Allocating the technology dividend in technical services through using vendor services

By: Sha Li Zhang, Dan Miller, John Williams

Sha Li Zhang with Dan Miller and John Williams, "Allocating the Technology Dividend in Technical Services through Using Vendor Services," an invitational paper for a special issue of *Library Collections Acquisitions and Technical Services* 26, no. 4, 2002.

Abstract:
To achieve operational efficiency and a high level of productivity, technical services departments in libraries have often sought technology-based services provided by vendors. Vendors are able to provide significant savings, personnel support, and expertise to the library that needs to devote its own capital (personnel, equipment, funding, etc.) to new initiatives. Developing a strong, positive working relationship between libraries and vendors will not only result in resource savings and expand profits, but also create a sense of teamwork and trust. In this article, authors present their practice in using the technology dividend generated through the beneficial investment in a partnership to provide enhanced services to library users while maintaining adequate vendor profitability.

Article:

1. Introduction

Libraries of all types and sizes in the United States have experienced unprecedented rates of change brought forth by technology since the early 1980s. Technical services departments in these libraries have been leaders in introducing and adapting technological advances since then and they continue to lead new endeavors in academic libraries today. Such technologies as the online catalog, the ILS, the use of EDI (electronic data interchange), and the application of metadata protocols to organize networked resources are a few examples. To achieve operational efficiency and a high level of productivity, technical services departments have also sought technology-based services provided by vendors. Formulating collaborations/partnerships between vendors and libraries could not come at a more opportune time. Vendors are able to provide significant savings, personnel support, and expertise to the library that needs to devote its own capital (personnel, equipment, funding, etc.) to new initiatives. Developing a strong, positive working relationship between libraries and vendors will not only result in resource savings and expand profits, but also create a sense of teamwork and trust. In this article, three authors, a head of technical services and an acquisitions manager at an university library, and an electronic services consultant of a book vendor, present their practice in using the technology dividend generated through the beneficial investment in a partnership to provide enhanced services to library users while maintaining adequate vendor profitability.

2. Literature review

Libraries have had a long relationship with their materials vendors who supply a variety of library functions. Libraries use vendor expertise, facilities, databases, and multiple staff contacts to accomplish technical services tasks. Physical processing of books (shelf-ready materials) is one such example. Slowly and steadily, partnerships with vendors have gained positive recognition among libraries in the country. Shirk describes such interdependent relationships:

> Few librarians today question the important role of the book jobber in their acquisitions strategies. In fact that role is gaining in importance as the book vendor assumes a more central supporting role in collection development, bibliographic control, and electronic data interchange. Book vendors become as

> important to the continuing health of libraries as libraries are to the continuing well-being of vendors. The symbiosis is real and seems to work for both [1].

At the 1993 ALA Midwinter meeting, it was reported from ALCTS Acquisitions Librarians/Vendors of Library Materials Discussion Group meeting that:

> Both librarians and vendors were admonished to master the art of negotiation so their working relationship is a win/win situation and not adversarial in nature. The growing list of requirements by libraries is resulting in longer term relationships with vendors which are more akin to a partnership [2].

The positive tone between libraries and vendors has continued and was echoed at one of the 1996 ALA/ALCTS meetings. At a program of the ALCTS Automated Acquisitions/InProcess Control Systems Discussion Group, the major theme was “Partnering with Vendors for Increased Productivity in Technical Services.” Two academic libraries presented positive experiences that they had had with their book vendors [3]. Most recently, in an editorial piece in *Cataloging & Classification Quarterly* on Vendors and Partnership, Carter further advocates partnership issues by stating that:

> In the best of worlds libraries and their vendors are partners where both have the same end of quality service to the library and information community users. While libraries must look at costs and vendors must have some profit, neither one can try unduly to get the best of the other without ultimately harm to both. Sometimes a vendor agrees to an unprofitable deal in order to leverage future business. Yet if it is unfairly low all the library accomplishes is hurting its partner to the point where the agreement for services is simply not viable [4].

Many libraries use vendors for certain technical services tasks. In the earlier library literature, this utilization of vendor services was called outsourcing. It has received much attention in recent years. Brown reported that in 1997, Barbara Ford, then President of ALA, appointed an Outsourcing Task Force to examine the issues, develop a wide-ranging list of questions, perform an extensive literature search, and prepare a detailed report that was presented to the ALA Council at the 1999 ALA Midwinter meeting [5]. At the 2000 ALA Annual Conference held in Chicago, it became clear from papers presented at the ALCTS programs that outsourcing could no longer be characterized as either a good or bad thing. It has been driven by the economic climate. The goals are to “increase productivity, reduce the need for staff time, relieve staff of repetitive tasks, improve delivery times, and reduce costs” [6]. Some authors recognize the value of letting the vendors perform certain library tasks. Smith states that “the outsourcing of many traditional technical services functions to vendors is both practical necessity for a growing number of libraries and a logical extension of vendor services in the first place” [7]. Furthermore, Alvin claims that:

> As a management tool, outsourcing has often met with success, because library vendors and others have positioned themselves to supplement or totally replace functions traditionally facilitated by technical services librarians. It has also met success as a method to contain library expenditures for personnel, processes, and services [8].

What are some benefits from vendors’ technological, physical, and personnel resources, their pre-established connections with publishers and producers, and their expertise as buying agents? McLaren outlines them in this way:

> Fiscal benefits to the library include both direct and indirect savings. Direct savings are realized by discounts offered on the cost of some materials, usually firm orders, approval, or standing order monographs. Indirect savings appear in the form of reduced library staff time that is required to identify, verify, order, claim, and pay for materials [9].

With such obvious benefits in partnering with vendors for technical services tasks, Flowers noted ingredients for success that included factors such as support from library administration, a focus upon users needs, supervisors who are open to change, a pilot approach to experiment with new ways, and an understanding that resource reallocation is essential if we are to build digital libraries [10].

3. Library environment

Libraries are now operating in a new information environment and they must continue to work with the print format while integrating electronic formats into their workflow. Such a new information environment poses certain challenges to libraries. The rapid rate of technological change, increasing demand for better library services from users, declining or flat budgets for both library operations and materials acquisitions, additional funding needed for technological infrastructure and personnel are some economic and political factors that have pushed libraries to continually seek value-added services from their vendors. This new information environment also offers unlimited opportunities for librarians and vendors to create new partnerships. Can partnerships between libraries and vendors become more effective while both parties continue benefitting from what each offers? Absolutely!

The University Libraries at Wichita State University (WSU) supports over 15,000 students and 1700 faculty/staff in the university community in which there are more than 150 undergraduate programs, 45 master degree programs, and 10 doctoral programs concentrating on chemistry, mathematics, education, engineering, and psychology. The library system includes a main library and two branches with a collection of 1.2 million volumes, about 3,900 current journal subscriptions, and more than 2,000 continuations. During the past decade, over 65,000 items have been added to the library's collection each year. Additionally, the collection offers access to nearly 90 of the basic electronic indexing/abstracting resources. The library also receives and catalogs 65% of federal government documents. The library's annual materials budget is $2.25 million, including funds from both State of Kansas and endowment sources. The materials budget expenditures break down into 15% for electronic resources, 25% on monographic materials, and 60% on serials. Accounting for the expenditure of funds and processing the materials purchased and received from the deposit library program is the workload of Technical Services Division at the library.

Under the leadership of the new dean of the library, in 2000, the library was very successful in fundraising activities and received close to one million dollars from the campus Pepsi commissions that could be allocated across three fiscal years. The library decided to apply the funding to sustain monographic purchasing and journal subscriptions, to acquire electronic journal packages, and to enhance the technology infrastructure. This additional funding has enabled the library to proceed with initiatives in achieving goals listed in the library's Decision Matrix [11]. The Technical Services Division has absorbed additional workload resulting from these initiatives without additional staff. Therefore, dependence upon vendors for some tasks has become imperative in the Technical Services Division.

4. Major partnership projects at WSU Libraries

In technical services, using vendors for certain tasks is no longer a choice, but a necessity. Schrift predicted this phenomenon in 1991:

> The library vendor is the most immediate direction to which the library turns as the ready remedy when faced by pressing, yet conflicting needs of reducing costs, and enhancing service simultaneously. Obviously the vendor is not the element that determines the price of library materials. The vendor, however, is the most direct and immediate contact of the library, it is the source to turn to for service, and therefore, is in a weak economic position to resist pressures forcefully [12].

For the past five years, in order to absorb additional workload, and with the full support from the library administration, the Technical Services Division at the WSU Libraries has contracted for several new services with various vendors. One of the principal vendors is Blackwell's Book Services. Its enterprise response to dealing with fiscally conservative and technologically ambitious accounts such as the WSU Libraries' has forced an emphasis upon their offering an array of services to help libraries meet their goals. For instance, keeping pace with the technological changes in libraries, Blackwell's New Titles file has evolved from a publication offered to its customers first on microfiche, later as a telnet-accessible database, and now through the World Wide Web. The advent of integrated library systems that included sophisticated acquisitions modules, also spurred the creation of a range of technological capabilities for helping libraries streamline their operations, including provision of selection of records for local order creation, and EDI ordering and invoicing.

Service	1997	1998	1999	2000	2001	2002 (projected)
MARC records	7%	14%	4%	6%	15%	2%
OCLC Promptcat records	283%	173%	74%	28%	20%	9%
CIP Upgrades	151%	20%	5%	29%	15%	5%
Collection Manager Users	83%	112%	117%	156%	68%	20%
E-Orders (including Collection Manager, EDI, etc.)	21%	8%	1%	38%	32%	3%
Blackwell's-US Shelf-ready Books	31%	27%	3%	16%	19%	2%

Fig. 1. Growth rate of Blackwell's technical services.

Fig. 1 shows the growth rate of some of Blackwell's technical services over the last six years. In all cases, the impetus for development of these services has been to remain competitive in a marketplace that is looking to vendors as a source of technical services that can help conserve library resources.

WSU Libraries contracted with Blackwell's in the following partnership enhancements in the recent past:

- ***Expanded Approval Plan***

The library has fine-tuned the profile of a major approval plan with Blackwell's so that the annual expenditures have been steadily maintained. In addition, several smaller or specialized approval plans, such as Biomedicine and Art, have been added. With Blackwell's account, the application of EDI purchase orders for approval announcements, and EDI invoicing, has been fully implemented. USMARC records are supplied for approval shipments three times a week by the vendor.

- ***Firm orders***

Because the Blackwell's New Title file provides a convenient searching and ordering process, the acquisitions staff takes advantage of it to fill firm orders in addition to confirming slip form orders. EDI purchase orders/invoices and supply of USMARC records are all part of the daily transfer of data between the vendor and the library for this component of the library's materials acquisitions.

- ***Purchasing MARC records for firm order items***

After a study of cataloging staff performance in searching, verifying, and exporting bibliographic records for acquisitions ordering in the Technical Services Division, the library started using MARC records provided by Blackwell's. The vendor sends bibliographic records via FTP three times a week, which enables acquisitions staff to create purchase order records in a timely fashion.

With Blackwell's and other vendors, the following outsourcing arrangements were accomplished:

- ***Sole sourcing for journals and continuations***

The two major suppliers of materials for the WSU Libraries have been EBSCO Subscription Services and Blackwell's Book Services for the past twenty-five years. Since 1993, sole-source agreements have been in place with the serials agent and since 1996 with the monographs agent to supply the library's materials.

Recently, the library renewed its sole sourcing agreements with both vendors. In addition to good discounts and reduced service charges, vendors supply invoicing via EDI creating a handsome savings of staff time.

- ***Authority control***

The library administration has allocated funds and contracted with a vendor to handle the library's authority control work in FY 2003. The recommendation for such a contract was made based on an internal research project in the Technical Services Division [13]. The vendor will provide authority records to support headings of newly imported bibliographic records on a weekly basis, update the library's existing authority records with newly issued/revised headings by the LC, and authorize these headings for the corresponding bibliographic records in the library's online catalog. To keep consistency and currency for the library's 1.2 million bibliographic records, using the vender-provided services represents a significant saving of staff time.

Before engaging in each service arrangement, the library and its Technical Services Division have set up clear goals that guide the vendor/library partnerships. The following goals are realized partially in each partnership project:

1. Use vendor services for repetitive tasks to free staff for complex tasks.

2. Sole-source materials generically to conserve financial resources through negotiated purchase agreements.

3. Extend purchasing power through consortia partnerships.

4. Redistribute staffing to accommodate new initiatives of the library.

5. Maintain organizational cohesion in addressing technological change through diverse, close-ended information technology projects.

6. Support new projects that benefit the entire library and the larger library community.

5. The library-vendor business partnership

In every business relationship, there is at least a shared perception that separate advantages are mutually acceptable, or at least bearable. In general, outsourcing occurs for an established service contracted at a specified price: the contract is close-ended and precisely defined. A partnership, on the other hand, is completely open-ended. A general sole-sourcing arrangement, for instance, usually accommodates *ad hoc* requests for customized services and generally accommodates ongoing requests to investigate solutions to problems brought with changing circumstances. In this case, vendors and library staff perform like co-workers rather than client and service provider. In the case of the WSU Libraries, the following is brought to the sole sourcing arrangement with Blackwell's:

1. 5% real growth in the dollar value of the business per year since 1997.

2. A commitment to stabilize monographic acquisitions by controlling serials expenditures according to an announced formula, that is, 60% for serials, 25% for monographs, and 15% for electronic resources.

3. Affirmation of no sudden changes in expenditure policy that could adversely alter collection development policy.

4. Pre-planning of fiscal year goals finalized by spring of the prior fiscal year.

5. Open expenditure histories shared with the vendor semi-annually.

In the case of Blackwell's Book Services, the following are features of the service/product mix necessary to its relationship with the WSU Libraries:

1. Prompt fulfillment of orders so that encumbrances can be converted to expenditures as quickly as possible.

2. Regular and reliable loading of MARC records and EDI invoices.

3. Systematic supply of paperback over case-bound editions.

4. Prompt and reliable financial services.

5. Enhanced discount predicated on early payment of deposit accounts.

6. Customized technical services and collection development outputs.

Absolutely crucial to maintaining the business relationship with a book vendor is the control of expenditure for serials and journals. The library's ongoing commitment to serials control and the methodology employed to accommodate electronic resources in the materials budget is mentioned elsewhere [14]. It is sufficient to state that the materials budget is governed by a percentage split. When serials rise in price over their allocated 65% (more recently 60%), a serials review project is initiated. Administration of the budget is firm with no more than 2 to 3% variation year-to-year. This has created a remarkably stable monographs budget and, with the infusion of endowments, an impressive array of electronic resources.

As firmly under control as the serials share of the materials budget is, the total personnel budget is even more controlled. Workload in the Technical Services Division has been regularly evaluated and distributed to accommodate operational needs resulting from vendor-provided services. Such a philosophical concept in the operation of Technical Services has contributed to the library's overall goal of maintaining the operative formula at 41% for materials, 51% salaries, and 8% wages/OOE (Other Operating Expenditures) (Fig. 2).

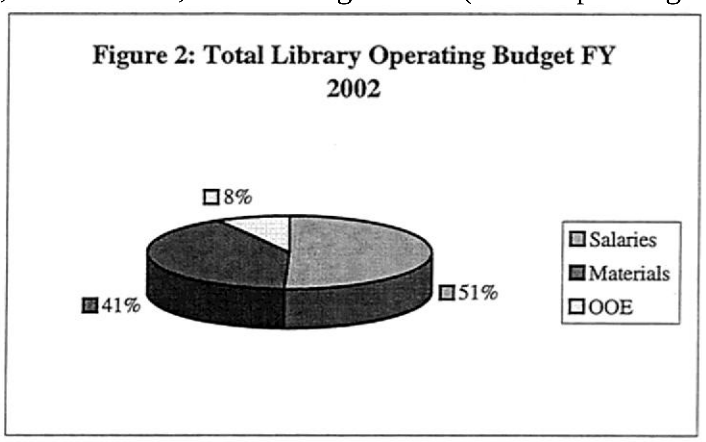

Fig. 2. Library operating budget.

Budget discipline exercised with regard to the two largest portions of the entire budget, personnel and serials, underwrites the stability of monographic acquisitions and insures that new monies entering the budget produces a modest increase in monographs expenditure and bankrolls electronic resources, including e-books.

6. The technology dividends achieved

Schrift summarizes the benefits of using technologies in libraries, "Electronic technology has contributed in a major way to the operational efficiency of many libraries, enabling them to control growth of staff levels while widening the scope and variety of user services" [15]. The WSU Libraries' Technical Services Division has, in particular, experienced increased productivity with the same level of staff through using technology-based services by vendors. The full complement of faculty and staff in the Technical Services Division consists of the following:

- 4 FTE professional librarians with faculty status
- 3 FTE support staff supervisory (Library Assistant III)
- 1 FTE Federal Documents Support Specialist (Library Assistant III)
- 3 FTE Library Assistant II
- 5 FTE Library Assistant I
- 0.5 FTE Graduate Assistant—IT Projects (interim)
- 3.125 FTE Student Assistant

This total of 19.625 Full Time Equivalent employees are divided as 20% Faculty rank, 62% Support Staff and 18% Student Assistants. Among the permanent employees, turnover has not exceeded 10% per year. Students seldom stay more than two semesters and the training of students is incessant. In the past four years, the Division filled on average two support staff positions each year. It took 12 and 18 months to fill two professional cataloger positions respectively.

Using technology-based services from vendors has enabled the Technical Services Division to consistently fulfill its normal workload and new initiatives in the past five years with the same level of staff (both professional and support personnel). As mentioned in the early part of the paper, the Division has handled $2.25 million of annual acquisitions expenditure, with a cataloging output of 65,000 items per year. In addition, the Division went through a major system migration from NOTIS to Voyager in 1999, accomplished two major system releases in 2000 and 2001, continued adding access to newly acquired electronic journals (1100 titles cataloged per year) and electronic books (7000 titles added in the current year) to the online catalog, and implemented metadata cataloging (CORC) procedures for Internet resources recommended by library bibliographers.

Furthermore, the Technical Services Division has continued to participate in library-wide systems development. This has resulted in the development of the Periodicals Analysis Database for tracking journal usage and cost, the Documents Data Miner 2, a Federal partnership project for managing government documents collections, and a Web-based online administrative report system that provides needed collection and operational statistical data to the library administration. This utility is operated by one Graduate Assistant and relieves faculty and staff of the necessity of becoming familiar with Structured Query Language (SQL) or MS Access. The added benefit of undertakings such as these is that it keeps staff aware of the need for change, provides faculty with a focus for professional growth, provides the library with a source for recognition within the library community, and adds value to the contribution made by the library regionally and nationally.

All of these changes were the results of increased reliance upon the efficiency of the library’s online catalog systems and the library/vendor partnerships. The most marked changes, particularly in Acquisitions, have occurred since 1998 as a result of vendor supplied MARC records (savings of at least 2 FTE), EDI invoicing (savings of over 1 FTE), and EDI claiming of serials (savings of .5 FTE). Further, the shift of emphasis from Acquisitions to Cataloging staffing has been driven by an increase in monographic acquisitions informed by cost savings resulting from sole-source arrangements with the Libraries’ vendors. As shown by Fig. 3, the acquisition of library materials is now at a higher level than it was during the early 1970s.

With the staff time saved from Acquisitions functions, Acquisitions staff have assisted with copy cataloging tasks over the last four years. Therefore, the Technical Services Division not only eliminated its monographic backlogs in June 2001, but also maintained less than a three-week turnaround time for newly acquired materials. It has significantly contributed to the instructional needs of undergraduate programs at WSU.

7. Cost-benefit in the partnership

The partnership between WSU Libraries and Blackwell's has served to reduce the average price per title (through increased discounts and paper-preferred editions), to lower staff inputs for processing an increasing number of titles (through bulk loads of MARC records and EDI invoicing), to eradicate processing backlogs (through reassignment of Acquisitions staff to cataloging duties), and to facilitate, through time savings, other library-wide projects that maintain staff adaptability to changes and the demands of technology. Effectively reducing costs, benefits have accrued to the Libraries' users.

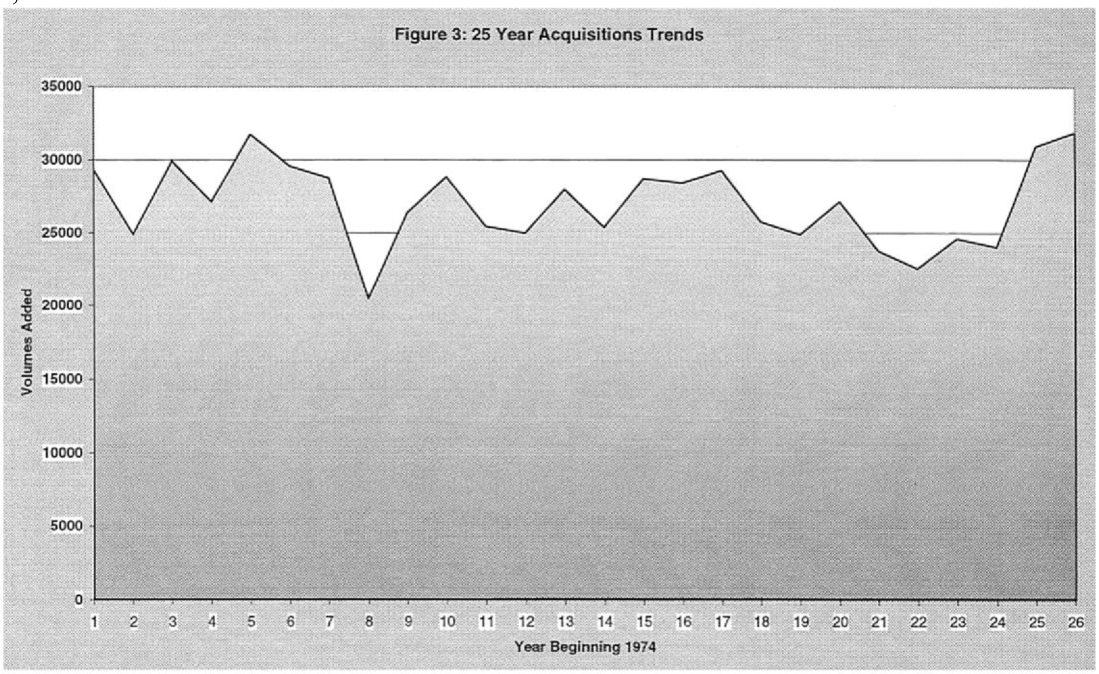

Fig. 3. Acquisitions trends.

However, cost benefit calculations for libraries are difficult to develop. The St. Louis Public Library's IMLS grant-funded study appears at least to furnish a general benchmark of 10:1 (10 dollars of value to the taxpayers for every dollar spent on their behalf to produce a library annually) [16]. At the WSU Libraries, to be safely within that matrix, it would have to affirm an annual value to various patrons of at least $50 million exchanged for the $4.7 million in taxpayer funding each year of the entire budget [17]. For instance, the cost of science, technology, and medicine journals and online access to their corresponding indexing/abstracting tools alone is around $900,000.00 in annual subscriptions. It might safely assert that WSU's specialist users and researchers in the sciences, technology, and medicine would have to spend $9 million to replicate this access separately, assuming that they could do that at all. In this case, the 10:1 ratio works convincingly.

This leaves aside the vast user base of undergraduate students who rely heavily on monographs and general serials titles at WSU Libraries in a given year. Annual use of the collections now amounts to over 80 uses per year per FTE student (data from database monitoring and re-shelving), nearly three quarters of a million uses. If we exclude the $900,000.00 cost of the above-described science, technology, and medicine specialist materials and divide the remaining $4.1 million of the total budget by 750,000 uses, we arrive at $5.50 per use in taxpayer inputs. Although this analysis might beg the question of whether $5.50 per use is entirely accurate, it does seem safe to say that consistent use of this model would provide the library with a benchmark for evaluating the ongoing value of each library use [18]. In any case, whether the cost/benefit ratio is as high as 10:1 or it is lower, it is plain that libraries may choose to control costs, increase use of collections, or both in order to control any conceivable cost per use value. The partnership with Blackwell's directly reduces costs and indirectly increases use of collections by providing for prompt processing of new materials, paper and electronic.

What is the vendor's perspective on these services? Blackwell's has recognized that value-added services are vital to the success of the organization. It has focused on ensuring that technical services are included among its value-added offerings. This gives rise to the question of whether bookselling margins alone can support these activities. Experience has shown they cannot. As Secor and Shirk point out with respect to technical services as a value-added component of bookselling to academic libraries: "The costs of developing and implementing the new technologies must be recognized by customers and priced correctly fairly with respect to the value received and high enough to cover costs and reward innovation" [19]. This is consistent with Blackwell's goal for pricing its value-added technical services. New technical services may be priced lower than mature technical services since full production costs associated with a mature service, provided to many customers, may not be known initially. Also, early adopters, who are taking a chance on a service, many times receive the benefit of lower costs. Though not all mature technical services are priced to include the same margins, each is expected to carry its own weight through earnings, or to otherwise attract revenue that will nurture the service. When successfully implemented, this policy fuels ongoing innovation. It allows Blackwell's to bring technologies to its customers that represent additional value, and it returns a profit to its shareholders.

More specifically, Blackwell's certainly shares the WSU Libraries' interest in prompt fulfillment of orders since it is one of the major criteria upon which libraries evaluate their vendors. Accordingly, Blackwell's goal is to fill 75% of orders within four weeks of receipt, with only a small amount of additional time required when books are provided shelf-ready. Additionally, pre-payment into a vendor deposit account is mutually beneficial as it provides the library with an additional discount while providing the vendor with additional operating capital. Provision by Blackwell's of prompt and reliable financial information to the library expedites prompt payment by the library, which also benefits Blackwell's cash flow. EDI and other forms of electronic ordering allow Blackwell's to reduce its manual order entry costs. Although customization can sometimes stretch vendors' resources, customization is also recognized as a value-added service that is integral to supply of books to academic libraries, and efforts are usually made to accommodate customization requests. Customized collection development outputs that reduce return rates for approval books serve the interests of both the library and the vendor.

8. The vendor's perspective

Vendor benefits associated with some technology-based services are not always clear. Presently, about 50% of Blackwell's approval libraries receive Blackwell's paper-preferred option, which Luddecke has shown saving a small to medium size approval library approximately $45,000 per year [20]. Additionally, numerous libraries receive the paper-preferred option for firm orders. For instance, WSU Libraries' current advantage from paper-preferred is in excess of $70,000.00 annually. However, the paper preferred option does not offer a separate advantage to the vendor, except insofar as it differentiates the vendor from others that do not offer the service. Consider a title with a list price of $60 sold at 14% discount, and the associated paper edition with a list price of $20 sold at a 10% discount, one can appreciate that the vendor's earnings are less when filling an order for the paper edition in contrast to the cloth edition, although the vendor's operating costs to fill the orders are identical.

Having just concluded negotiation for the newest 3 to 5 year agreement with both the serials and monographs vendors, the WSU Libraries had to accept a 1.5% increase in service charge on serials supply and a loss of 3% in discounts for monographs supply. The offset to this for the library is the remarkable range of the technology-based services now furnished by both vendors and the attendant efficiencies that result from their utilization. Further, EDI features have dramatically reduced delivery problems in both sectors and have noticeably shortened fulfillment time for monographs.

In the case of Blackwell's other services, such as provision of MARC records, many people assume that realizing economies-of-scale is to the vendor's advantage. Unlike trade book distributors to public libraries, for whom a multicopy order of a title represents an opportunity to spread the cost of filling the single order over several billable copies, distributors to academic and research libraries rarely encounter multi-copy orders that offer an opportunity for realizing economies-of-scale. Additionally, most large wholesalers, by virtue of the large number of orders submitted to publishers, have long since reached the upper limits of publishers' discount schedules. Publishers are loath to make additional concessions based on higher order levels, believing that such orders do not represent new business but rather the same business from a different source.

In fact, the average publisher discount to Blackwell's and most other academic wholesalers has remained fundamentally the same over the last several years. Some services do, indeed, offer an opportunity to realize economies-of-scale. When the service is sold (and not offered free of charge) and when the cost of sale does not include third party products, services can bring an attractive return to book distributors who operate on small profit margins on books alone. However, due to market pressure and in contrast to vendors' goals, value-added services have often been provided at low or no charge. This makes it difficult or impossible to obtain a return on the capital investment associated with developing and maintaining the services. In fact, revenue generated by these services rarely covers the development and operating costs associated with providing the services.

As Blackwell's and other wholesalers develop business models that support their transition from book jobbers to jobbers/service providers, the specific needs of commercial organizations (in contrast to academic organizations) influence the process. For example, the Internet and its applications (e.g., e-mail, FTP, web applications) remain the locus of activity with respect to Blackwell's technical services. Similarly, the locus of most present generation library systems is the Internet. However, issues such as Internet security and reliability compel Blackwell's to evaluate non-Internet environments when determining the optimal conditions under which to run financial and distribution/order management systems that must be accessible in multiple locations.

Factor	1996	1997	1998	1999	2000	2001	2002 (Projected)
IT costs as a percent of total costs	26%	32%	39%	35%	27%	26%	39%
Portion of IT costs covered by TS revenues	18%	25%	16%	22%	33%	54%	35%
Book Selling Gross Margin	20%	20%	19%	19%	19%	20%	19%

Fig. 4. Blackwell's IT costs.

Fig. 4 shows Blackwell's IT costs as a percent of total operating costs each year since 1996. It also shows the portion of Blackwell's IT costs covered by revenue associated with Blackwell's technical services. Finally, it shows the percent of each revenue dollar that Blackwell's has left to pay its own operating costs after paying the publisher for books purchased. As can be seen, IT costs constitute a large portion of Blackwell's total operating costs, while only a small percentage of these IT costs are recovered through its technical services sales revenues. The majority of the IT costs, along with other expenditures, must be covered by the difference between what Blackwell's charges libraries for books sold and what Blackwell's pays the publishers of those books (i.e., the gross margin), at a time when gross margin percentage has declined. While a 1% decline in gross margin may not seem significant, it must be born in mind that the decline represents a 5% erosion in the value of the gross margin itself (i.e., 1% of 20%).

Clearly, this is not a sanguine picture. Given static discounts from publishers in what was already a low margin industry, this situation can, and has, been fatal to some of the smaller wholesalers who either tried to remain competitive by offering additional services, or recognized from the outset that the current business model for offering these services was prohibitive. As Halloran pointed out with respect to the large number of corporate acquisitions in library book wholesaling in 1999, "They reflect the merger activity that is occurring in all parts of the high technology industry, where agility and innovation are the driving forces" [21]. The histories of these smaller companies have lead Blackwell's shareholders to demand a return on services investments that cover the capital expense associated with developing and maintaining the services, so the needs of Blackwell's customers can continue to be met, but within the context of a business relationship that is mutually beneficial.

9. Conclusion

Creating solutions for building and managing library collections is a formidable undertaking for libraries and vendors. In the context of less-than-robust library funding for operations and materials acquisitions, libraries look to vendors for support. Vendors have proven, at the WSU Libraries and elsewhere, that technology-based services can significantly contribute to enhancing library services to its user community regardless of economic circumstances. However, from the vendor's perspective, the question is how to create a working business model that reconciles the high technology costs necessary to support these services in a low (and eroding) gross margin environment.

For technical services to remain a viable part of the vendor's product/service mix, more flexibility on the part of libraries for accepting lower discounts on books, or using vendor-provided services, would seem to provide a partial solution to the problem. At the same time, it is incumbent upon vendors to reduce operating costs as much as possible, to preserve gross margins that foster an ability to react creatively to libraries' needs. The future will hold great promise for jointly meeting the needs of research library users, as a true mutuality of interests is realized, and good practice for libraries is also good business for academic wholesalers.

References

[1] Shirk, G. M. (1991). The wondrous web: reflections on library acquisitions and vendor relationships. In B. Katz (Ed.), *Vendors and Library Acquisitions* (pp. 1–8). New York, NY: The Haworth Press.

[2] Luther, J. (1993). How can I make you happy? A report of ALCTS Acquisitions Librarians/Vendors of Library Materials Discussion Group Meeting, ALA Midwinter Meeting, Denver, January 1993. *Technical Services Quarterly*, *11* (2), 80–81.

[3] Easton, C. (1997). Partnering with vendors for increased productivity in technical services: a program of the ALCTS Automated Acquisitions/In-process Control Systems Discussion Group. *Library Acquisitions: Practice & Theory*, *21* (Spring), 64–66.

[4] Carter, R. C. (2001). Vendors and partnership. *Cataloging & Classification Quarterly*, *32* (1), 1–2.

[5] Brown, L. B. (2001). Evaluating the outsourcing of technical services: how do you know if you're there if you don't know where you are going? A report of the ALCTS Commercial Technical Services Committee Program. ALA Annual Conference, Chicago 2000. *Technical Services Quarterly*, *18* (4), 58–62.

[6] Ibid.

[7] Smith, S. A. (1999). The cost of service: understanding the business of vendors. In K. A. Schmidt (Ed.), *Understanding the Business of Library Acquisitions* (2nd ed.) (pp. 59–74). Chicago and London: American Library Association.

[8] Alvin, G. (1999). Outsourcing acquisitions: methods and models. In K. A., Schmidt (Ed.), *Understanding the Business of Library Acquisitions* (2nd ed.) (pp. 262–284). Chicago and London: American Library Association.

[9] McLaren, M. K. (1999). Vendor selection: service, cost, and more service! In K. A. Schmidt (Ed.), *Understanding the Business of Library Acquisitions* (2nd ed.) (pp. 75–89). Chicago and London: American Library Association.

[10] Flowers, J. L. (2001). Matchmaker, matchmaker ... streamlined acquisitions using vendor services and systems: a report of the ALCTS Acquisitions Section Technology Committee Program, ALA Annual Conference, Chicago, July 2000. *Technical Services Quarterly*, *18* (4), 47–53.

[11] The full text of the WSU Libraries Decision Matrix can be accessed at the URL (http://library.wichita.edu/pdf/decisionmatrix2001.PDF).

[12] Schrift, L. (1991). The 1990s—is there any room left?. In B. Katz (Ed.), *Vendors and Library Acquisitions* (pp. 29–36). New York and London: The Haworth Press.

[13] Zhang, S. L. (2001). Planning an authority control project at a medium-sized university library. *College & Research Libraries*, *62* (5), 395–405.

[14] Moore-Jansen, C., Williams, J., & Dadashzadeh, M. (2001). Is a decision support system enough? *Serials Review*, *27* (3/4), 48–61.

[15] Schrift, p. 31.

[16] Holt, G. E., Elliot, D., & Moore, A. (1999). *Placing a value on public library services* [On-line]. Available: http://www.slpl.lib.mo.us/libsrc/rescbec.htm.
[17] The paradigm asserted by the St. Louis study is based upon total budget figures. Such a budget is more human-resource rich (with a lower cost/FTE) than an academic library. The materials budget, further, has lower unit costs both for monographs and serials and is less likely to be as highly expended for electronic resources.
[18] This model further excludes use of Interlibrary Loan, and Special Collections, which facilitates access to rare or regionally unavailable materials.
[19] Secor, J. R., & Shirk, G. M. (2000). The coming restructuring of library book vending. *Against the Grain*, *11* (6), 75-78.
[20] Luddecke, J. (1999). Paper versus cloth: does the dollar difference really count? *Against the Grain*, *10* (6), 54-55.
[21] Halloran, D. P. (2001). Supplying books to libraries. *Against the Grain*, *12* (1), 20-22.