

Case 4-4

Xerox: Outsourcing Global Information Technology Resources¹

In June 1994, Jagdish Dalal, head of Xerox's global outsourcing team, finalized a 10-year, \$3.2 billion contract with Electronic Data Systems (EDS). Reflecting on the hard work that effort had involved, Dalal was pleased with what his team had accomplished and confident that the agreement it had crafted would allow Xerox to quickly create the information infrastructure needed to support its new business processes. The new outsourcing model Xerox was pioneering would automatically adjust to environmental changes while keeping EDS's and Xerox's incentives aligned.

The deal was noteworthy both for its facts and figures and for the way it was to be managed. This was reputed to be the largest computer outsourcing deal in history and the first to be implemented on a global scale. Few vendors could support such a contract. The size and complexity drove the management philosophy; the contract would not be used as an instrument to define organizational boundaries and limitations. As noted by Dalal:

The term *outsourcing* is inappropriate. This is really more of an integration of two separate businesses. We wanted to take the best parts of each culture and put them together. The same goes for structure, strategy, and people. We will realize substantial economic value if we can achieve commitment to a high degree of integration. It is the spirit of the agreement

that creates this commitment; there are no "mechanisms" that can be put into place as a substitute for the spirit.

Finally, for some observers, Xerox's outsourcing had an additional message. Xerox possessed substantial technological prowess in the digital and computer arenas. Xerox PARC² had, among other things, invented the first graphics-oriented monitor, the first "mouse" input device, the Ethernet protocol, the first laser printer, and the applications "windowing" concept. Hence, Xerox's outsourcing seemed to signal that even at companies where digital technologies were important core competencies, the information technology (IT) function could be outsourced.

Company Background

Xerox was a global enterprise that developed, manufactured, marketed, serviced, and financed a complete range of document processing products and services designed to make offices around the world more productive. It marketed copiers, duplicators, digital production publishers, electronic printers, facsimile products, scanners, workstations, networks, computer software, and supplies in more than 130 countries, using a direct sales force and a network of dealers, agents, and distributors.

Company History

After spending more than a decade perfecting the xerographic (copying/duplicating) process, Xerox introduced its model 914 copier in 1959.

This case was prepared by Research Associate Kevin Davis under the supervision of Professor Lynda M. Applegate.

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Harvard Business School case 195-158.

²Palo Alto Research Center.

Sales increased from \$32 million in 1959 to \$1.1 billion in 1968; the number of employees surged from 900 in 1959 to 24,000 in 1966. By 1970, Xerox held a 95 percent share of the plain-paper copier market. Gross margins for many products in 1970 ranged from 70 percent to 80 percent. (See Exhibit 1 for selected Xerox financial information.) However, Xerox's phenomenal growth and profitability attracted federal lawsuits. In 1975 Xerox reached a settlement with the Federal Trade Commission: Xerox was forced to forfeit patent protection and had to license its competitors.³

From 1976 to 1982, Xerox's share of U.S. copier installations dropped from an estimated 80 percent to 13 percent due to competition from such Japanese companies as Canon, Minolta, Ricoh, and Sharp. Licensing also dramatically increased new product introductions: Between 1971 and 1978, 77 different plain-paper copiers were introduced in the United States; between 1978 and 1980, another 70 arrived (see Exhibit 2).

After struggling to develop a strategy to address its newly competitive environment, in 1980 Xerox began to aggressively pursue benchmarking and employee involvement initiatives.⁴ In addition, under the leadership of

³Xerox executives recount how the proliferation of lawsuits began to have a chilling effect on company strategy. For example, Xerox became less aggressive in its pricing policies; lawyers began to accompany managers when they met with other companies to ensure that there was no hint of illegal collaboration; managers were coached on what they could say (words such as *annihilate* were outlawed). In addition, costs in terms of legal fees and executive time (the CEO, for example, lost an estimated 30 or 40 days a year) were substantial. See Gary Jacobsen and John Hil Kirk, *Xerox: American Samurai* (New York: Macmillan, 1986), especially pp. 69-75 and 196-200.

⁴The company issues a little red booklet on benchmarking to employees. You see it in offices everywhere. It explains how each department and employee can determine what to benchmark, how to benchmark, and how to use that information to improve Xerox. Jacobsen and Hil Kirk, op. cit., p. 233.

the chief executive officer (CEO), David T. Kearns, Xerox embraced quality as its basis for competition, instituting a program called Leadership through Quality. These three directions—participation, benchmarking, and quality management—worked in unison. "Benchmarking," Kearns noted, "spread like wildfire through the company. We were fast closing in on our goal of having every department in the company measuring its performance against similar operations at other companies."⁵ "We had begun to build long-term relationships with our best vendors," he explained. "We began to treat our vendors as part of an extended family and to train them in the principles of Leadership through Quality."⁶ Xerox's efforts to improve quality earned the company several prestigious awards: In 1989, it earned the national Malcolm Baldrige Quality Award; shortly afterward, Xerox Canada won the Canadian National Quality Award; and in 1992, Xerox became the first winner of the European Quality Award.

The emphasis on participation, benchmarking, and quality seemed to work in the marketplace as well; between 1984 and 1993, Xerox's market share in low-end copiers rose from 8 percent to 18 percent, while for mid- and high-end copiers its share rose from 26 percent to 35 percent.⁷

Corporate Restructuring

Despite improvements in market share, overall corporate performance declined in the early 1990s. In 1992 Xerox's CEO, Paul Allaire, announced a major reorganization: Xerox would create nine divisions along market segment lines and three customer operations along

⁵See David T. Kearns and David A. Nadler, *Prophets in the Dark* (New York: HarperCollins, 1992), p. 238.

⁶*Ibid.*, p. 256.

⁷Subrata, Chakravarty, "Back in Focus," *Forbes*, June 6, 1994.

EXHIBIT 1 Xerox Financial Highlights (Operations and Financial Position Numbers in Millions)

	1993	1992	1991	1990	1989	1988	1987	1986	1985	1980	1970	1960
Operations												
Operating revenues (sales, service)	\$13,384	\$13,460	\$12,734	\$12,542	\$11,602	\$11,029	\$10,320	\$9,355	\$8,676	\$8,037	\$1,690	\$40
Cost of sales, service, and rentals	\$7,230	\$7,126	\$6,661	\$6,656	\$6,237	\$5,778	\$5,382	\$4,814	\$4,411			
General and administrative	\$4,585	\$4,779	\$4,497	\$4,286	\$3,929	\$3,847						
Research and development expenses	\$883	\$922	\$890	\$848	\$809	\$794	\$722	\$650	\$597	\$430	\$87	\$3
Income from document processing	(\$193) ^a	\$562	\$436 ^e	\$599	\$488	\$148 ^g	\$353	\$316				
Income from insurance operations	\$4	(\$779) ^c	\$2	\$11	\$154	\$181	\$188	\$129 ^f				
Income from continuing operation	(\$189) ^a	(\$217) ^c	\$438	\$610	\$642	\$329	\$541	\$445	\$381	\$553	\$210	
Net income	(\$126) ^a	(\$1,020) ^d	\$454 ^e	\$743 ^f	\$704	\$388 ^g	\$578	\$465				
Financial position												
Total document processing assets	\$18,158	\$17,140	\$15,178	\$14,421	\$13,488	\$12,415						
Total insurance assets	\$15,418	\$15,479	\$15,552	\$14,579	\$14,864	\$13,036						
Long-term debt	\$7,386	\$8,105	\$7,825	\$8,726	\$9,247	\$6,675						
Shareholders' equity	\$3,972	\$3,875	\$5,140	\$5,051	\$5,035	\$5,371	\$5,105	\$4,687	\$4,386	\$3,630	\$918	\$29
Per share												
Net income per common share ^b	(\$2.46)	(\$3.32)	\$3.91	\$5.51	\$6.56	\$3.50	\$5.35	\$4.52	\$3.46	\$6.69	\$2.33	\$0.13
Dividends per common share	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$2.80	\$0.65	\$0.05
Document processing employees at year end	97,000	99,300	100,900	99,000	99,000	100,000	99,032	100,367	101,636	117,247	59,267	2,973

^aIncludes the following special pretax charges: severance pay and other employee separation benefits (\$843 million), lease cancellation and site consolidation (\$258 million), write-down of various assets (\$94 million), litigation settlements (\$278 million).

^bBefore results of discontinued operations of .62 per share in 1993, -3.84 in 1990, -.67 in 1986, and +.98 in 1985 and special items of -7.97 in 1992 and +.43 in 1986.

^cIncludes insurance operations restructuring charge (\$778 million after tax).

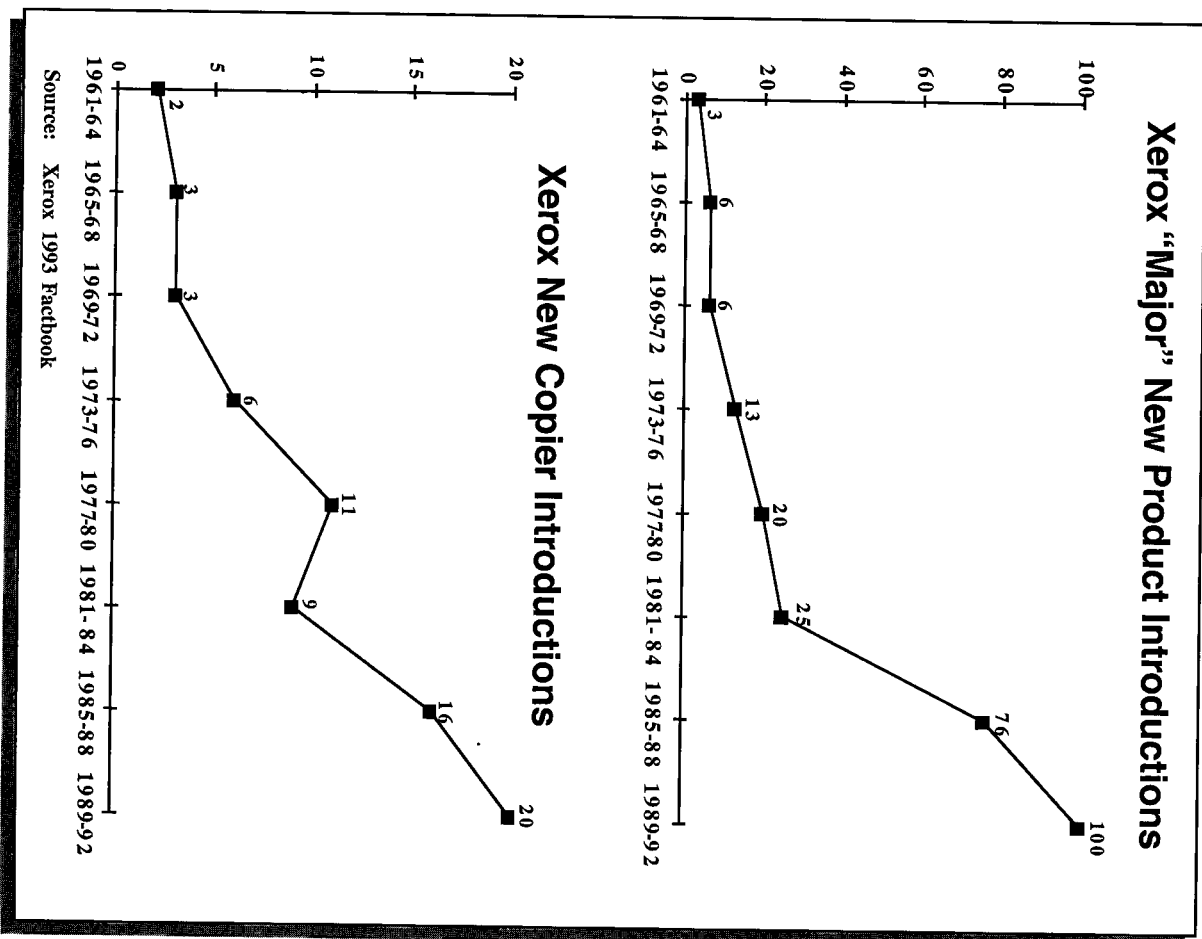
^dIncludes the following special after-tax charges: insurance operations restructuring (\$778 million), adoption of FASB SFAS 106, related to employee benefits (\$606 million); adoption of FASB SFAS 109, relating to income taxes (\$158 million).

^eIncludes a \$101 million after-tax charge for the costs of a workforce reduction.

^fIncludes a before-tax charge of \$375 million as a provision for real estate losses. In 1990 the company discontinued its real estate operation and related real estate financing operations.

^gIncludes several special pretax charges: write-off of excess electronic typewriter manufacturing capacity (\$140 million), overhead and employment reductions (\$100 million), revaluation of assets (\$35 million).

EXHIBIT 2
Pace of Xerox Product Introductions

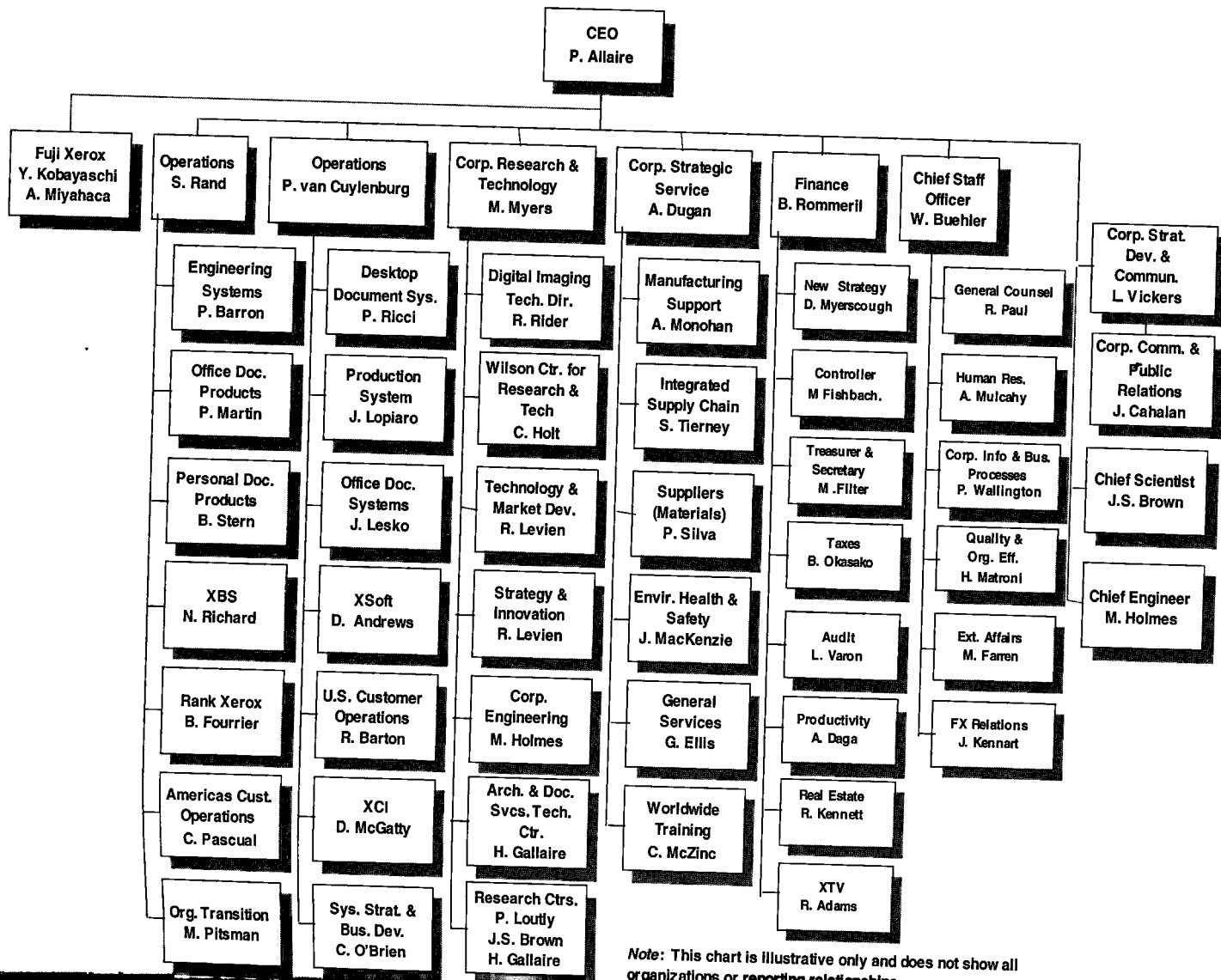


geographic lines⁸ (see Exhibit 3). The nine market segment divisions were created to move decision making closer to the customer.

⁸ibid. Also see Xerox 1992 annual report, p. 4.

According to the 1992 annual report, "Each Xerox division [has] 'end-to-end' responsibility for a set of products and services, a set of primary market segments, an identifiable set of competitors and an income statement and

EXHIBIT 3 Global Process and Information Management Structure



Note: This chart is illustrative only and does not show all organizations or reporting relationships.

balance sheet.”⁹ Allaire, who was determined to do more than just change the formal structure, explained, “Many times people will change just the structure and reporting relationships. But if you want to change a company, you’d better change more than that. There’s the formal structure, and then there’s the way the company really works. You have to change the way it really works.”¹⁰

Reorganizing the corporation along customer lines meant redefining both operational and management processes. The company also focused on its core competencies, as underlined by its moves to sell its financial businesses. In January 1993 Allaire announced, “We’ve decided to disengage from our remaining Insurance and Other Financial Services businesses. . . . With the decision to exit from financial services, we can now focus clearly and unencumbered on our Document Processing business.”¹¹ Finally, Xerox announced in 1993 that it would be reducing the size of its document processing workforce by 10,000 (approximately 10 percent) over the next two to three years.

Information Management at Xerox

Xerox established the corporate information management (CIM) unit in the early 1970s¹² to be responsible for managing data centers and networks; in 1987, however, these functions were moved to a separate division called the General Services Division (see Exhibit 4). Patricia Barron, appointed director of CIM in June

1987, explained CIM’s new mission: “[We were] to develop the information technology strategy for Xerox and ensure that it was implemented in all the business units.” Added Bill Glavin, vice chairman in the late 1980s, “We expected CIM to provide the overall information technology leadership to the company.”

Yet as Barron worked to provide this leadership, she found she would not be able to fulfill this mission without substantial organizational changes. “While senior management expected CIM to ensure that the \$500 million information technology budget was well spent, the business unit managers regarded attempts to audit expenditures as unnecessary,” Barron observed. In order to assess information management (IM) at Xerox, in 1988 she brought in an IT strategy consulting firm, which discovered numerous areas of concern. In particular, the diffusion of authority in IT decision making had created many IT problems at Xerox. The consultants elaborated:

There was no overall coordination or management of the hundreds of millions of dollars spent each year and no corporatewide management of IM investment priorities. The CIM organization at Xerox was not positioned, chartered, or staffed to perform many of the CIO functions. Overall, CIM was a peripheral player in the IT management picture because they were not chartered to direct or manage infrastructure or resourced to furnish leadership.

The IT function at Xerox possessed a narrowly focused IM talent pool, reported to senior managers who viewed IT infrastructure investment as an expense to be avoided, required redundant and overlapping efforts to find or reconcile the most basic information, and lacked effective staff development mechanisms.

It was clear that the 1989 Xerox IM infrastructure could not support the company’s strategic direction in the 1990s.

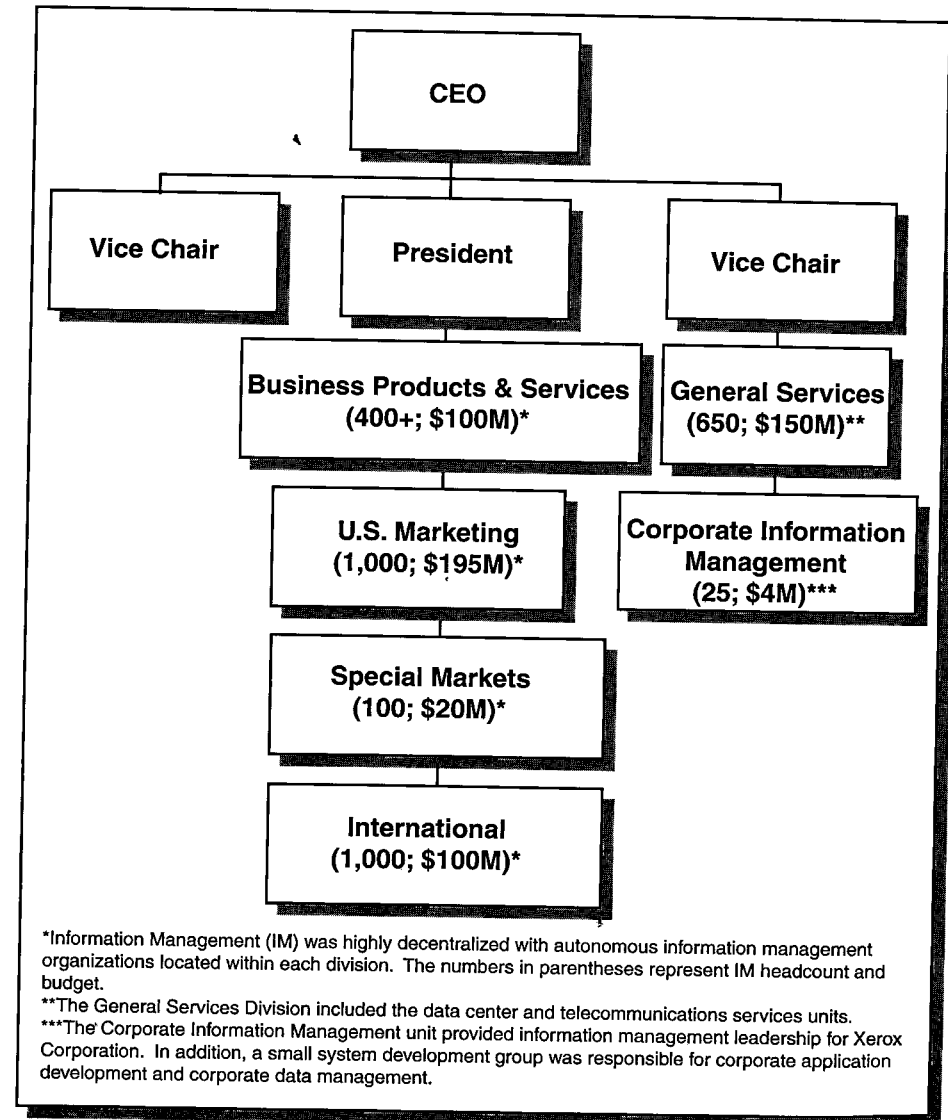
⁹Xerox 1992 annual report, p. 9.

¹⁰Chakravarty, op. cit., p. 76.

¹¹Xerox 1992 annual report, p. 6.

¹²For further information see *Xerox Corporation: Leadership of the Information Technology Function (A)* (Harvard Business School Publishing No. 188-113).

EXHIBIT 4
Xerox Corporation:
IT Management Organization, 1988



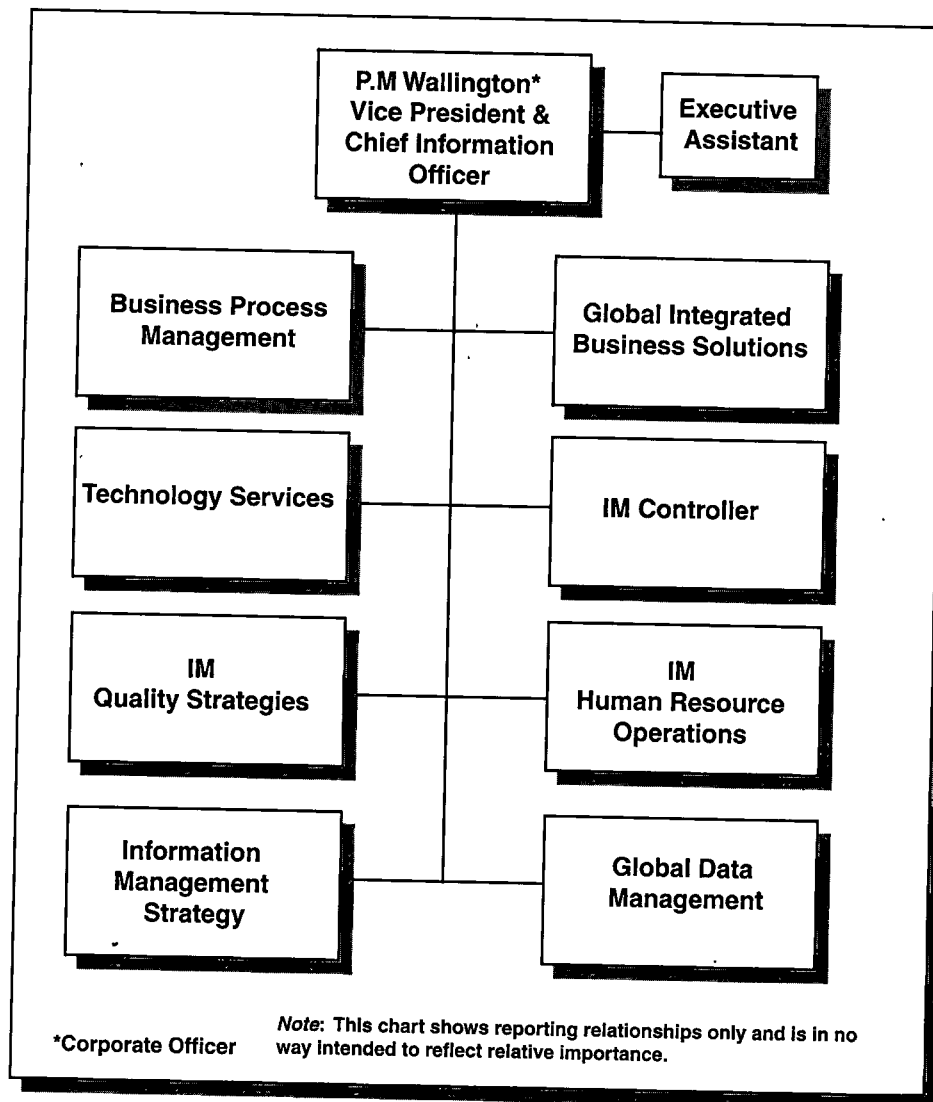
Centralizing Xerox IM

In 1993, to align IM with the direction the company was taking, Patricia Wallington,¹³ head of

¹³Wallington was appointed head of CIM in 1992; Barron, the previous head, was promoted to president of the newly created Office Document Products Division as part of the 1992 reorganization.

corporate information management, asked for and received direct authority over IM worldwide. (See Exhibit 5 for the new IM organization implemented by Wallington.) For several years IM managers had been addressing the problems Barron and the consultants had identified, but change had been slow. Thus, as the IM workforce tried to support the new Xerox divisional

EXHIBIT 5
Xerox
Information
Management
Organization,
December 1993



structure, it became obvious that the existing information systems infrastructure was inadequate. IM was unable to provide the data needed to support Xerox's new divisions.

After investigating the extent of the problems facing IM, Wallington presented her findings at the Xerox Presidents Council meeting in April 1993. Xerox had spent \$670 million on IM dur-

ing 1992, a figure that was forecast to grow to \$1 billion by the end of the decade, she noted. IM personnel were well aware that the division presidents did not feel they were getting an adequate payback from what amounted to 3.7 percent of total Xerox revenues. Suzanne Higgins, head of IM management processes, commented on Wallington's presentation: "She actually pulled

together all this information; it was a real eye-opener. At that point the Presidents Council said we needed to get control of these dollars. There was a sense from the division presidents that they were not getting what they needed for the dollars being spent."

The IM 2000 Project

To address IM problems, CIM started the "IM 2000" reengineering project in mid-1993. An initial IM 2000 design team was formed to identify IM problem areas and recommend strategies to address them. Projects supporting these strategies would be implemented by transitional teams, which would ultimately move IM to a new information systems infrastructure.

Salient IM Problems

Xerox possessed an aging applications portfolio built on proprietary technologies created to support the earlier functionally structured organization.¹⁴ IM appeared to be "trapped in a spending spiral on outdated legacy systems."¹⁵ The corporate change to a divisional structure had exposed the inflexibility of existing information systems. Janice Malaszenko, head of the CIM strategy function, explained:

The company had reorganized the previous year to a divisional, product line focus versus what primarily had been a regional or geographic focus. Where our systems essentially fell apart was in not being able to supply information about how a particular division's products were doing globally. We were jury-rigging a lot of systems and a lot of data to try to respond to this new divisional structure. The division presidents were not getting the information they needed to run their businesses. We needed better access to information and flexible solutions that would be relevant even if the number of divisions changed.

¹⁴IM 2000, issue 2 (a Xerox internal publication), December 1993, p. 13.

¹⁵ibid., p. 5.

Dalal noted that in part, Xerox's "legacy"¹⁶ systems prevented IM from addressing division needs. "I spent 110 percent of my time on legacy systems; there was not enough time to implement new ideas," he commented. "You had to maintain the old systems. It took a lot of resources and a lot of time. It was like an additional weight on your shoulders and prevented you from moving quickly forward."

There were financial challenges as well. "We were a support function in a company operating in a very competitive industry, and we had a hard time competing for the investments we needed in tools and training," noted Dick Bailey, a member of the core outsourcing team.

Finally, Xerox's culture, with its emphasis on autonomy, had allowed significant duplication of effort in IM across functional areas. "We had no consolidated list of applications—what their technology was, what development methods were used, or what business process they supported," one manager observed.

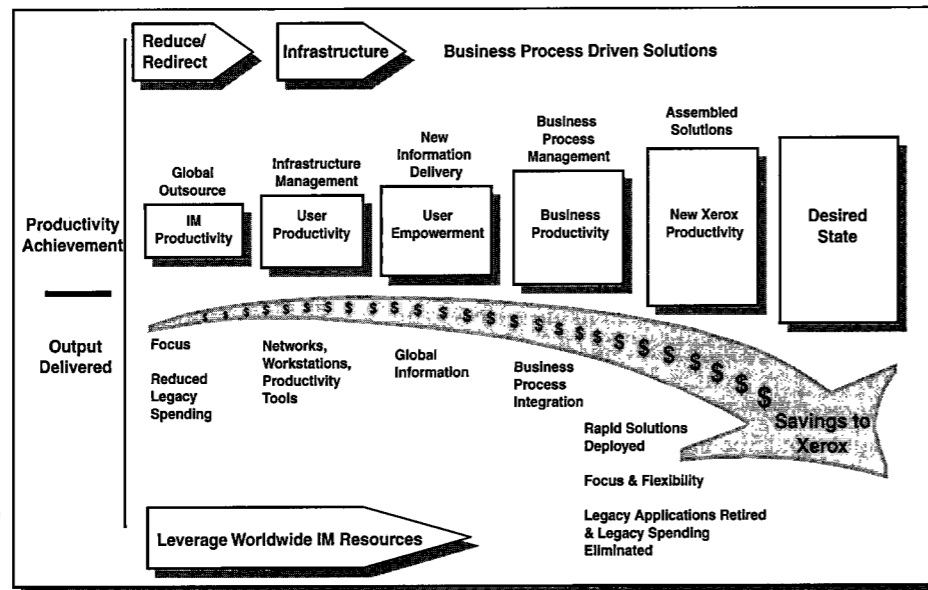
Design Team Strategies

After studying IM's problems, the IM 2000 design team recommended specific strategies by which IM could quickly develop the IT infrastructure and capabilities required to provide Xerox's business divisions with the information they needed. (See Exhibit 6 for a graphic depiction of these strategies.) The four strategies were

1. *Reduce/redirect.* IM would seek to reduce overall costs by reining in the expense of legacy systems. A part of any savings would be retained by IM to fund new applications and infrastructure able to support new Xerox business processes.

¹⁶Legacy refers to transaction processing systems designed to perform a specific function which over time may not accurately reflect business information needs. In addition, as hardware and software improvements occur in the information systems (IS) marketplace, older IS solutions may be more costly to operate and maintain.

EXHIBIT 6
The Xerox IM
2000 Vision



2. *Infrastructure management.* IM would move to an industry-standard infrastructure that would be managed centrally in order to increase interoperability and the sharing of solutions and information worldwide. A major objective of the infrastructure strategy was to move to a client-server environment.
3. *Leverage worldwide IM resources.* IM was to create a library of shareable core modules, centrally developed or purchased, which could be used locally to create solutions. Central monitoring of solutions would limit redundancy.
4. *Business process-driven solutions.* The current portfolio of applications (legacy systems) was to be retired or replaced with solutions supporting new Xerox business processes.

The Information Systems Outsourcing Decision

Xerox's earlier drive for quality had created a change in the corporate culture by promoting a sense of partnership with suppliers. Hence,

given the company's experience with outsourcing and creating alliances, the Presidents Council instructed top IM staff to contemplate outsourcing as a way to change IM radically. Malaszenko recalled:

The presidents, very specifically in their request to us, documented that we should be considering radical and significant moves, including outsourcing. They [the division presidents] might be outsourcing pieces of their product; they might be outsourcing distribution; they might be outsourcing some of their sales through channels. The term *outsourcing* was not foreign. Why not consider using the same concept and how it might apply in an IM world?

At first many IM managers felt that outsourcing was unnecessary; they could accomplish the needed changes internally. The IM design team quickly realized, however, that many internal obstacles would not be easily overcome.

First, any attempt to solve IM problems internally would also have to contend with the relationships between IM and its customers, the business divisions, which apparently did not

fully appreciate the problems IM faced. Top IM managers found that after addressing business requests for current systems, they had little time or money to address future infrastructure and process redesign issues. And as long as IM was internal, they knew that they would always be asked to satisfy more demands than they could support. There was a feeling that an outside change agent might introduce some welcome discipline into the process. Bailey explained:

By doing business with an external vendor in a businesslike fashion, with real money changing hands, we hoped to get some sharper decision making as to how much money was spent and on what. We hoped to reduce the tendency of a captive in-house organization to queue up an enormous backlog of things for it to do. This made it very difficult to determine an appropriate spending level.

Other managers agreed. One manager noted, "When you began to spend the money outside, you were much more conscious of how much money you were spending; you questioned all those quick [information systems applications] changes."

Funding constraints added to the impossibility of an internal solution. The implementation costs for the IM 2000 strategies were expected to be substantial. "The costs internally were prohibitive, with \$55 million just for hardware, much more when applications development and training and reskilling were included," Dalal explained. Bailey pointed out that such an expense was unlikely to be funded internally: "We had enormous pressures on profit margins, and we couldn't expect our top executives to divert this level of investment into what they probably considered to be an expense center."

Nevertheless, IM executives felt that given enough time, they could successfully transform their information systems internally; unfortunately, IM required immediate improvement. Xerox businesses were facing an increasingly competitive environment and were being forced to adapt quickly (as evidenced by the increase in product introductions shown in Exhibit 2). To

provide the information the business divisions needed, IM managers knew they had to rebuild the IM infrastructure rapidly while radically changing the processes IM personnel used. Top IM managers began to realize that they would not be able to change quickly enough without outside help. Many managers admitted that modest change efforts in the past hadn't been particularly successful, as Audrey Pantas, the chief information officer's (CIO's) executive assistant during the outsourcing effort, explained:

It wasn't as if we hadn't tried to implement change internally; we had tried—with varying degrees of success. Unfortunately, the business required us to change more rapidly. The real key to outsourcing was that Xerox would be able to move toward the future quickly. We were focused on building the new solutions; EDS was focused on supporting the legacy systems and the desktop infrastructure. Without the change in focus, it would have taken us years to implement the required changes. The business could not wait; speed was critical.

It was the need for rapid movement toward the IM 2000 vision that ultimately convinced Xerox IM managers to outsource.

A global outsourcing team was created to formally examine the benefits and feasibility of outsourcing. If outsourcing was found to be feasible, the team was to find a partner and create a contract. Dalal, Xerox's lead outsourcing manager, enlisted Dick Bailey, an IM manager from the U.S. customer operations division, and Charles Gilliam, senior corporate counsel, to assist him in the recruitment of an outsourcing team. Those three served as the "core" Xerox outsourcing team. Over time, the number of people working on the outsourcing effort grew to 50. The group was managed informally, without a definitive organizational structure. As the need for expertise arose, team members approached new people who could provide it. Areas of expertise included tax, treasury, human resources, finance, audit, and security. Most team members worked on outsourcing in addition to their normal duties.

Outsourcing Benefits

Based on first-level feasibility studies completed in November 1993, the team, having identified numerous potential benefits, decided to pursue an outsourcing arrangement.

The financial benefits from outsourcing included rapid funding of new systems development and economies of scale and scope. According to Dalal, "As part of the transaction, IT assets were sold. This gave Xerox an opportunity to renew its asset base and accelerate growth toward the new infrastructure." Xerox's internal experience with consolidation convinced the outsourcing team that even greater economies could be achieved by an external vendor. A Xerox manager observed, "Xerox has consolidated some internal data centers in the last few years. Through these consolidations we experienced cost reductions in hardware/software licensing, facilities, and support headcount. An outside vendor will be able to attain further economies by continuing this consolidation effort."

The team also expected to capitalize on an outside vendor's extensive IT experience. Malaszenko, for example, stated that she "wanted to be able to draw on the vendor's expertise to say, 'How are you approaching it with some of your other customers?'" The vendor's additional expertise derived in part from its specialized focus on IT. As Dave Skotnicki, who worked with potential bidders to define Xerox's information management needs, noted, "An outside vendor had the ability to get more of the technology that came out. They could spend money on investments which we couldn't afford internally. That opened up a lot more avenues to future technologies."

IM managers also believed that an outside vendor would manage the IT function more efficiently. Another Xerox manager pointed out that a vendor's "main competency was managing computer systems. Through their skills, leverage, and economies of scale, they could provide a level of efficiency that we could not achieve at Xerox." Bailey agreed: "This was their core

competence. And a combination of that and their focus allowed them to harness all that energy and be more effective. The top outside vendors had standardized approaches. In this company, every pocket of systems expertise had a tendency to do it its own way and march to a different drummer."

Perhaps most important, outsourcing allowed internal IM managers to focus on the development of a new IT infrastructure. Underlying the outsourcing effort, according to Bailey, was a fundamental strategy: "to offload legacy applications and operations so we could focus on developing new strategic applications to support the global business processes which were being reengineered." Skotnicki agreed: "The idea was to outsource all of our existing legacy applications. We were going to screw down spending on legacy, enabling Xerox to focus on new development."

Bailey summarized the benefits of outsourcing this way:

Many people thought the only reason you would outsource was because your company was in trouble and you needed immediate cash or your information management organization was considered a hopeless failure. Our reasons for looking at outsourcing were quite different: One, we wanted to control and drive down spending on our "legacy" IM environment to provide investment funds for new strategic systems and infrastructure; two, we wanted to improve both the quality and cost of our IM services; and, three, we wanted to focus the company's resources on our primary mission as "The Document Company." We believed outsourcing would help us address all three objectives.

The Outsourcing Process

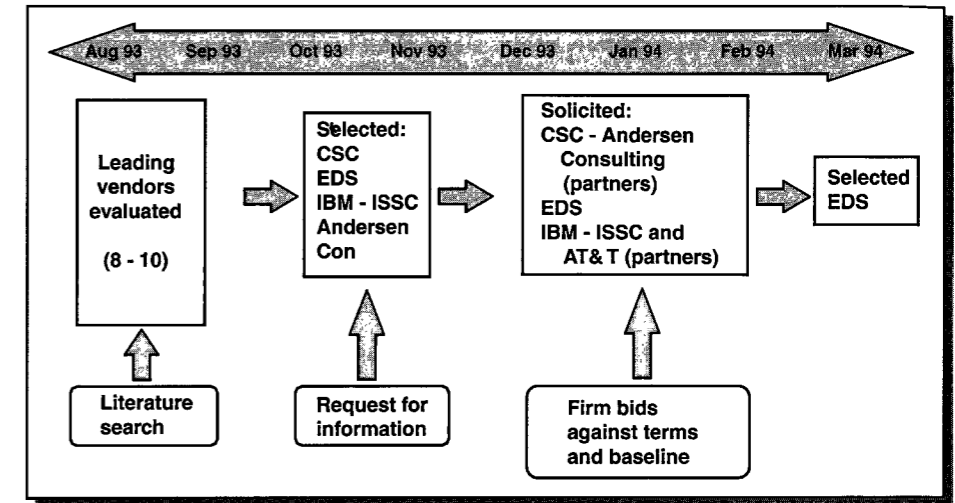
Choosing a Partner

The outsourcing team began by inviting numerous companies to bid. (See Exhibits 7, 8 and 9 for diagrams of the selection and project processes.) One manager who worked on the

EXHIBIT 7

Vendor Selection Process

Source: Adapted from a Xerox presentation by J. Dalal.



outsourcing selection process recounted how they decided whom to invite: "We opened it up to some of the companies we've done business with or do business with as well as major customers that we've had that might have some options for pursuing this and left it open to them to refuse."

The size and complexity of the deal, however, forced most potential bidders to walk away; only two vendors and one vendor team formally responded. "They weeded themselves out," recalled Bailey. Added Skotnicki, "You're not just looking at running a data center or supporting business applications; you're also including network and infrastructure solutions on a worldwide scale."

The team then created a list of criteria (see Exhibit 10), providing a general sense of how potential vendors would be judged. "[Such] scoring allowed us to eliminate one [vendor]," noted Dalal. Next, after intense negotiations with the remaining two vendors, Xerox chose EDS on the basis of several factors. "First," Dalal explained, "global presence was extremely important, and EDS was believed to have a superior global presence." Xerox was also inter-

ested in ensuring a good transition for outsourced employees. Dalal described EDS as "more willing to tailor their human resource program for our folks." Finally, EDS entered a very competitive bid, and Dalal was confident that EDS could make money on that bid. "Our intention was not to have EDS lose money. The best partner is a viable, strong partner," he explained. He also felt that it was irrelevant to ask whether EDS would be losing money during the first year or two: "You really couldn't make money in one year, whether it was early or late. You really had to look at the whole deal."

Interestingly, the outsourcing team felt that another vendor actually offered the best "cultural match." IM managers considered the advantages of a vendor with a different background; however, they felt "out-of-the-box" thinking was needed, and that would be facilitated by partnering with a firm with a different culture.

The Contract

In June 1994, Xerox signed a \$3.2 billion, 10-year deal with EDS. (Exhibit 11 shows the contract highlights; Exhibit 12 provides a generic

EXHIBIT 8
Outsourcing
Process

Source: Adapted from a Xerox presentation by J. Dalal.

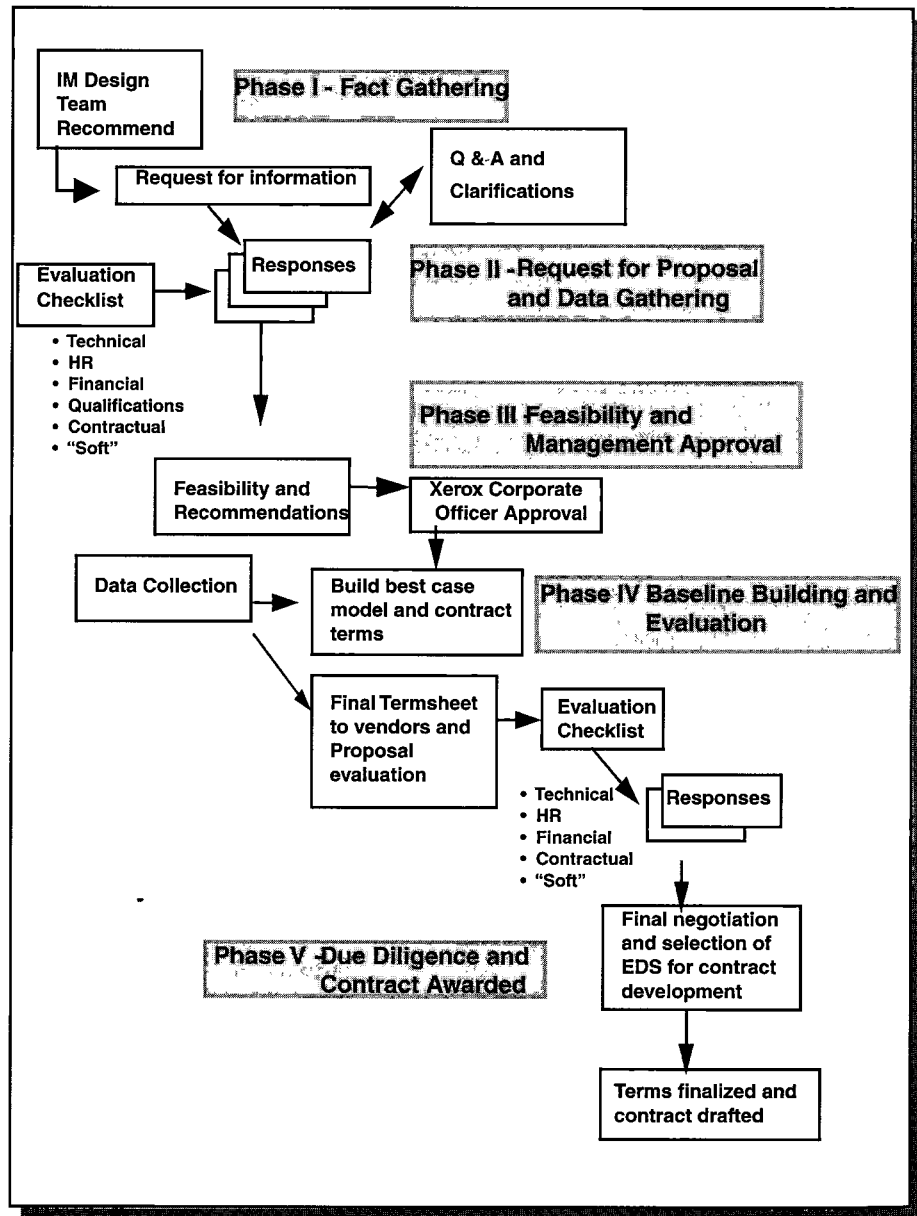


EXHIBIT 9
Benchmarking
Completed
during Phase I
of the
Outsourcing
Process

Source: Adapted from a Xerox presentation by J. Dalal.

Extensive benchmarking was conducted, resulting in information on:

- Outsourcing strategies
- Outsourcing processes
- Contracting
- Transitioning
- Ongoing management of the relationship
- Vendor references
- Human resource impact

Companies used in the benchmarking process included:

Salomon Brothers	Equifax	AT&T
KF (Sweden)	First Boston Corporation	Kodak
General Dynamics	McDonnell Douglas	Sun
British Home Stores	Kugelfischer (Germany)	Europcar
General Motors	British Aerospace	

EXHIBIT 10
Xerox Vendor
Selection
Criteria

*"Frameworks" included data center, telecommunications, infrastructure support, and applications.
Source: Adapted from a Xerox presentation by J. Dalal.

Vendor Qualifications

- Global presence
- Capability to manage "globally"
- Experience in large-scale outsourcing
- "Core" strengths in various frameworks*
- Desire to "create a different outsourcing environment" (for Xerox)
- Management processes and strength

Human Resources

- Treatment of Xerox employees
- Human resource values

Technical Solutions

- Overall productivity commitment: percent and credibility
- Support for existing Xerox diverse environments
- Capability to help "migrate"

Financial

- Translation of productivity savings to Xerox
- Flexibility in meeting Xerox financial requirements (globally)
- Experience in "engineering" financial environment (worldwide)

"Soft" Criteria

- "Congruence" with positive Xerox cultural traits
- Provide benchmark for desired Xerox cultural traits

EXHIBIT 11 The Xerox- EDS Contract

Source: Adapted from
a Xerox presentation
by J. Dalal.

CONTRACT HIGHLIGHTS

"Evergreen" contract terms: a new concept. The objective was to create a contract that would automatically adjust to current global needs. The mechanisms used to achieve this evergreen concept included

- Schedules and exhibits
- Terms with "built-in" renewal processes (e.g., pricing)
- Terms and performance separated for management purposes (e.g., service responsibility manual, operations manual)
- Global terms for the life of the contract separated from transition terms to facilitate on-time transition activities

Other contract terms, some of which are unique, included

- Global contractual terms
- Human resource terms
- Pricing mechanism: benchmarking and indices
- Service-level management: "service-level variance" concept (adaptation of Xerox quality processes/tools)
- Ongoing relationship terms built on "partnership" rather than establishing a "supplier/buyer" model
- Future business relationship terms

EXHIBIT 12 Checklist of Clauses for an Outsourcing Agreement (Listing Below Does Not Imply That Xerox-EDS Agreement Includes These Clauses)

Note: This material represents a checklist of items to be included in a typical outsourcing agreement. It is not necessarily complete, and all such contracts should be tailored to the specific objectives of the customer and the vendor. The list is deliberately in random sequence to avoid any imputation of importance to any particular clause.

1. Description of base services
 - Data processing
 - Data communication
 - Voice communication
 - Application development and maintenance
2. Miscellaneous services to be provided
 - Mail
 - Messenger
 - Consulting
 - Training
 - Reports
3. Service levels
4. Initial term of the agreement
5. Renewal term of the agreement
6. Fees and charges
7. Payment schedule
8. Adjustments to charges based on volume

EXHIBIT 12 Checklist of Clauses for an Outsourcing Agreement (Listing Below Does Not Imply That Xerox-EDS Agreement Includes These Clauses) (continued)

9. Price protection
 - Percentage cap on increases
 - CPI/GNP inflator
 - Most favored nation
10. Verification of costs
11. Annual adjustments to charges
12. Expenses
 - Cap on expenses
 - Documentation of expenses
 - Customer policy in respect of expenses
13. Miscellaneous expenses—paper, supplies, messenger, duplication, binding, etc.
14. Third-party contracts
 - Required consents
 - Transfer fee
15. Third-party software contracts
 - Required consents
 - Transfer fees
16. Third-party equipment leases
 - Required consents
 - Transfer fees
17. Change procedures—programming and processing
18. Data center
19. File ownership
20. Data ownership
21. Media ownership
22. Security procedures at data center
23. Auditor access at data center
24. Access at data center
25. Hiring of employees
26. Transfer of personnel
27. Arbitration
28. Insurance
29. Backup system availability
30. Backup files and programs
31. Disaster recovery procedures
32. Liquidated damages for failure to achieve service levels
33. Confidentiality
34. Force majeure
35. Default and termination
36. Termination for convenience
37. Termination upon sale of business
38. Post termination assistance
39. Continuity during dispute
 - Pay fees into escrow account
40. Correction of errors

EXHIBIT 12 Checklist of Clauses for an Outsourcing Agreement (Listing Below Does Not Imply That Xerox-EDS Agreement Includes These Clauses) (concluded)

41. Assignment
42. Relationship
43. Staff to be assigned
44. Staff caliber
45. Project manager
46. Right to change staff
47. No solicitation
48. Indemnification
 - By customer
 - By vendor
49. Survival
50. Limitation of liability
51. Severability
52. Notices
53. Amendments
54. Headings not controlling
55. Entire agreement
56. Governing law
57. Breach not waiver
58. Publicity
59. Management committee
60. Taxes
61. Representations and warranties
 - No infringement
 - Meet service levels
 - Qualified personnel
62. Disclaimer
63. Performance review
64. Counterparts
65. Exhibits

RFP, proposal, description of services, service levels, payment schedule, customer software, employee list, third-party contracts

Source: John K. Halvey, Milbank, Tweed, Hadley and McCloy.

outsourcing contract checklist.) EDS was responsible for running mainframes, maintaining legacy systems, and handling worldwide voice and data communications in 19 countries. (See Exhibit 13 for a summary of the deal's scope.) Approximately 1,900 Xerox IM personnel and about \$170 million in assets were transferred to EDS. Xerox retained control of strategic and architectural information management func-

tions and new applications development; 700 IM workers were retained to work on those functions. According to Wallington, the mission for those staying on at Xerox was clear: "We want to focus our internal staff on moving us to the environment that will support us tomorrow."¹⁷

¹⁷Computerworld, June 20, 1994, p. 12.

EXHIBIT 13
Scope of the
Xerox/EDS
Outsourcing
Deal

Source: Adapted from
a Xerox presentation
by J. Dalal.

Data Center Operations

Operations and management of data centers

- Monroe County, NY (serving United States, Canada, and Mexico)
- London, England
- Brazil
- Various "decentralized"

All print operations—centralized and decentralized. EDS in turn outsourced print operations to Xerox Business Systems on a subcontract

Network Operations

Operations and management of

- Worldwide voice
- Worldwide data/video—WAN and LAN

Legacy Applications Maintenance and Enhancements

Production support of applications worldwide

Limited enhancements of applications worldwide

Infrastructure Support

Support of information management activities for the above platforms: includes worldwide desktop devices and local area networks (6085s, personal computers)

- Help desk
- Software and hardware support (move, add, change)

EDS's share of the Xerox IM budget was forecast to be 70 percent in the first year of the contract and to shrink to 30 to 35 percent by the final year. According to Dalal, by the end of the 10-year contract, "We will have rebuilt all of our applications systems, and our legacy that we are outsourcing to EDS will no longer exist." However, even without legacy retirements, the IT expense was expected to decline. John Halvey, an outsourcing expert from Milbank Tweed who worked on the Xerox contract, commented:

There were several reasons why IM executives at an outsourcing company expected their IT processing volume and expenses to decline. First, they believed that over time, the vendor would increase overall IT efficiency. Second, personnel and hardware expenses were expected to decrease for any given level of IT capacity as new technologies became available. Third, many companies were down-

sizing and expected their IT usage curve to fall as they began to concentrate on core competencies and stopped trying to do everything else.

Although confident that they had created a robust agreement, the IM managers knew they had to keep the transition from the legacy environment to a new information infrastructure on track. Confirming the importance of a timely transition, Dalal remarked, "The goal was, after 10 years, to replace the legacy systems with new business solutions. We ran a risk of increasing costs if we did not achieve our systems retirement plan."

The "Spirit" of the Contract

As they hammered out an agreement, Xerox's core outsourcing team (Dalal, Bailey, and Gilliam) met frequently with EDS's core team

EXHIBIT 14
The Core
Xerox and EDS
Outsourcing
Teams

The Core Xerox Outsourcing Team	
Jagdish Dalal	Lead outsourcing manager, Xerox
Richard Bailey	Formerly an IM manager in Xerox's U.S. Customer Operations Division
Charles Gilliam	Corporate counsel
The Core EDS Outsourcing Team	
Mike Reed	Lead outsourcing manager, EDS
Will Clark	Proposal manager
John Funk	Corporate lawyer

(See Exhibit 14). According to Dalal, it quickly became evident that the outsourcing relationship required something more than negotiations with a traditional IT supplier. Reed agreed: "This is not a client/vendor relationship; this is not a supplier relationship; this is not a win/lose situation; this is a strategic relationship." But both sides realized that integration could be achieved only if they developed a high degree of cooperation.

The first obstacle to be overcome was what Dalal termed "fear of publication." To achieve the level of honesty required to attempt an integration, the participants had to be assured that what was said in the core meetings would not be shared beyond the members of the core team. Only after creating an environment of trust could the six (who came to view themselves as a single team) work to understand each corporation's objectives. Dalal described how an open environment and sharing of objectives were accomplished:

Each side made two lists. First we wrote down our company's objectives; then we wrote down what we thought were the other company's objectives. All these objectives were then put on flip charts. This procedure allowed us to quickly identify disconnects. To ensure complete honesty, we went a step further and the two of us who led the team put up our personal objectives as well, right down to what would get us promoted and fired. That session got us extremely close to one another. After the discussion we threw the charts away,

but as the negotiations progressed, these objectives were always in the back of our minds.

Once the team reached an understanding of the "spirit" of the relationship, the rest of the negotiations proceeded smoothly. To ensure that the spirit persisted, they worked hard to capture a sense of it in the final contract. Dalal explained how the contract was used to capture the spirit and maintain a focus on IM 2000 objectives:

Article 1 of the contract covers the spirit of the agreement. It stresses the vision of IM 2000 and what makes us successful. The objective was not to outsource but to accomplish IM 2000. Outsourcing is simply the first in an integrated set of strategies. It provides the savings that help deliver the rest of the strategies. If EDS doesn't help us by delivering on the agreement, we cannot achieve the IM 2000 vision.

Yet the very length and complexity of the contract made transmitting the spirit of the deal difficult. Global issues alone demanded more than 50 pages of contractual language. According to Dalal, the team responded to this problem by "creating a summary of the contract that was circulated among senior Xerox management to ensure that everyone understood the spirit of the relationship." Dalal also held one-day sessions with IM managers to ensure "that they understood not only the contract but also the spirit of the agreement."

The team attempted to use the contract as a repository of corporate memory instead of an instrument to define organizational boundaries and limitations. Hence, longtime employees would be able to use the contract to refresh their memories as to the nature and spirit of the agreement; new employees could use the contract to learn about the EDS/Xerox relationship. The team expected the spirit to evolve over time in response to changing environmental realities. They agreed to change the contract as needed to ensure that it mirrored any changes in the spirit.

Two sets of contractual issues presented a significant challenge in maintaining the relationship: divorce issues and pricing issues. The team realized that these issues had to be addressed adequately up front. The pricing issue was solved by an intricate benchmarking mechanism. Dalal recalled:

Xerox built on its quality and benchmarking heritage and devised a unique methodology. The contract required annual price benchmarking. Therefore, the contract guaranteed both to Xerox and to EDS that current prices would always be at benchmark levels worldwide. Our price benchmarking would be based on 40-odd price elements rather than aggregate prices. We had found an appropriate benchmark or index for each of these price elements. The contract ensured that we wouldn't have to worry about IT price swings that occurred during the duration of the contract. The contract would not have to be reopened to adjust pricing; the contract renewed itself.

Divorce concerns were addressed by including clauses in the contract that would protect each party adequately if a split became necessary. "The contract had certain checkpoints and conditions along the way that provided the capability for moving out," Malaszenko explained. Nevertheless, Xerox IM managers realized that once the two companies became integrated, divorce would be difficult. For example, as Malaszenko noted, "Restaffing would be com-

plex, as transitioned employees might not be available or interested in returning to work in their previous capacity."

The actual negotiation of the divorce clause was apparently not very difficult due to the team members' insistence on understanding each other's objectives up front. As Dalal stated:

The termination portion of the agreement was where the objectives helped most. We tried to ensure that corporate and personal objectives would live through any termination of the relationship. The termination negotiation did not take long; I think we did it in a couple of hours one morning.

Dalal underlined the importance of not dwelling on divorce issues: "You cannot drive your commitment based on disintegration." Other IM managers expressed similar views. For example, one manager commented, "If we didn't have a real strong feeling that it was going to work, we wouldn't have gone into it at all." Bailey commented, "I believed it was very important to approach both the contract and the relationship with a win-win attitude because it was important that the relationship be a healthy one."

By focusing on the spirit of the relationship and solving pricing and divorce issues early, the team had created an agreement that would allow it to integrate the two companies. Early indications of this success were noted by Dalal, who observed, "Today, in any meeting, you cannot tell who is from Xerox and who is from EDS. And it doesn't matter who leads the meeting because the objective is a common objective." Reed too addressed the success of integration: "Our check on what we do is always measured by 'Is this providing value to Xerox?' We will not take additional revenue opportunities that don't provide value for Xerox."

Global Complexities

The global nature of the contract added greatly to its complexity. The team had to ensure that overseas Xerox units would be satisfied with the

outsourcing deal. As noted by Halvey, global outsourcing deals were extremely complex:

There are additional concerns in any global deal. First, different countries have different human resource laws; these laws affect a wide variety of employee issues. For example, virtually all of these contracts contained some kind of a COLA¹⁸ provision. But if you were a vendor doing work in Brazil, where inflation could be 100 percent in a day, a typical COLA clause might have been unworkable. Second, the effect of a "force majeure"¹⁹ event is a significant issue in all outsourcing contracts. While this is a problem at the domestic level as well, on a global basis firms faced a much greater degree of risk, particularly in terms of political instability and labor disputes. Third, asset transfer laws are different in each country. These differences can make it difficult to transfer hard assets like real estate. And in many nations, the transfer of intellectual property, such as software, could create unexpected legal liabilities. Finally, dealing with the local telephone companies could be a challenge. . . . The list just goes on and on. The bottom line is, if you are going to do a global deal with someone, you have to trust them. I tell my clients that I can get them a state-of-the-art termination clause, but if they have to use it, they are in a lot of trouble. In these kinds of deals legal victories are Pyrrhic.

To ensure that global issues were addressed adequately, Graham Rudge, director of global process and information management and CIO of Rank Xerox, the company's European subsidiary, was added to the outsourcing team. In the end Xerox was able to create a single global contract that could be implemented locally in

¹⁸Cost of living adjustment.

¹⁹Force majeure events resulting from certain contingencies may excuse the vendor from contract performance. Examples of possible force majeure events include delays caused by the other party, acts of God, war, labor disputes, and third-party nonperformance.

each of the 130 countries in which the company operated. For example, to contend with currency fluctuations, Xerox created a "price book" system that dynamically adjusted IM prices to ensure that Xerox groups in other countries were better off after implementation of the outsourcing agreement. For most services, prices for each country were in local currencies, not dollars, and were benchmarked against the local economy. IM managers felt that if they allowed groups in other countries to become dissatisfied with outsourcing efforts, significant problems could result. As Bailey noted:

Theoretically, we could have told them that this was how it was going to be. But if we screwed it up and it messed up their business results, they'd be impossible to control. It was in our own self-interest to make sure they were involved and taken care of properly.

Implementing the Outsourcing Agreement

In mid-1994 the integration of EDS and Xerox was proceeding smoothly, largely because of the sense of partnership. Reed commented on the process:

In a typical outsourcing deal, the announcement is made one day, and the people are told, "Tomorrow you all work at EDS." That is the wrong way to outsource. It can take you a year to try to get everyone back up to speed because you just destroyed their trust. What we did at Xerox was identify the leadership that would be transitioning to EDS and then empower them to participate in the transitioning and integration of their employees. This made the transition date when the people and assets from Xerox officially moved to EDS unimportant because everything had already begun to move forward.

Within Xerox the outsourcing effort was to be implemented as part of the overall IM 2000 reengineering effort. For example, a portion of

the money saved via outsourcing was to be used to move the company away from legacy systems. Suzanne Higgins, leader of the IM 2000 project's management processes team, explained, "This [fund] was for new projects, new things; nothing that would be enhancing the legacy systems would be funded out of these dollars." The 700 IM professionals who remained at Xerox would focus their efforts on the four recommended IM 2000 strategies (identified earlier) as they moved forward.

EDS had created a separate global strategic business unit dedicated solely to Xerox. Reed was trying to structure that unit in a nonhierarchical way. He knew that he needed to create an environment that fostered cooperation because "when you have a globally diverse group, you have no alternative; you must cooperate or you can't operate."

According to Dalal, it was important to differentiate among the three outsourcing terms: "Transition is the event of officially moving IM over to EDS; migration refers to the activities and process that lead to a successful transition; integration is the process of bringing the two companies together over time" (see Exhibit 15). Dalal and Reed knew that long-term success depended on the degree of integration achieved by the two organizations. According to Dalal:

For the integration to be successful, five dimensions had to be addressed: culture, strategy, structure, people, and process. We created a set of EDS/Xerox teams to focus on each of these dimensions from a quality perspective. For example, we have a team that identified current and future processes; their challenge is to work on the transition from one to the other. To capture the relationship's potential economic value, we must emphasize integration. My organizing model for systems integration uses "degree of integration" on one axis and "opportunity for integration" on the other. Our agreement with EDS contains a lot of opportunity for integration; therefore, we will realize substantial economic value if we can achieve commitment to a high degree

of integration. It is the spirit of the agreement that creates this commitment; there are no "mechanisms" that can be put into place as a substitute for the spirit. For example, after we were done with the pricing mechanisms, we discovered that there was a whole class of users that we had not priced correctly. We sat down with EDS and constructed a whole new set of prices and published them. The word *outsource* does not really describe this relationship. Mike Reed and I believe that what we have done is hand a Xerox function over to EDS, which they now manage for us. And Xerox doesn't really have an outsourcing management organization; EDS was enfranchised by our commitment to integration.

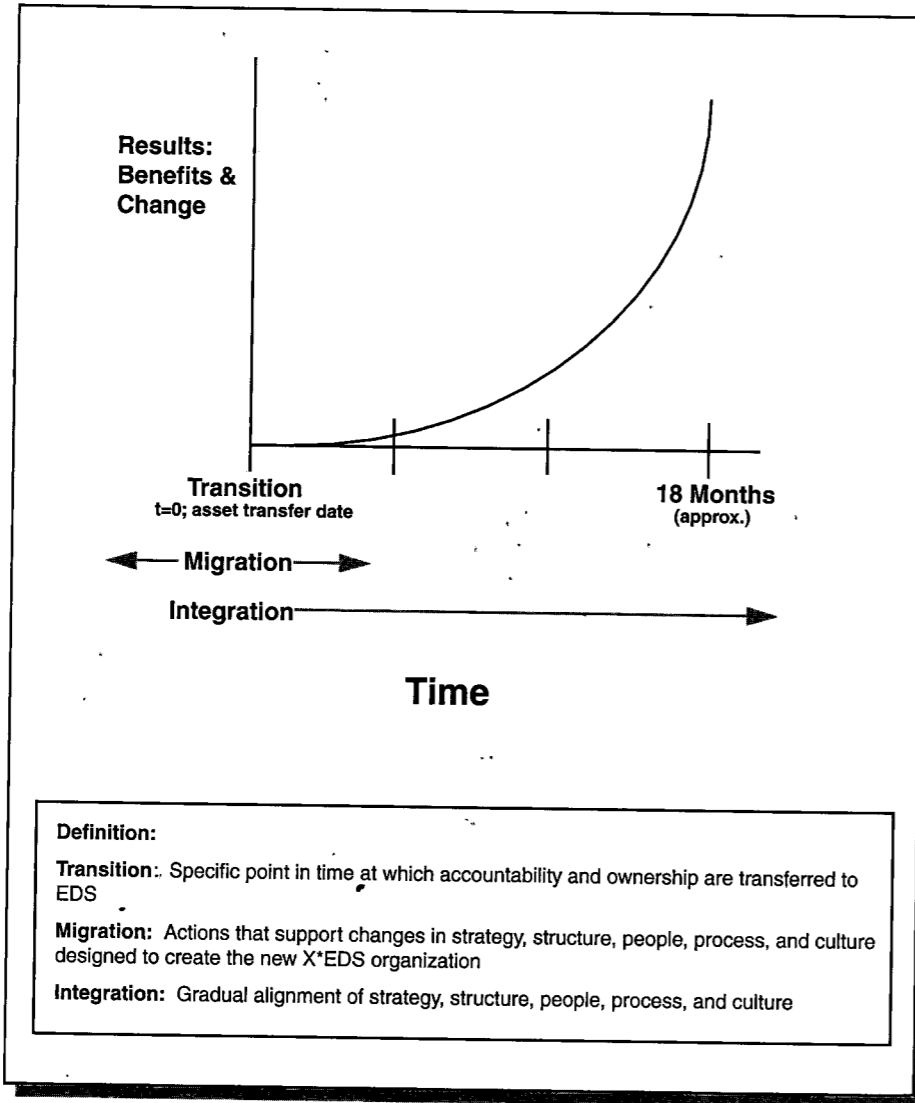
Issues to Be Clarified

While the outsourcing process had been a valuable learning experience (see Exhibit 16 for a "lessons learned" list), the integration process was only beginning in late 1994. The partners were working on many important issues, including the following:

1. *Structure.* Both sides were still working on their organizational structures. (See Exhibit 17 for the initial Xerox postoutsourcing IM structure.) In response to this need for initial governance mechanisms, Xerox IM had set up what it called "framework teams." "There's a framework team around applications, there's a framework team around telecommunications, there's a framework team around infrastructure. They are jointly being run," explained a manager. But the details of how the IM 2000 transition teams and framework teams were to interact with EDS still had to be worked out. As Dalal noted, "We're working on details that relate to the fine line of how some groups relate." The goal, according to Bailey, was to create "an integrated organization which would continue to serve Xerox, but under EDS management."
2. *IM operating processes.* Xerox and EDS were working together to define IM processes. Higgins explained, "We're taking the best practices

EXHIBIT 15
Xerox/EDS
Outsourcing
Integration

Source: Adapted from a Xerox presentation by J. Dalal.



from both. [If] EDS has a process that they've already got defined and working, we'll examine it."

3. *Management processes.* While the contract specified in part the measures to be used to judge EDS's effectiveness, the actual management processes to be used required finalization. In addition, incentive systems for the relationship still needed to be worked out.

4. *Human resource management.* The roles of IM workers would be further clarified as management and business processes were selected. For example, to what extent would IM managers need to become negotiators and coaches in addition to their duties as technologists or administrators?

Since these areas were interdependent, it was believed that the relationship would take many months to reach a stable form.

EXHIBIT 16
Lessons
Learned

Source: Adapted from a Xerox presentation by J. Dalal.

- General Lessons**
- The quality process works for outsourcing.
 - Good understanding of objectives and "what you want" is essential for good results.
 - A multidisciplinary team is a necessity.
 - A full-time project manager (with IM and business backgrounds) is a key success factor.
 - Activities and efforts take longer than expected.
 - A good contract requires a tremendous amount of data.
 - Collection and identification of preoutsourcing cost data are critical.
 - Employee communication is a key success factor.
 - The vendor management process must be subject to strict discipline.
- Global Lessons**
- Global integration of IM is necessary for a global contract.
 - Acceptance of a global IM strategy is a necessity for common contract development.
 - Global consistency of IM measurement is a necessity.
 - Economic differences prevent a global pricing methodology without significant effort on the part of both companies.
 - Vendors/consultants are not yet experienced in managing a global outsourcing contract.
 - Local legal requirements (for human resources and billing) require thorough research and understanding before a global outsourcing contract is developed.
- Critical Success Factors**
- Existence of a multiyear, total IM strategy
 - Corporate commitment to the IM strategy
 - Corporate commitment to outsourcing, where the process defines the results
 - Quality culture and "Team Xerox" attitude
 - Not being bound by "this is how it is done"

EXHIBIT 17
Global Process
and
Information
Management
Structure,
December 1994

Source: Adapted from a Xerox presentation by J. Dalal.

