

III

Cost Justification: A Practical Approach

“Cherchez la loot? or Whose money is at risk?”

Paul Tate, the international editor of *Datamation*, said: “The industrial world in the late 1980s, busily pioneering a global Information Economy, still hasn’t worked out how to quantify and value the basic commodity of the future--information.”¹

Cost justification means different things to different people in the organization.

To some, information is valued by the technology which delivers the product. The cost and book value of discs, printers, and software are measured on the organization’s balance sheet. But most information professionals know that the value of information cannot be read from the ledger book. Information, in Tate’s words, is a *hidden asset*.

It’s no secret that libraries will be facing budget cuts in the coming years--some predict by as much as 10 to 15

percent. Investments in equipment to support new technologies become real considerations in the face of these spending restraints. The library cannot easily demonstrate cost reductions, especially those resulting from the use of CD-ROMs.

Our approach to this dilemma is to prepare a brief report designed for key decision makers in the organization. It includes both *qualitative* (human factor) information and *quantitative* data (numbers or statistics). The cost-justification document is based on information collected throughout the initial usage period of the CD-ROM installation. This post-CD-ROM information is compared with historical usage patterns for online sources, the purchase of sources in other media, and allocation and cost of staff time.

In our experience, success most often comes from having complete and accurate information that clearly explains what money will be *spent* and what money will be *saved*. The biggest problem in justifying the cost of the CD-ROM product is getting a complete picture of major costs and associated costs. Obtain a working knowledge about the components of the CD-ROM system. This will help contribute to the accuracy of the cost summary and analysis.

One can pull together direct, payroll, and administrative expenses for a department. It's easy to provide rough estimates of the cost of *one* new piece of equipment. But accurate costs for a large amount of hardware may be difficult to obtain.

Some specific guidelines for developing realistic time and cost estimates for CD-ROMs are provided in the pages

which follow. Don't misunderstand us: there are real and significant cost benefits associated with **CD-ROMS**. The problem comes from overestimating the savings and underestimating the expenses. The point is to have a firm grasp of costs and sensitivity to tricky areas.

Weighing Cost and Time Factors

Assessing the costs of the **CD-ROM** installation and staff time is the logical starting point. You will need to assemble the costs or estimated costs for these items:

- The personal computer.
- The peripherals (**CD-ROM** drives, cables, printer).
- The **CD-ROM** product(s).
- Supplies (paper, ribbons, floppy discs, toner).
- Furniture.
- Space allocation for workstation(s).

The second step is to assemble costs associated with staff:

- Training or practice time.
- Maintenance.
- Administration (ordering, follow-ups with vendors, accounting for missing or lost discs, usage tracking).
- Ongoing technology awareness (staff involvement in keeping current with trends, new products, product enhancements or upgrades, technology).

As you might expect, there are several cost areas where errors multiply; for example:

- *Incorrectly estimating hardware costs.* The buyer's technical knowledge is not sufficiently detailed, making it difficult to know what questions to ask and hard to analyze the vendor's answers. The safeguard is to ask specific questions; for example, "Does the purchase price of the computer include the **CD-ROM** controller card and cable?" or "What is the cost of the text-retrieval software upgrade and installation?"
- *Overlooking upgrade costs.* The vendor may not be fully forthright about the costs for upgrading and maintaining the system. Ask, "What is the expected lifetime of the configuration I am purchasing?" and "What trade-in provisions are included if I buy this configuration and it is unsatisfactory for my application?"
- *Ignoring the costs of future technological innovations.* A third-party action may occur which catches both the buyer and the vendor by surprise. Ask, "What is the cost of modifying this system to accept the next generation of read-only optical drives?" and "What is the cost of the extended service contract and what additional, specific services does it offer?"

Most buyers assume that having the **CD-ROM** product will significantly reduce their variable online expenditures. Online is a pay-as-you-go service. On the surface, a fixed-price **CD-ROM** eliminates variable online charges for

a particular database. One final point: be aware of the four common CD-ROM cost-benefit myths. Accepting them as truth can skew the accuracy of your numbers.

- CD-ROMS will lower online search costs.
- CD-ROMS will eliminate or lessen the need for print sources.
- CD-ROMS will decrease staff involvement.
- Equipment costs will remain constant or decrease.

Current Cost Analysis

Current cost analysis is developed from the department's budget. Attaching a copy of the department's total budget to the cost justification is a workable way to give the reader of your cost-justification document a point of reference for current expenditures.

You may want to consider revising the complete budget and reformatting the information to make the before-and-after comparisons easier to understand. The important line items to break out are:

- Staff time.
- Equipment expenses.
- Maintenance.
- Online expenditures.
- Information products providing the same data as the proposed CD-ROM product.
- Supplies.

- Furniture.
- Miscellaneous.

You can make these items as detailed as appropriate. If possible, compress the current costs, the proposed costs, and the savings or increased expenditures as one table with three columns. You can provide detailed explanatory notes in an appendix.

Current Costs Affected by CD-ROMs

CD-ROM provides savings in some areas, but in others, costs may increase. For example, online search costs may *rise* because the CD-ROM *pulls* more people to electronic research. These individuals may want to get more current information from online sources or request material not in the library's collection.

CD-ROMS do not alter the organization's information habits overnight. If the CD-ROM introduction is not staged properly, the buyer may be faced with paying for an installation which is not fully utilized while online expenditures are unchanged.

These are the typical factors upon which the CD-ROM workstation will have an impact:

- Online search costs (may rise or fall depending upon the particular circumstances in an organization).
- Staff time for online searching.
- Hardcopy costs for books, journals, and other media.

- Microform costs.
- Photocopying costs and time.
- Cost of supplies.
- Interlibrary loans.
- Document-delivery costs.

It is critically important, therefore, that the cost-justification analysis be as thorough and complete as the technical preparation. It is not a case of one factor being more important than the other. Both are equally important, and your credibility as well as the success of the CD-ROM implementation depend on your management of the financial and technical aspects of the product.

It is worth repeating that each organization is unique and has individual requirements, so that these factors may be affected in a positive or negative way by the CD-ROM. The influence of the CD-ROM will depend on a variety of factors. It is important to be aware of the conditions in your organization and to assess the changes that the CD-ROM will bring.

Steps in Cost Justification

Unfortunately there is no cook-book approach to cost justification. For this discussion of the subject, the authors have pooled the experiences of a number of librarians and information professionals and developed a profile of the most common steps required in completing a cost-justification document for acquiring a CD-ROM product. Let's look at the components of the CD-ROM

cost-justification process. (A complete cost-justification memorandum appears in Appendix C to this chapter.)

1. Create a Strategic Plan for Information

In Chapters I and II we dealt with the strategic planning process and management issues that library managers must address. The first step in cost justification relies on the information needs assessment conducted as part of your strategic plan.

Based on the identified needs articulated in your plan, you begin to research and analyze the CD-ROM product that meets these needs. The important question is, "Will the patrons and clients of the library benefit by the acquisition of the CD-ROM?"

This type of analytic process offers specific, unique techniques to aid effective purchasing. The approach requires you to focus on what is required and then to use knowledge, initiative, and creativity to propose an optimum value information product.

A need-based, analytic approach will help you to cut your purchasing costs, and ultimately reduce the cost of upgrading and maintaining CD-ROM products. You are asking "What are we trying to do?" and "What's the most cost-effective way to achieve this goal?" You then apply creative thinking to determine the most appropriate solution.

2. Study the Source Material's Content

Price is not value. A thorough investigation of the various products providing the information necessary to meet the needs you have identified is essential. Most CD-ROM products are also available in other formats; for example, print or online. Your professional judgment is critical to the proper product selection. Among the questions to answer are:

- In what other format is the information available? What's the cost of the other formats?
- If you access the databases online, take a look at your expenditures on that particular database, preferably over at least a three-month period. Compare the money you spend plus the benefits derived were the information budget spent for an in-house CD-ROM. Would this be a cost-effective move? Realize that the use of a CD-ROM product that has an online counterpart may impact online search costs. These impacts may be both positive and negative.
- How do you currently access the information and how will having the information in-house change this? Will its usage increase by key groups if they no longer have to worry about a search surcharge at the end of each month? Are there groups that are not using your services but now might because it is free or less expensive?
- Are there *what if* types of searches you would perform for your clients if it were possible and did not involve incremental costs?

- What databases on **CD-ROM** are the most accurate and appropriate for your clients or patrons? Are they updated frequently enough to be useful?

3. Look at the Technology

Chapters IV and VII provide specific information about **CD-ROM** technology. Bear in mind that you must answer these fundamental questions:

- What does the **CD-ROM** technology enable you and your patrons to do that you could not do using paper, fiche, or online?
- What is the **CD-ROM**'s impact on end users? Will it promote greater understanding of the information available and increasing their technological expertise in such activities as downloading and manipulating data?
- Is the library able to serve all of its clients or patrons? The **CD-ROM** will, in general, improve your organization's productivity. In addition to end user searching, your paraprofessional staff can shoulder more of the searching load. Work changes can free professionals for other information activities in line with the goals of your organization.

4. Prepare a **CD-ROM Benefit Analysis**

State clearly how identified needs are positively affected by the proposed **CD-ROM** acquisition:

- Focus on specifics. Get the details in writing.

- Debunk myths about CD-ROM usage.
- Cite examples of other installations that are similar to yours.
- Associate costs with each factor.
- Eliminate false assumptions by being realistic in your forecasts.
- Use industry specialists to extend your knowledge as well as the experience of your peers.

5. Take a Longer-Term View

The focus of your Needs Identification and Benefit Analysis must address a one- to three-year interval. How will you maximize the use of the product and deliver benefits over the long term?

As you process the information about technology, products, and costs, place this information on a sufficiently broad matrix for planning and analyzing. Examine the significant components at least one and, preferably, two years in the future. Apply such criteria as:

- Is this a function that my customer wants today and tomorrow?
- How does this cost relate to groups of functions and to individual functions? Where does the *significant* cost benefit reside?
- Do I have sufficient information about today and what's likely to happen tomorrow with this technology?

- Is the information solution I am recommending accomplishing something essential or non-essential?

6. Make a Commitment

The job of preparing the cost justification is challenging, but it is a short-term project. The average cost justification will require about three weeks to complete. However, a total commitment to the long-range goals articulated in your strategic plan is necessary in order to implement successfully the technology and benefit fully from its advantages. **CD-ROM** is not likely to replace personnel but will help to maximize their efficiency and productivity.

Senior management and information professionals must jointly resolve the inevitable cost-justification issues. Therefore, it is important to discuss openly with your management the effect that **CD-ROM** will have on costs and services provided.

The buyer of a **CD-ROM** product must secure the commitment of all employees involved in and affected by the **CD-ROM**. The key question is, "What is the cost of obtaining such commitment?" It may be necessary to spend more money for training, extend the pre-decision interval or restructure the department. You may have to consider other steps which may have an impact on the final price of the **CD-ROM** implementation.

7. Complete the Financial Analysis

The appendices to this chapter provide models of budget worksheets which you can use in their present

form, or you can modify them to meet the requirements of your organization.

The cost-justification evaluation combines financial analysis and market research. The evaluation should include measurement of *pro forma* working capital balances, cash flow, and residual balance sheets. The evaluation should provide its reader with an objective assessment of the value of the CD-ROM in the current marketplace. The basics of the financial analysis include:

- An analysis of the current service/cost ratio and estimate of what ratio would result from the introduction of the CD-ROM product.
- A comparison of the value of the CD-ROM to the current costs of equivalent sources.
- A projection of the effect that the CD-ROM will have on your budget.

Beware of cost masquerading as quality. Your cost justification is a demonstration of the value of the product and its impact on service to the organization. The price you pay for the product should have a relationship to the value your clients and patrons will receive from the product's use.

In this context, value in an electronic information service or product means appropriate cost and performance. An effective cost justification pivots upon proving that the product or service will have two desirable outcomes:

- Yield lower costs.
- Provide higher quality of service.

Appropriate cost is a cost that is as low, or lower, than the alternative source's cost. *Appropriate quality* is more difficult to define, since it depends on the customers' needs and wants and can have many variations. Library staff can improve quality by learning what the customer wants. We want to reiterate the importance of surveying customers to better understand the customers' definitions of higher quality and the customers' needed functions. Again this is accomplished by the Needs Assessment.

The currently-popular buzzword for this approach to cost justification is *value analysis*. The cost-justification documentation you prepare is a key determinant of value.

Cost Categories

Let's look at each of the major cost categories associated with a complete **CD-ROM** workstation and pinpoint those which can return unreliable numbers:

Hardware

Vendors take different approaches to pricing the hardware for the **CD-ROM** products they sell. There are three general approaches in the marketplace today:

- The vendor sells everything for one price; that is, you purchase what is generally referred to as a *turnkey operation* or a *bundle*. You buy everything from one source; that is, **PC**, **CD-ROM** drive, cables, and data disc. *Characteristics*: High-price, service orientation, reduced management and technical demands on the customer.

- The vendor sells the data and a drive. The successful Ziff Communications Co.'s Computer Library CD-ROM product, which can be ordered with a drive is this type of approach. The buyer assumes responsibility for making the CD-ROM function. *Characteristics:* Low price, telephone support, relatively high technical demands on the customer.
- The vendor can sell you the data plus any of the hardware or software you specify. You can pick and choose from the inventory and shop around for the best deal. *Characteristics:* Some high and some low prices, some technical support provided but no single vendor is ultimately responsible for making the components work together; generally high technical demands on the customer.

Keep in mind that hardware may mean one thing to the vendor and another to you. If a printer is required and not included in your purchase agreement, you will have to acquire that peripheral yourself. Just a reminder: spell out explicitly what you will purchase from a vendor. Include part number, manufacturer, and price per component on the purchase order and avoid phrases like "CD-ROM workstation." Another important tip is to make certain that the specific computer processor and its operating speed are stated explicitly on the contract; for example, "an IBM-compatible 80286 CPU operating at 12 megahertz." Vendors can and do substitute CPUs depending upon their inventory when they ship. Protect yourself against an unwanted downgrade or an unnecessary upgrade.

Consider the incidentals--chairs, table, storage cabinets, and security devices. These costs can add up. Even mundane supplies can account for a surprisingly large part of the CD-ROM budget. Costs for paper, floppy discs, and printer supplies add up quickly.

License Considerations

One important aspect of the pricing equation is the cost of adding additional units or upgrading to a site license for a network application. It is helpful to attach to your contract or purchase agreement either a statement of the prices for upgrades or extra equipment. Having prices in the contract can help protect you from price increases. In some cases, this is the only way to make the salesperson's reassurances have any meaning. Even then, some vendors will *forget* that you anticipated growth and locked in the prices.

One useful tip: sign contracts and purchase agreement after consulting the purchasing or contract specialists in your organization. Vendors have been known to include provisions in the contract for delivering less than the buyer thinks was purchased, particularly when referring to equipment which is described as "an industry-standard equivalent."

What is "an industry-standard equivalent?" The phrase lets the vendor substitute whatever is in stock and works with his application. Spell out what you are buying and assume control of the purchase's attributes.

The Software

In most cases, software of some type is included in the CD-ROM purchase. This can range from helpful utilities for searching, downloading, and statistics tracking to an unhelpful manual and flawed installation disc. In general you want to receive as part of your subscription or purchase price:

- Microsoft CD-ROM extensions for the CD-ROM drive.
- Retrieval software.
- Graphics software (if required).
- Remote diagnostic software (if required for service).
- Utilities and local diagnostic software.
- Network software if you are investing in that type of configuration.

Spell out exactly what software and the version number the library is purchasing. Attach a cost to each item. Often upgrades to new versions of the software carry fees, some nominal, some equivalent to purchasing the software another time. Attempt to get an estimate of the cost and frequency of upgrades. Include that figure in your analysis of the total cost of the CD-ROM product.

The Service and Maintenance Costs

The trend in the CD-ROM business is to charge for telephone and on-site service and support. What are these fees? To protect yourself against price increases during

the term of your contract with the vendor, spell out the fees.

One of the most costly components of service is the cost of rush or after-working hours support. Check carefully what the vendor or third-party service organizations charge for evening, weekend, and holiday support. Include several of these calls in your pricing analysis. Do this with each vendor from whom you are purchasing equipment.

In your pricing analysis be aware of vendors who provide free service during the first 90 days or six months of the contract but charge for travel time. If the company does not have a local service operation, you will be billed for airfare, car rentals, and travel time. Purchasers of the NEC Silent Writer 890[®] laser printer find themselves saddled with this type of deal. The *free* service call can reach \$200. Do your homework and specify what the library will pay for in the purchase contract.

The In-House Staff Costs

In an ideal world, the CD-ROM product arrives, is plugged in, turned on, and used immediately. In the real world, it rarely works this way.

Make an assessment of the amount of time your staff will invest in the installation, maintenance, and management of the CD-ROM product. Conversations with those who own a CD-ROM product provide you with the best source of reliable information about these costs.

One important factor to include is the time required to train your staff to operate, update, maintain, and teach others to use the CD-ROM product. In general, computer-literate users require less instructional time.

Investing a small amount of time in the training of new users will result in savings in the long run. Make sure that staff is familiar with the administrative tasks associated with the **CD-ROM**, replacing printer paper, changing discs, and resetting the computer. Effective group training pays dividends again and again. One reminder: establish a procedure to account for theft or misplacement of discs.

The Miscellaneous Costs

The next-generation optical information products are arriving. University Microfilms (UMI) unveiled a combination abstract-and-index **CD-ROM** product which allows access to facsimile images of the full-text source documents stored on a collection of two dozen **CD-ROMS**. These second-generation products--see the description of Laser Disclosure in Chapter V--take full advantage of the powerful microprocessors available today. But they also bring costs to the **CD-ROM** equation:

- Dedicated telephone line for online connections.
- Technical manuals for operating systems and programming languages.
- User documentation for **CD-ROM** products.
- Training fees per session.
- Special security requirements; for example, securing a laser printer in a public access facility. The laser's toner cartridge can easily be removed and taken just as easily as the cables unplugged and the unit carried off.

The financial section of your cost-justification memorandum consists of a brief analysis and review of your budget and source of funding. Should you not have the money for this acquisition, review alternative sources of funding such as grants to not-for-profit institutions. If the library is in a corporate setting and a key department has been identified with an immediate information need which can be satisfied by the installation of a **CD-ROM**, perhaps you can negotiate a subsidy for the acquisition? Create partnerships with your clients. (Appendix A to this chapter shows a typical budget worksheet for gathering financial information about the **CD-ROM**.)

Marketing the Idea

Since many libraries already have **CD-ROMS**, find out how your peers convinced their management that acquiring a **CD-ROM** is necessary. Point to the fact that your colleagues or competition are already using the technology*

Begin your memorandum highlighting the need you identified as a result of the Needs Assessment. The argument for buying a **CD-ROM** should not be built on the need to understand or acquire the technology for its sake alone. The **CD-ROM** should be a response to needs expressed by your key users. Suggested arguments to link the purchase with the value of the **CD-ROM** appear in Appendix B to this chapter.

The memorandum should include a review of your search for the best product to answer user needs and why you recommend this step be taken at this time. Since the request for funding is probably being directed to an in-

dividual outside the library, you may want to include an overview of the technology and how other organizations are making use of it.

Tell others what the library expects to accomplish by installing the CD-ROM and, should it prove to be successful, how it plans to capitalize on that success; for example, acquiring additional titles.

Evaluating to Respond to Change

Cost justification demands that you continually need to evaluate the success or lack of success of the CD-ROM.

There are four distinct ways to evaluate your library's products and services and the effectiveness of its marketing plans. You need not limit yourself to one particular methodology. Choose one with which you are most comfortable but remember that, in any given instance, one may be more appropriate than another. In fact, you may elect to combine several methods in your evaluation of your CD-ROM acquisition.

A clearly articulated evaluation process that suggests action steps to correct potential problems provides tangible evidence of the value the library provides to individual customers and user groups as well as the organization as a whole.

Appendix B to this chapter provides a *Usage Statistics Tracking Form* that you can adapt for your organization. We have learned that several CD-ROM vendors are considering adding an electronic usage tracking component to their products.

Four Evaluation Techniques

1. Top-Down Approach

The *top-down approach* to product evaluation seeks the support and approval of your efforts from above. Those to whom you have a direct or indirect reporting relationship, can be called upon to evaluate the decision to purchase the CD-ROM and who are familiar with your situation.

Follow up to get feedback and suggestions. It is not advisable to wait for your annual budget review to seek an evaluation of the CD-ROM service provided throughout the year. By then, it is too late for any correction to have an effect on your department's budget. Instead decide on an appropriate interval in which to collect data to present about the CD-ROM service and then request an evaluation.

Those who are responsible for approving your budget may not be aware of all of the services you provide and the extent to which they are used, Keep senior management or administration informed by sending them memoranda, samples of output from the CD-ROM, and copies of letters of commendation you receive from users. Do this on a regular basis.

Solicit suggestions for improving the CD-ROM service you offer. This sparks management to think about your operation and evaluate it on a product-by-product or service-by-service basis. These evaluations will be crucial should you seek to expand your CD-ROM collection.

When soliciting suggestions, make certain that the evaluators understand what you expected to accomplish when you first discussed acquiring the CD-ROM. They

should be informed of the original target audience and the current customers. Only when they are familiar with the CD-ROM service will they be able to evaluate it properly.

2. Bottom-Up Approach

The *bottom-up approach* to evaluation requires feedback from those who use the CD-ROM. The more you know about your customers and how they are using the CD-ROM, the easier it will be to ascertain how the CD-ROM collection service might be expanded.

Try to elicit constructive criticism from your client base and share these comments with your peers and those from whom you have purchased your CD-ROM products. Perhaps they will suggest ways to resolve any problems that surfaced during the CD-ROM trial. Remember, the objective of any evaluation process is to determine how you might improve your CD-ROM product library, the service you provide, or the way you promote the CD-ROM service.

Avoid the *How do you like it?* question because it elicits the automatic response *It's fine*, which tells you nothing about how effective the CD-ROM has been and what you might do to improve the service. Customers are more likely to respond to your requests for evaluation if you explain why the feedback is essential to fine tuning the CD-ROM program.

3. Interactive Approach

The *interactive or negotiated approach* seeks evaluation from a wider range of people than any of the other approaches. Comments about current or future CD-ROM

products are elicited from current users, potential users, superiors, and even outsiders, for example, database vendors, librarians in other companies or communities. The usual method for obtaining feedback is through individual interviews or focus groups.

Sometimes we are too close to the products and services we develop. We may have a specific, narrow view of how the CD-ROM will be used and who will be its heaviest users. The interactive approach may uncover information needs not being met or introduce you to a new market for your CD-ROM products.

4. Objective Approach

The *objective approach* requires a great deal of effort on the part of the library staff: keeping the records which will be used to support the case that the decision to acquire the CD-ROM was a wise one. These statistics, including budget data and usage logs, should not be compiled retroactively but should be part of the initial CD-ROM program implementation. Reconstruction can be a time-consuming and futile effort; setting up the process correctly at the outset will avoid this problem.

Cost-Justification Tips

Here are a few suggestions for librarians working in three different settings.

Academic Library Cost-Justification Tips

- Focus on departmental support.
- Stress expanded student and faculty access.

- Seek review of the cost-justification by the department heads whose students and faculty will make the greatest use of the **CD-ROM**.
- Allow your organization's computer center staff to review the document with particular attention to the hardware, software, and maintenance figures. Their experience with suppliers in your area will provide a validity check on your figures and their implications.

Public Library Cost-Justification Tips

- Link acquisition to patron service.
- Demonstrate for-fee application of product.
- Show curtailment of a **class** of online services.
- Use a technology-magnet approach to obtain free publicity or greater patron support in fund raising efforts.
- Start the cost-justification well ahead of the annual budget cycle. The rush job is not likely to be a thorough picture of the ongoing costs associated with **CD-ROMs**.

Special Library Cost-Justification Tips

- Focus on hot new product areas.
- Serve key departments which use external information; for example, marketing, not accounting, unless the **CD-ROM** is subject specific and directly relates to their day-to-day job.

- Follow the financial analysis format used in your organization. Most companies have a specific format for such analyses. Get one and use it as your model.
- Seek review of your draft cost-justification by the department which has been targeted as the chief beneficiary of the CD-ROM and by one of the organization's financial analysts. Both reviews will point out areas which need amplification or repositioning for impact.
- Allow the organization's computer center staff to review the document with particular attention to the hardware, software, and maintenance figures. Their experience with suppliers will give you a validity check on your figures and their implications.

Note

¹ Paul Tate, "A Badly Needed Sense of the Value of Information," *Datamation*, March 15, 1989, page 78.

Appendix A: Sample Budget Worksheet

Expense	Current	CD-ROM	Change
Staff			
Full-time			
Part-time			
Benefits			
General & Admin			
Equipment			
PC			
Drives			
Cables			
Printers			
Modem			
Upgrade cost			
Software			
Package 1			
Package 2			
Upgrade cost			
Supplies			
Paper			
Toner			
Ribbons			
Floppies			
Furniture			
Training			
CD-ROM specific			
Other			
Maintenance			
Monthly			
Contingency			
Replacement discs			
Security			
Devices			
Staff			
Direct online costs			
Database 1			
Database 2			
Photocopies			
Microforms			
Subscriptions			
Royalties			
Estimate of savings			

Appendix B: Linking Acquisition and Value

Reason for Acquisition

Cash in on the hot technology.

Reduce online expenditures.

Provide more user access.

Offer unique capabilities.

Introduce new services.

Obtain more equipment.

Expand the library budget.

Get smart about CD-ROMS.

Manage time more effectively.

Follow the crowd.

Link to Value

Increase the stature of the library and its staff

Spark excitement about the use of CD-ROM

Increase the budget

Cost of online for specific databases reduced

New users are accessing the CD-ROM

Increased patronage from existing clientele

increase downloading of data.

Create quarterly bulletins.

Introduce for-fee research services.

Increase the population of 80386 machines.

CD-ROM acquisition approved and funding obtained by management.

Staff is comfortable using the CD-ROM and teaching others.

Staff members at all levels are more involved in the electronic research process.

Other libraries cite your use of the CD-ROM to justify their purchases.

Appendix C: Cost-Justification Report

Memorandum: March 29, 1989

To: Marie Wilson

From: Bill Smith

Subject: Acquisition of ABI/INFORM Ondisc

Background

The recent expansion of the School of Business has placed additional demands on the Library. Specifically, in the last 12 months we have:

- Increased online expenditures for business databases by 20 percent, from \$3,800 a year to more than \$4,500.
- Experienced a corresponding increase in our interlibrary loan activity.
- Accepted 33 percent more photocopying volume in the business-related journals.

The emphasis on business and related disciplines will continue for the foreseeable future, and the Library is responding to this need. As you know, our resources are stretched.

Options

We investigated thoroughly the options recommended by the Library Committee. These included expansion of our microfilm collection, increasing our journal subscriptions, and exploring various electronic information capabilities.

That review of electronic options has been completed, and we have determined that:

Commercial tape leases for business information files are at present beyond the technological capabilities of our Computer Center. This option, however, must be reexamined when the Computer Center expansion is completed in 1991.

Online access to commercial timesharing services can be accomplished. The challenge with online is the variable cost of information retrieval and the dedicated telephone line this service requires. At this time, the variable cost structure is almost impossible to accommodate in the present budget climate.

CD-ROM technology. At this time, the CD-ROM option is the most appealing.

The Need

The need at this time is to respond to the increased demands for business and management information of an analytic and strategic nature. Our present print resources, including the daily newspapers, provide reasonably sound data about the finances of a company or an industry.

Our collection is solid in the core business titles, but we are somewhat limited by constraints on our journal subscription budget. Frankly, we are quite weak in most functional management areas, although we have the basic titles like *Forbes*, *Business Week*, and the *Harvard Business Review*.

Students and faculty alike are voicing concern over the lack of information in such areas as marketing, insurance, accounting, and computers in business.

The Recommendation

After investigating more than two dozen business and management CD-ROM information products at the most recent SLA, ALA, and National Online meetings, we narrowed our focus to products offered by UMI/Data Courier, H.W. Wilson, and Information Access Co. Each of these firms offers indexing or indexing and abstracting of the significant titles in the business and management disciplines. (We have an analysis of the strengths and weaknesses of each product which I can provide if you would like more detail than this memo offers.)

We believe that at this time the ABI/INFORM OnDisc product is a wise choice. The CD-ROM contains five years of information. The data consist of 150-word summaries of the significant articles appearing in about 800 worldwide business and management journals. The reputation of the database is excellent.

We believe that this product will provide access to an information source which can make an immediate and direct contribution to our business program.

The Costs

The price for a one year's subscription to the product is \$5,000. We would have to acquire a CD-ROM drive and cables. The present cost to the school with our discount is about \$500. We have two computers now being used for online searching. Our thought is to dedicate one of these to the ABI/INFORM OnDisc application, track usage, and then decide on a **next step**.

In short, we can provide this information source for less than **\$6,000**.

Implications

We're not suggesting that this is the solution to the growing demands on the library from the business school. It is an effective way to expand service and gain valuable insights into how the new electronic products can contribute to our service offering.

We've identified four areas which will be directly affected by the CD-ROM, and each of these areas will reallocate budget dollars to cover CD-ROM expenses. We'll have to tighten our belts through the first six to nine months until we get a handle on the full financial impact of the CD-ROM. The four areas are:

- *Demand for online.* This is a cost area which is unlikely to decrease. Our analysis suggests that the demand for online research may increase. We have, however, developed an analysis that shows we can now charge for rush or special service searches. The result is that our online service will generate about \$2,500 in new revenue.
- *Maintenance.* Although we will have a one-year warranty on the drive, the PC will get heavy use, if the experiences of other ABI/INFORM customers is correct. We'll have to allocate \$1,500 for repairs and possible equipment replacements in the next nine months.
- *Staffing.* We anticipate that some reference desk time will be available. We will not be able to reduce staff expenditures because the CD-ROM will require our providing some training to students and faculty. Over

time, however, our hope is to reduce some of the part-time expenditures in our reference department.

- *Photocopies.* We know from conversations with UMI/Data Courier that photocopy demands will increase. It's our thought that we will add a \$1 service charge on all photocopies. We also will charge a \$3 premium on rush orders. The result of this fee will be an additional \$5,600 in revenue in the next 12 months.

Next Step

We're confident that we can make the CD-ROM pay its own way. With your permission, we'd like to move ahead as quickly as possible with the acquisition of the this product.

(The actual memorandum would have a one-page expense summary and a one-page revenue summary reiterating the points made in the cover memorandum.)