in place.

The library also requests that any proposed system protect the library's data. What are the provisions for redundancy and data replication?

# C. Remote peripherals: How will the system work with the library equipment?

The library asks the vendor to provide minimum requirements for staff PCs, web-based patron access catalogs, side printers, etc.

#### SECTION V

#### Vendor Support

Vendor support specifications must be the most carefully worded section in the RFP. In this section, the library outlines the vendor's responsibilities for installing and supporting the system. This part of the RFP sets the stage for the working relationship between the vendor and the institution; the library should be explicit in its expectations and requests. By the same token, the library also must confirm it can conform to these guidelines and fulfill its duties.

## A. Vendor viability: Is the vendor healthy?

Someone on the library's procurement team should have already conducted a general viability study of vendors in the market, so the library should have a basic idea of any vendor's financial situation. For an official confirmation of viability, the library requests information about the vendor's operations and customers, including audited financial data, résumés of the vendor's project staff, and a complete listing of the vendor's installations from the last four years.

#### B. Database migrations: How will the transfer work?

The library outlines what it will provide the vendor for the transfer of the library's database and then succinctly lists the vendor's responsibilities, including what hardware the vendor must provide. The library also specifies the initial load size for the database transfer and requests a quote for migrating the library's other records.

#### C. Delivery and installation: What will the installation process look like?

The library describes, point by point, the delivery and installation process of the new ILS, indicating the library's own responsibilities as well as the vendor's. Because the RFP is a legally binding document, the library procurement team (as well as the library's attorney) must carefully review this section before sending the RFP.

#### D. Training: How much instruction does the library need from the vendor?

The library indicates how many systems operators will be trained at the vendor's headquarters and specifies what capabilities the systems operators must have after training. The library also outlines how much training the vendor must conduct on-site for other key library personnel. The library requests additional materials from the vendor for training other staff in-house.

#### E. Maintenance: After installation, what are the vendor's duties?

This section of the document should be prepared in concert with the library's information technology (IT) administrator to determine how much maintenance to request from the vendor and how much can be performed in-house.

The library defines what levels of maintenance the vendor must be responsible for, what hours field maintenance will be available, and what conditions the vendor must meet for repairs.

#### F. Escrow agreement: What if . . . ?

To protect itself from vendor bankruptcy or cessation of product support (usually measured by the frequency of product releases—if the vendor does not release any update to the product for one year, the product is unsupported), the library asks the vendor to provide or place in escrow the source code and system documentation for all applications. In exchange, the library agrees to sign any nondisclosure agreement provided by the vendor.

The library also stipulates that the application software will be written to permit maintenance by other than vendor personnel in the event that the vendor enters bankruptcy or the product is no longer supported.

#### **SECTION VI**

#### Acceptance and Ongoing Reliability

This section tells the vendor how the library will assess the success of the product installation, and it outlines the vendor's responsibilities after the system has been installed.

#### A. Components of acceptance: Does the system pass the test?

The library lists the components of its acceptance tests for the system. The library also can reserve the right to withhold payments until after acceptance tests have been successfully conducted. In the event of repeated failures, the library can stipulate the return of all payments and enter into arbitration against the vendor. The system also may be subject to reliability tests as long as two years after initial installation—failure of those tests can result in withholding of maintenance payments.

#### B. Methodology: What's on the test?

The library gives parameters for the acceptance test, such as how many concurrent users will be included, how system response times will be measured, and how test results will be logged.

#### C. Reliability and downtime: Is the system there when the library needs it?

The library gives its definition of a reliable system, as well as how reliability will be calculated. The library also defines downtime and describes how it will calculate overall system downtime.

## D. Response times: What speed constitutes great service?

How fast does the system need to work? In this section, the library gives minimum rates of response for different system operations (for example, charge and discharge of library materials should average two seconds at least 95 percent of the time) and stipulates that these times must be met even when the maximum number of concurrent users (specified in the general hardware requirements) is using the system.

#### E. Withholding of maintenance payments: What happens when the system fails?

If the system fails to function at the contracted level of performance, the library reserves the right to withhold a percentage of its regular maintenance payments. Conditions that allow for payment withholding can include:

- Failure to meet reliability rates after acceptance tests have been passed
- Failure to meet required response times
- Loss of files or databases due to system failure

## **STANDARDS**

In 2003 the National Information Standards Organization (NISO) published "The RFP Writer's Guide to Standards for Library Systems," a comprehensive inventory of information standards and how to include them in the library's RFP. Even though not current with the latest standards, this continues to be an excellent guide. Created by Cynthia Hodgson, it includes specifications that can be added to RFPs, as well as explanations of which standards are appropriate for different library projects. See www.niso.org/publications/press/ RFP\_Writers\_Guide.pdf.

## ADDITIONAL RESOURCES

Marshall Breeding's Library Technology Guides website has a "Procurement" center where many RFPs are available for download as they're announced: http://librarytechnology.org/procurement.

You might also check the following resources:

- Colorado Department of Education, "Request for Proposal (RFP) page," www.cde.state.co.us/cdelib/technology/atrfp.htm.
- TechSoup connects nonprofits, foundations, and libraries with tech products, services, and learning resources, and provides tips and sample RFPs for your nonprofit, charity, or library. See www.techsoup.org/support/articles-and-how-tos/rfp-library.
- The consortium Orbis Cascade Alliance has posted RFP documents and process information at https://oldsite.orbiscascade.org/index/rfp.

## CONCLUSION

Above all, the RFP is a document that seeks information about solving the library's problems or expanding its services. The RFP outline presented here is one way to organize a request for bids, and its areas of functionality are commonly addressed in RFPs for an ILS.

The next chapter, again using an ILS example, discusses how to incorporate your library's needs and desires into a well-written document that will help you achieve successful technology implementation.

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