OUTSOURCING AWARDS ANALYSIS

INPUT

About INPUT

INPUT provides planning information, analysis, and recommendations for the information technology industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Subscription services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services. INPUT specializes in the software and services industry which includes software products, systems operations, processing services, network services, systems integration, professional services, turnkey systems, and customer services. Particular areas of expertise include CASE analysis, information systems planning, and outsourcing.

Many of INPUT's professional staff members have more than 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

INPUT OFFICES

North America

San Francisco
1280 Villa Street
Mountain View, CA 94041-1194
Tel. (415) 961-3300 Fax (415) 961-3966

New York
Atrium at Glenpointe
400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050 Fax (201) 801-0441

Washington, D.C.
INPUT, INC.
1953 Gallows Road, Suite 560
Vienna, VA 22182
Tel. (703) 847-6870 Fax (703) 847-6872

International

London
INPUT LTD.
Piccadilly House
33/37 Regent Street
London SW1Y 4NF, England
Tel. (071) 493-9335 Fax (071) 629-0179

Paris
INPUT SARL
24, avenue du Recteur Poincaré
75016 Paris, France
Tel. (1) 46 47 65 65 Fax (1) 46 47 69 50

Frankfurt
INPUT LTD.
Sudetenstrasse 9
W-6306 Langgöns-Niederkleen, Germany
Tel. 0 6447-7229 Fax 0 6447-7327

Tokyo
INPUT KK
Saida Building, 4-6
Kanda Sakuma-cho, Chiyoda-ku
Tokyo 101, Japan
Tel. (03) 3864-0531 Fax (03) 3864-4114

M&S 459/01 2/92

FEBRUARY 1992

OUTSOURCING AWARDS ANALYSIS

INPUT®

1953 Gallows Road, Suite 560, Vienna, Virginia 22182 (703) 847-6870

Published by
INPUT
1953 Gallows Road, Suite 560
Vienna, VA 22182-3934
U.S.A.

U.S. Outsourcing Information Systems Program (OIS)

Outsourcing Awards Analysis

SODB1 • 491 • 1991

Abstract

This awards analysis report reviews a group of representative outsourcing contracts that were awarded during the period 1989 to 1991. The report includes such characteristics as the value of the contract, the length of the contract agreement, the client, and the vendor.

INPUT does not intend for the data included in this report to be an exhaustive list of all awards for this three-year period. Rather, it is a compendium of the major awards in the most active industries. The data was compiled primarily from press releases and public information about the activities of outsourcing vendors.

This data is grouped by eight vertical industries. The eight industries INPUT selected recorded enough activity to permit some general conclusions to be drawn about trends in that industry.

The awards are also grouped by eight major vendors in the outsourcing industry. Each vendor's level of activity and industry penetration during the three-year period are reported.

INPUT identifies certain contracts as milestone events in all three years surveyed. These milestones represent awards that were either very large or set some new pattern for the outsourcing of systems operations.

The report provides conclusions and recommendations for outsourcing vendors, based on the trends identified by this analysis of historical data.

This report contains 66 pages and 45 exhibits, and was prepared as part of INPUT's Systems Operations/Outsourcing Program for 1991.

Table of Contents

Table of Contents (Continued)

Exhibits

Exhibits (Continued)

I

Introduction

There is value in stepping back from the daily market activity and taking a broader overview of the outsourcing market. By compiling and publishing a set of significant outsourcing contracts awarded in the past several years, INPUT provides a basis for allowing market participants to, in effect, look over their shoulders and see how the market is developing.

This data base supplements INPUT's analysis of the market. It provides market participants with the materials with which to draw their own conclusions about their own strategies and the trends in the market. If that leads to conclusions that differ from those developed by INPUT, this can only mean the organizations have a different perspective of certain aspects of their marketing and business development activities.

This data base is strategic data, recording past history, rather than the tactical data that a data base of opportunities would represent. It is nonetheless useful if an evolution of major market trends can be derived from it. The acquisition of tactical data, such as specific opportunities, continues to be an unachievable goal, except in the federal and state and local government vertical markets. Most prospects will not divulge their plans for outsourcing ahead of time.

There have been a few recent exceptions, such as the Continental Bank of Chicago and the United Technology contracts. Some major organizations may be adopting a strategy of letting the world know that they are in the market and letting the vendors beat a path to their doors. This is still likely to be the exception to the rule, however, since most organizations only make the outsourcing decision once.

A

Methodology and Source

INPUT has been gathering data on outsourcing contracts awarded in the last several years for use in its research and analysis of the systems operations/outsourcing market. The data is compiled from the following sources:

- Published announcements in the industry press that are usually made at the time of award
- Information gathered while compiling vendor profiles as a continuing part of INPUT's vendor analysis program
- Data compiled as part of INPUT's other research programs dealing with various aspects of the information services industry
- Data compiled in the regular extensive contacts between INPUT staff and industry executives

This data does not represent a complete, exhaustive listing of the outsourcing contracts in the marketplace. It is useful, however, as it represents a broad cross-section of significant contracts, including those that can be called milestone contracts, such as the Kodak/IBM/DEC, the EDS/Continental Airlines, and the CSC/General Dynamics contracts.

INPUT estimates that the awards in this data base represent 32% of the annual expenditures for outsourcing services and 10% of the contracts awarded. It is fully expected that a larger portion of the market will be represented in future issues of this data base, as data collection tools continue to be refined and vendors and users become less reluctant to discuss the awards.

B
Purpose and Use

By sorting and classifying the awards data by industry and by vendor, some market trends can be identified. This trend analysis can benefit all participants in the market. The objective is to gather, in one place, information about a group of major contracts in the outsourcing market and derive some value from it.

This report sorts and catalogs contracts by industry to benefit those concentrating in one or two vertical markets. It also sorts and reports information on major vendors to provide some analysis of each major vendor's strategy.

Vendors can use the data as an additional check on their evolving market strategies. Users and prospects can identify the dominant vendors in their vertical market and organizations in their industry that have already chosen to outsource their systems operations activities.

C
Report Structure

The report is organized to provide quick access to the data of most interest to the reader.

Chapter I—Introduction—identifies the purpose and scope of the report and describes the sources of the data.

Chapter II—Executive Overview—highlights the major points of the analysis and provides a summary of the key data.

Chapter III—Industry Analysis—presents the contract data sorted by vertical industry market. Only industries with sufficient data are included—namely banking, federal government, state and local government, discrete manufacturing, process manufacturing, insurance, retail distribution and business services. Certain characteristics of the activity in each vertical market are discussed.

Chapter IV—Vendor Analysis—reviews the major contract awards of each major vendor. It includes discussion of what these awards imply for that vendor's strategy in general.

Chapter V—Conclusions—presents an overview of the market activity, including a chronological review of the major awards and their impacts on market trends.

II

Executive Overview

This data base is strategic data, recording past history, not tactical data that a data base of opportunities would represent. It is, nonetheless, useful from which to derive major market trends.

This data does not represent a complete, exhaustive listing of the outsourcing contracts in the marketplace. It does, however, represent a broad cross-section of significant contracts, such as the Kodak/IBM/DEC, the EDS/Continental Airlines, and the CSC/General Dynamics contracts.

INPUT estimates that the awards in this data base represent 32% of the annual expenditures for outsourcing services and 10% of the contracts awarded.

The report sorts and catalogs the contracts by industry for the benefit of vendors concentrating in one or two vertical markets. It also sorts and reports information on major vendors to provide some analysis of each major vendor's strategy.

Vendors can use the data as an additional check on their evolving market strategies. Users and prospects can identify the dominant vendors in their vertical market and organizations in their industry that have already chosen to outsource their systems operations activities.

A
Major Industry Activity

Eight of the fifteen vertical industries monitored by INPUT had sufficient activity in the recent past to warrant analysis and inclusion in this data base.

1. Banking and Finance

Historically, the banking and finance market has been the most receptive to and the most successful for outsourcing vendors. This industry contains the longest existing contracts in the outsourcing market. Further, most of the major vendors have won major awards in the banking industry. In addition, there are some specialist vendors who participate only in the banking industry.

The reason for the relative success of outsourcing in the banking community relates to a number of factors:

- Bankers are familiar with the concept of outsourcing. They were outsourcing credit card processing, check collection and other services before anyone coined the term *outsourcing*.

- Banking executives, a close-knit community, are acutely aware of what their competitors are doing.

- The banking community, in particular the savings and loan sector (and now the commercial sector), is experiencing serious financial setbacks. This is an environment in which the reduced capital investment and operating expense reductions promised by outsourcing vendors fall on receptive ears.

It is no wonder, then, that three phenomena have developed in the banking market:

- Major vendors, such as IBM and EDS, have garnered a large number of contracts in this sector.

- Banking specialists, such as Systematics and FIserv, have been successful at outsourcing, even though they have concentrated on only one market. Only in banking is the market currently mature enough to permit this.

- Members of the banking community themselves have acted as outsourcing vendors. Mellon Bank is currently the only example remaining, now that the operations of Citicorp Information Services have been acquired by FIserv.

2. Discrete Manufacturing

The more aggressive firms in the discrete manufacturing vertical market have traditionally been receptive to outsourcing of their systems operations. Many firms in this industry have also maintained a distinction between business operations and shop floor operations. This has led to internal competition for processing equipment and information technology products.

3. Process Manufacturing

The process manufacturing vertical industry has provided good candidates for outsourcing vendors, particularly in the oil and gas processing subsector of this market. Yet some of the largest and most advanced firms in this sector—the pharmaceutical and food processors—have not yet jumped on the outsourcing bandwagon. It may be that the more financially troubled firms are first to turn to outsourcing.

There are no megacontracts in this sector yet, though there are some very large companies that are good outsourcing candidates.

4. Retail Distribution

ACS Commercial Services holds the oldest contract in the retail distribution market, with the Southland Corporation.

IBM has only recently entered this market. However, it has made its presence felt by scoring three wins within a month: two with supermarket chains and one with Zale Corp., the troubled drug retailer.

INPUT expects this market to grow at a 24% CAGR for the forecast period 1991 to 1996, primarily because of the continued high rate of activity of IBM and the current low revenue base.

5. Business Services

Only a few companies have awarded contracts so far in the business services industry. EDS is the only identified vendor in this market. This industry represents a diverse mix of firms whose services range from providing entertainment and assistance to consumers to providing consulting to business firms. As a result, it is a difficult market to penetrate.

EDS has apparently been successful recently. Its strategy has become clear. The Continental Air, National Car, and Hospitality Franchise contracts all involve acquisition or joint development of reservations software and related information technology.

6. Insurance

The insurance industry has traditionally strenuously resisted outsourcing.

Blue Cross and the other medical insurance providers should provide a high-potential market. EDS does the platform systems operations for Blue Shield of California, yet there had been no recorded outsourcing contracts in that segment of the market prior to the EDS win. Other Blue Shield contracts covered only processing services.

7. State and Local Government

The state and local government marketplace has demonstrated a pent-up need for upgraded and enhanced systems as obsolete systems break down under the increased requirements placed upon them by the demand for more services. The IT budgets of most states are suffering from the same restrictions and shortages as the federal government. There are substantial awards being made at the state level to such vendors as EDS, ACS, CSC and SHL Systemhouse.

8. Federal Government

The federal government industry sector has long been the "big leagues" for systems integrators and outsourcing vendors. This market had the largest contracts with the longest durations. The major outsourcing vendors dominated the market because the stakes were so high. In addition, the rules of engagement were unique, since federal procurement policies dictate very different buying practices from the commercial market.

B
Market Growth

Exhibit II-1 summarizes how the outsourcing market, represented by the eight vertical industries reviewed, has grown. In the aggregate there is a very healthy growth pattern; INPUT expects the CAGR to reach 17%. INPUT's full market analysis report discusses this in detail. The pattern for each of the eight vertical industries is discussed in Chapter III of this report.

EXHIBIT II-1

Representative Contract Award Values, 1989-1991

Year	Number of Contracts	Value ($M)
1989	22	1,275
1990	64	4,050
1991 (to 10/91)	57	10,572

The number of contracts identified actually drops in the table, but since this represents only contracts reported for the first nine months of 1991, the number still shows an upward trend. The value of these contracts has more than doubled, however, indicating that the individual contracts are being let for a higher life-cycle value.

C

Major Vendors' Market Strategy

Exhibit II-2 illustrates the variation in penetration by vertical market for some of the most active outsourcing vendors.

The following discussion profiles the activity of eight major vendors. The number of contracts indicates how active they are and how forthcoming they are with awards announcements. Most vendors only issue releases about their major contracts, and many prefer to refrain from talking about the value of the contract.

1. EDS

EDS holds the largest market share (14% of 1990 revenue). This reflects three factors:

- EDS has been in the outsourcing business for 29 years.
- EDS has negotiated some of the largest contracts held in the industry, such as the Continental Airlines and Enron Corp. contracts.
- EDS is active in ten vertical industries.

EXHIBIT II-2

Industry Penetration of Vendors

	Bnk	DM	PM	Ser	Ins	Hlth	Fed	S/L	Ret	Com	Oth
EDS	x	x	x	x	x	x	x	x	x	x	
IBM								x	x		x
Andersen		x	x			x					
CSC		x			x		x	x	x		
Genix		x	x								
Power			x			x					
ACS						x		x	x	x	
Systematics	x										

The list of sample contracts illustrates a few elements of EDS' strategy.

- EDS favors long-term contracts of 10 years or even more.
- EDS assumes responsibility for applications development whenever possible. In the Continental and the National Car cases, access to the resulting software was a key element of the negotiations.

2. IBM (ISSC)

IBM recently emerged as a force in the market with the formation of the Integrated Systems Services Corporation (ISSC).

It held numerous outsourcing contracts prior to that time. A new focus has been placed on the aggressive pursuit of the services business. The early results have been positive, and INPUT expects IBM to stay in the market.

3. Andersen Consulting

Andersen Consulting emerged as an early successful participant in the outsourcing market but more recently has seen a slowdown of activity. Management has stated plans to de-emphasize the data center operations portion of outsourcing and concentrate on the areas it knows best—the applications software development and maintenance portion.

4. CSC

CSC was included as one of the highlighted vendors because of a recent milestone win at General Dynamics and its major outsourcing activity in the past, which was concentrated in the federal and state and local government vertical industries.

CSC has found niches in which it operates well, such as the management of medical claims processing. It should be able to leverage that experience with other prospects.

Four other vendors are profiled in this report. They are:

- The Genix Group
- Power Corporation
- Systematics
- ACS Commercial Services

The first three of these vendors specialize in one or two vertical industry markets. ACS has a broader base and is expanding rapidly after only three years in existence.

The vendors profiled in this analysis represent the leaders in the market and a representative sample of vendors that have shown strength in smaller niches or show signs of expanding their scope. This review is based on a sampling of contract data, not a complete set.

D
Conclusions

As the market evolves, certain trends and patterns emerge, which are summarized in Exhibit II-3.

EXHIBIT II-3

Conclusions

- Platform operations becoming commodity market
- Applications operations facing resistance
- Multivendor operations emerging

- The platform operations market is becoming more of a commodity market, where vendors will have a hard time differentiating their product from that of others. A price war may already be under way here.

- Applications operations continues to be the outsourcing option promoted by most vendors. Many prospects are, however, still reluctant to turn over that much control to a vendor.

- Very few vendors have the capability of providing all potential outsourcing services to the client, from platform operations to desktop services. When the need arises, clients have entered into separate agreements with several vendors to provide the full range of services. The larger vendors are forming alliances or acquiring assets to address this need.

Outsourcing vendors will evolve in response to market demands and according to a growth strategy deemed appropriate by management. INPUT expects the market forces to be the more important of those two drivers. Any analysis that correctly identifies market trends and changes will provide great strategic value to marketing and sales executives alike.

E
Recommendations

A set of recommendations based on user motivations and vendor strategies emerges from this review of major awards in the last three years. These recommendations are summarized in Exhibit II-4.

EXHIBIT II-4

Recommendations

- Be prepared to assume risks
- Complement capabilities with alliances
- Expect longer, larger contracts
- Look for more than processing operations

More and more the vendor must assume substantial risks in order to close the deal with the prospect. This has become a standard operating practice with many outsourcing vendors, and helps them differentiate themselves from the competition.

The outsourcing market has reached the level of maturity in which all viable vendors must assess the risks involved in each proposed deal realistically and be ready to turn some down, if the client has a high probability of failure.

Vendors can address the risk while enhancing their own position in the marketplace through alliances. They should focus on other participants in the market who can complement the primary vendor's resources. The primary motivation is, indeed, the capabilities enhancement, but a secondary benefit is to share the risk with another vendor.

The move to larger contracts seems to be accelerating. General Dynamics, Continental Bank and United Technology represent three recent examples of very large contracts generally awarded for long terms, at least ten years. As the trend moves toward including applications operations, network management and desktop services, the value of awards will increase further.

The platform operations portion of the entire outsourcing equation is likely to become a commodity priced item. There will be increasing need for each vendor to differentiate itself from the competition, either by industry expertise or software availability. The platform vendor can enhance its position most rapidly by forming alliances. Acquiring complementary assets is a viable, though more costly, solution.

In summary, the outsourcing market continues to require more sophisticated approaches as it expands and matures. Vendors have to assess risks more carefully. They need to manage their own assets and those of their alliance partners effectively. Finally, they must recognize the need to have financial resources in place that allow them to acquire the client's assets, when required. Successful outsourcing vendors will have good answers for these and other market challenges in the coming year.

III

Industry Analysis

Eight of the fifteen vertical industries monitored by INPUT had sufficient activity in the recent past to warrant analysis and inclusion in this data base. Other awards are being tracked as they occur in other industries, but these eight have either a large amount of activity, as in banking, or a significant set of awards, as in the retail and business services vertical industry markets.

A
Banking

The banking and finance market has been historically the most receptive to and the most successful for outsourcing vendors.

The reason for the relative success of outsourcing in the banking community relates to a number of factors. First, bankers are familiar with the concept of outsourcing. They were outsourcing credit card processing, check collection and other services before anyone coined the term *outsourcing*. Thus, the concept of turning over an entire specialized operation to an external vendor is not new to most bank executives.

Second, the banking community is a close-knit community whose executives are acutely aware of what their competitors are doing. When one bank is considering outsourcing, it can obtain many referrals by simply picking up the phone. The prospect bank does not have to rely on the vendor for referrals. Rather, it simply calls an associate in a bank that has already outsourced with that same vendor to get the proper perspective on that vendor's performance.

Third, the banking community, in particular the savings and loan sector (and now the commercial sector), is experiencing serious financial setbacks. This is an environment in which the reduced capital investment and operating expense reductions promised by the outsourcing vendors fall on receptive ears.

It is no wonder, then, that three phenomena have developed in the banking market:

- Major vendors, such as IBM and EDS, have garnered a large number of contracts in this sector.

- Banking specialists, such as Systematics and FIserv, have been successful at outsourcing even though they have concentrated on only one market. Banking is currently the only market mature enough to permit this.

- Members of the banking community themselves have acted as outsourcing vendors. Mellon Bank is currently the only example remaining, now that the operations of Citicorp Information Services have been acquired by FIserv.

Exhibit III-1 lists 46 awards in this industry in descending order of total contract value. There are many large contracts in this market but many more small ones that are not recorded here.

EXHIBIT III-1

Banking Contracts Ranked by Value

Client	Value ($M)	Vendor
First City Bancorp (TX)	600	EDS
Continental Bank (Chicago)	450	IBM
First Fidelity (NJ)	450	EDS
First American Bankshares	400	Perot
Signet Bank	300	EDS
NCNB Bank	200	Perot
Riggs National Bank	160	IBM
Merrill Lynch	150	MCI
Comdata Holdings	120	IBM
Federal Home Loan of San Francisco	80	Systematics
First Tennessee Bank	80	IBM
Bankers Trust	40	Northern Telecom
Hibernia National Bank	40	IBM
Bank South	30	IBM
Dollar Dry Dock	30	Mellon
Commerce Bancshares	25	IBM
First American National Bank	25	IBM
Southeast Banking (Miami)	25	Mellon
Orange County Federal Credit Union	22.5	EDS
Meritor Savings	20	EDS
Republic Bank	16	Systematics
Bank of El Paso	15	EDS
Motorola Credit Union	15	EDS
Federal Home Loan of Milwaukee	13	FIserv

EXHIBIT III-1 (CONT.)

Banking Contracts Ranked by Value

Client	Value ($M)	Vendor
River Forest BankCorp	13	EDS
Community Federal Savings & Loan	12	FIserv
Texas Credit Union	12	EDS
Prudential Bank and Trust	10	Systematics
Federal Home Loan of Seattle	8	EDS
Integra Bank	8	Systematics
Washington State Employees Credit Union	8	EDS
First Los Angeles Bank	7	Systematics
Denver Credit Union	6	EDS
Bank of A. Levy	5	Systematics
California Federal Bank	5	Systematics
Chase Manhattan of CT	5	IBM
Guaranty Federal Savings	5	Systematics
District Government Employees Credit Union	4.5	EDS
Los Angeles County Teachers Credit Union	4	EDS
San Francisco Federal Savings & Loan	4	Systematics
Columbia Savings & Loan (Irvine)	3	Systematics
Terre Haute First National Bank	3	Systematics
Citizen Bank & Trust	2	Systematics
Resolution Trust Corporation	2	FIserv
New Jersey Savings Banks (3)	1.2	NCR
Banknorth Group	1	Systematics

Exhibit III-2 summarizes the same 46 awards by grouping them according to date of contract award, from 1989 to 1991. It is obvious that the total number of contracts is growing. The average size of the contracts is also getting larger, as the market matures and confidence builds among bankers.

EXHIBIT III-2

Banking Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	7	115
1990	23	1,090
1991 (to 10/91)	16	2,229

Finally, Exhibit III-3 graphically illustrates vendor participation in this market. It groups the 46 reported contracts by vendor.

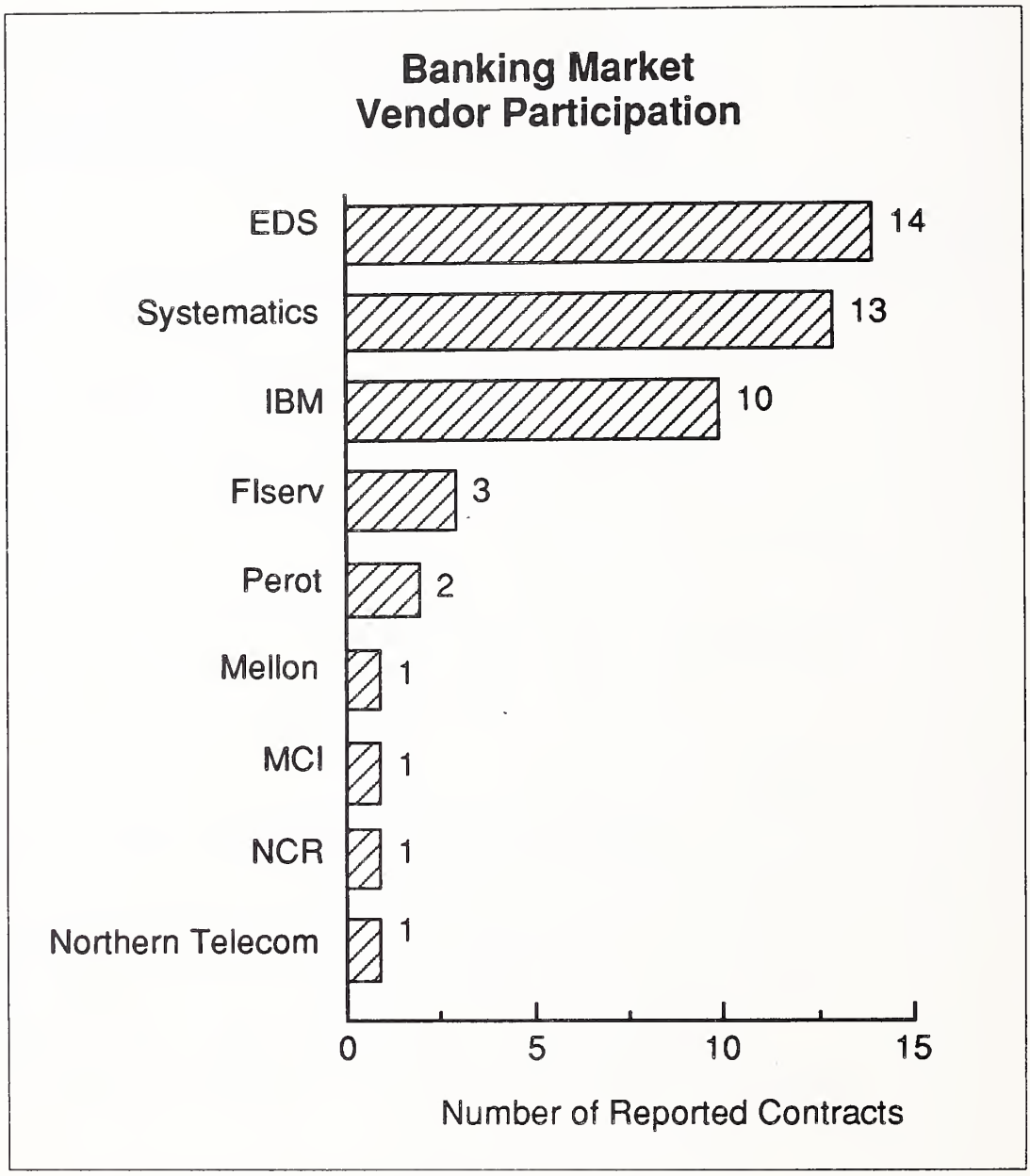
Though many other contracts are not recorded in this data base, the banking data is representative of the whole market, and most of the active participants are included. EDS, Systematics and IBM are really the market leaders, as the exhibit shows. Systematics has many more contracts that are not included, some of them in existence for many years and many of them small.

Note that some networking activity has begun in the banking vertical market. MCI and Northern Telecom are both managing networks for banks in separate outsourcing contracts. Some of the larger outsourcing contracts also include network management.

Generally speaking, long-term contracts (greater than five years) represent highest value contracts. The following mix of contract lengths exists in our representative sample:

- Less than five years 3
- Five years 25
- Greater than five years 18

EXHIBIT III-3



INPUT expects this vertical market to continue to provide substantial prospects for outsourcing vendors. There may be some further consolidation in the market but the strong vendors are likely to stay strong. Industry observers can expect to see some of the emerging outsourcing trends, such as applications management and desktop services, appear first in the banking market. In spite of the inherent conservatism of organizations in this sector, it continues to set the tone for the entire outsourcing market.

B
Discrete Manufacturing

The more aggressive firms in the discrete manufacturing vertical market have traditionally been receptive to outsourcing of their systems operations. Yet this sector also includes many firms that are extremely conservative and even backward in their approaches to information systems. Many firms in this industry have also maintained a distinction between business operations and shop floor operations, leading to internal competition for processing equipment and information technology products.

This is changing, as more firms are coupling their shop floor information with data in their business operations to improve operating efficiency and responsiveness to customers. The trend should help increase the demand for outsourcing vendors, who understand the merging of the two streams of information and who have software and experience that can be applied to solve these problems.

Exhibit III-4 is a list of representative contracts in order of descending contract value. The list is obviously topped off by the megacontract that CSC recently won from General Dynamics, which represents the largest single outsourcing contract to date. It is a milestone both in size and in terms of the number of people transferred to the vendor staff. It is significant also in that the large percent of this staff represents applications programming resources. Thus, the industry has a significant applications platform management contract which will become the new milestone for some time. It replaces Kodak, which, though much smaller, represented outsourcing of all operations, with the specific exclusion of applications software management.

The list also includes a few contracts which could be called "captive" contracts. PRC's contract with Black and Decker, its parent corporation, and EDS' contracts with ASK Computer Systems and Hitachi Data Systems—firms in which EDS has made a significant financial investment—are examples of this phenomenon. The classic example of a captive contract, EDS' processing for General Motors, is not even included in this data base. It is so large and such a special case that it would skew interpretation of the data.

Other anomalies in the list include the processing Litton does for BICC Cables and that done for Libbey-Owens-Ford by Genix. Both are operating through a third-party applications management vendor (CTM for Libbey-Owens-Ford and ISI for BICC). Who is the prime vendor? INPUT has chosen to include the processing vendor, though both derive revenue from the arrangement.

EXHIBIT III-4

Discrete Manufacturing Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
General Dynamics	3,000	CSC
United Technology	1,000	IBM
American Standard	500	Genix
Eastman Kodak	500	IBM
McDonnell Douglas (pending)	250	EDS
Cummins Engine	150	EDS
Cummins CS	90	EDS
ASK Computer Systems	53	EDS
Eastman Kodak	50	DEC
Eastman Kodak	50	Businessland
AM General (LTV)	30	Genix
Ford Motor Company	30	Unisys
CTM/Libbey-Owens-Ford	25	Genix
Black & Decker	20	PRC
Hitachi Data System	20	EDS
Duracell, Inc.	11	Genix
Meredith Corp.	10	EDS
ISI/BICC Cables	5	Litton
ISI/Bridgeport Brass	5	Litton
Bailey Controls	4	Genix
Pneumo Abex Corp.	3.5	SHL
Plessey Electronics	2.4	Genix
Combustion Engineering	2	Power

Exhibit III-5 presents the same contracts grouped by award year. It includes American Standard, the grandfather of outsourcing awards in the discrete manufacturing market. It ends with United Technologies, a contract still not awarded to IBM as of this writing but very likely to be. It is especially significant because United Technologies has for such a long time been a bastion of resistance to outsourcing.

EXHIBIT III-5

Discrete Manufacturing Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	5	542
1990	12	954
1991 (to 10/91)	6	4,295

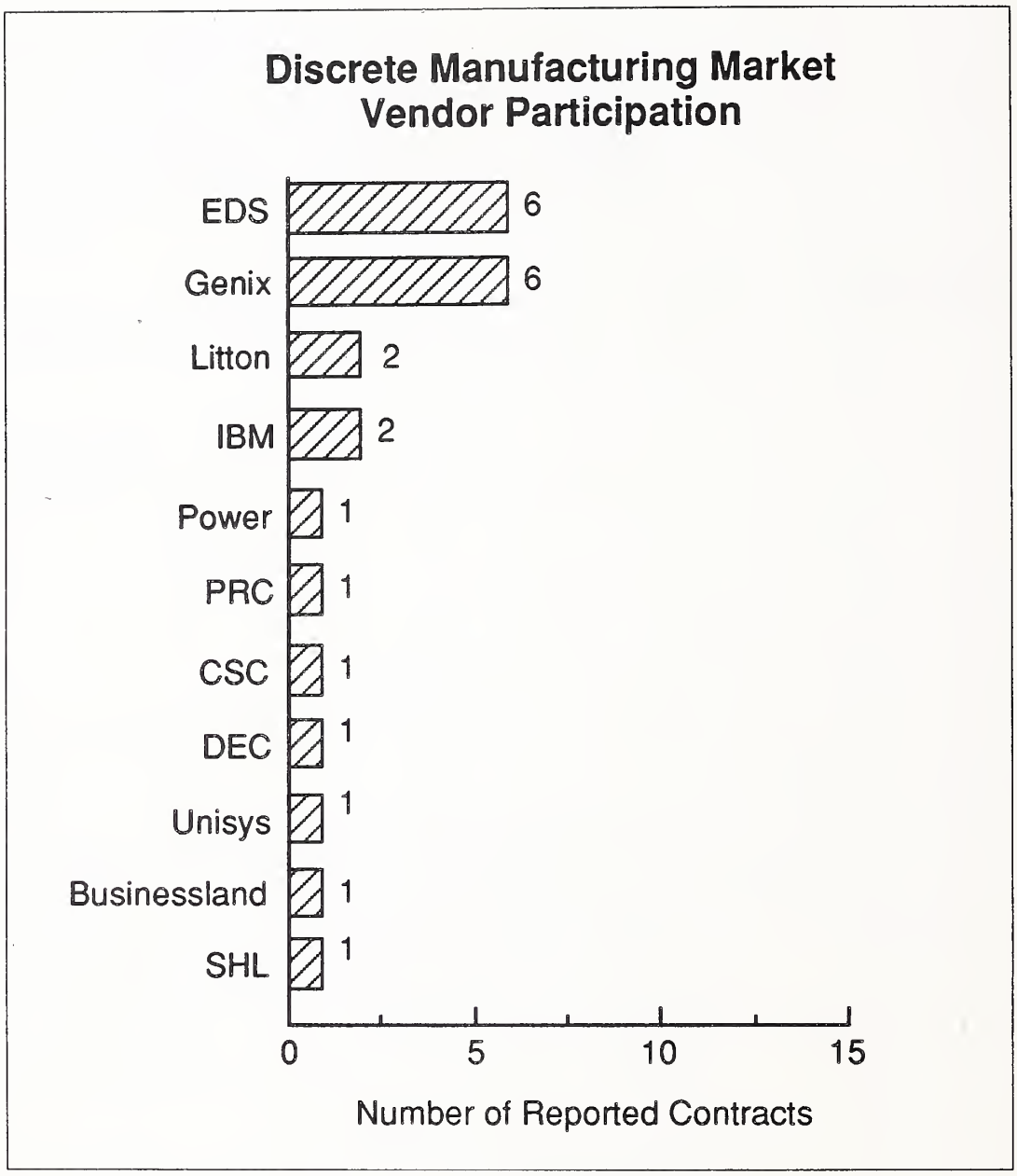
Exhibit III-6 lists the major vendors in the discrete manufacturing market. This representative set shows Genix and EDS in the lead, but also demonstrates that many vendors are participating in this vertical industry market. Some of them, such as CSC and Unisys, are only represented by one contract. They can, however, be expected to continue pursuit of opportunities in this market. Businessland is on the list by virtue of its contract with Kodak. Outsourcing does not seem to be a prime target for Businessland, even as part of the JWP Group.

The network management area has experienced little activity, except for the DEC/Kodak contract. However, as large organizations such as automobile manufacturers start shifting their distribution of data from remote processing vendors to VSAT networks, other such high-volume transmission methods will likely increase.

Looking at the contract lengths found in the sample of contracts in this market sector, we note that many are in the conservative five-year range. Very few are in the less-than-five-year category. The breakdown is as follows:

- Less than five years 2
- Five years 13
- Greater than five years 8

EXHIBIT III-6



There has been recent strong activity in this market, such as the CSC/GD deal and the pending IBM/UT deal. These could well start a bandwagon effect as more firms follow the lead of these two giants and choose to outsource. To paraphrase the old Charlie Wilson (former CEO of General Motors) expression: "What's good for General Dynamics is good for the country."

C
Process Manufacturing

The process manufacturing industry has provided good candidates for outsourcing vendors, particularly in the oil and gas processing subsector of the market. Yet some of the largest and most advanced firms in this sector, the pharmaceutical and food processors, have not yet jumped on the outsourcing bandwagon. It may be that the more financially troubled firms are first to turn to outsourcing. That was indeed the case with the oil processing sector of this industry in the recent past, though this situation has now been reversed. The pharmaceutical industry, in particular, has enjoyed substantial profits, lessening the need to consider outsourcing.

Exhibit III-7 lists the representative contracts in this industry in descending contract value. There are no megacontracts in this sector yet, despite the presence of some very large companies that are good outsourcing candidates.

The list includes mostly contracts that are platform operations outsourcing contracts. Freeport McMoran is an exception. EDS has responsibility for both platform operations and applications software development and maintenance. The list also includes the only disappointed customer encountered in the outsourcing community. Penrod Drilling turned over all processing to EDS and pulled it back after the first year of the contract. A source in the company stated: *"We tried outsourcing with EDS and found them to be too expensive. We are a private company and feel managing our own operations is part of that."*

Signetics represents the first penetration into the electronics industry. This should be a prime target for outsourcing since many of the firms are finding it difficult to maintain decent profit margins in that sector.

Exhibit III-8 presents an overview of process manufacturing outsourcing contracts in the past three years. It illustrates that the process manufacturing industry was an early participant in the outsourcing market and continues to be a good source of prospects for vendors. However, the pace slowed in 1991. The date used to assign these contracts to a year of origin is usually the actual date the contract began when that is available. Otherwise, the news release date or the date of the letter of intent was used. This may shift start dates by as much as four months but no more.

EXHIBIT III-7

Process Manufacturing Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
Emron Corp.	750	EDS
Sun Refining and Marketing	175	Andersen
Signetics Corp.	100	EDS
Wheeling Pittsburgh Steel	70	Genix
Maxus Energy	60	Andersen
Westmoreland Coal	35	EDS
PPG Industries	34	EDS
Hunt Energy Corp.	28	EDS
Permian Corp.	20	EDS
Placid Oil	20	EDS
Cyprus Minerals	16	EDS
Earle M. Jorgensen Company	16	DEC
American Ultramar	15	Power
American Tobacco	14	Genix
National Steel	14	Genix
Trinity Industries	13	Power
Dial Company	10	Andersen
Beacon Oil	8	Power
Freeport McMoran	5.5	EDS
Apache Corp.	5	Power
Imperial Oil	5	DEC
Penrod Drilling	3	EDS
Santa Fe Mineral	3	Power
Ocean Drilling and Exploration	2.5	Power
Loffland Brothers	2	Power
Petro Canada	2	SHL
ASEA Brown Boveri	1.5	Power

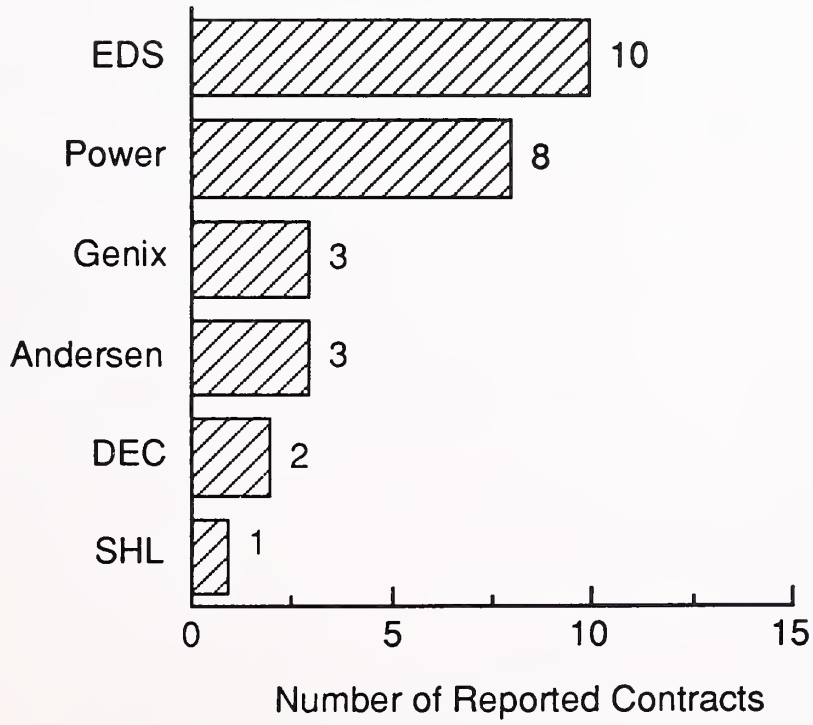
EXHIBIT III-8

Process Manufacturing Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	5	98
1990	11	1,081
1991 (to 10/91)	11	248

The major vendors are evident when examining Exhibit III-9. Though EDS is the leader again, Power has a number of contracts in this vertical industry also. Since both firms are headquartered in Dallas and the majority of oil companies have a strong presence in the same area, it could be read as an indication that it pays to be near your prospects. Genix has only three contracts in this representative set, but has manufacturing expertise to bring to the table and should continue to develop other prospects in this industry, particularly in the non-petroleum sectors. Andersen, also with three contracts, seems to be reconsidering its position and is less likely to make any major inroads into this industry.

EXHIBIT III-9



The contract duration is spread over a broader range of terms in this market. Even some of the larger contracts will last only five years:

- Less than five years 7
- Five years 10
- Greater than five years 10

INPUT's representative set of contracts shows a slowing of 1991 activity in Exhibit III-8. INPUT's Market Analysis Program report on outsourcing projects the compound growth rate for outsourcing/systems operations in the process manufacturing industry at 20%, slightly above the overall market rate of 18% for the period 1991 to 1996. This reflects the current strength of the vendors in that market and the anticipation that some large contracts will emerge in this market in the next few months.

D
Retail Distribution

Until recently, organizations in the retail distribution industry showed little enthusiasm for outsourcing. There are a large number of retailers who, when interviewed, indicated that their businesses were too specialized to be turned over to vendors. Disappearing profit margins and the aggressive sales activities of IBM (ISSC) in the last year have begun convincing some firms that outsourcing may solve some of their problems.

Exhibit III-10 presents a list of representative contracts in this vertical industry. The oldest contract in this set is the Southland contract held by ACS Commercial Services. It was the first large contract for ACS and included not only the total assumption of Southland's processing assets, but also the building in which it was housed. ACS has since leveraged this processing capacity and staff to advantage in other outsourcing contracts such as the one with Builders' Emporium.

IBM has only recently entered this market but has made its presence felt by scoring three wins within a month: two with supermarket chains and one with Zale Corp., the troubled drug retailer. This last one should be watched because IBM may still lose if Zale cannot pull itself out of the dire financial straits it is in. It demonstrates the risk inherent for a vendor when the outsourcing decision is totally based on a financially strapped client's need to dramatically cut costs.

EXHIBIT III-10

Retail Distribution Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
Zale Corporation	286	IBM
Southland Corp.	100	ACS
Supermarkets General	75	IBM
Cullum Companies	60	IBM
RJR-MacDonald	45	EDS
Builders' Emporium	20	ACS
Pearle Vision	20	CSC
Addis and Dey	15	Litton
Brooks Brothers	12	Litton
Garfinkels	5	Litton

Exhibit III-11 lists the same contracts grouped by award year. Note that no contracts were even identified in 1989. As mentioned earlier, the Southland contract is the oldest and the IBM contracts the most recent. Litton has had some success also, mostly with firms that got into trouble because of the financial woes of Robert Campeau.

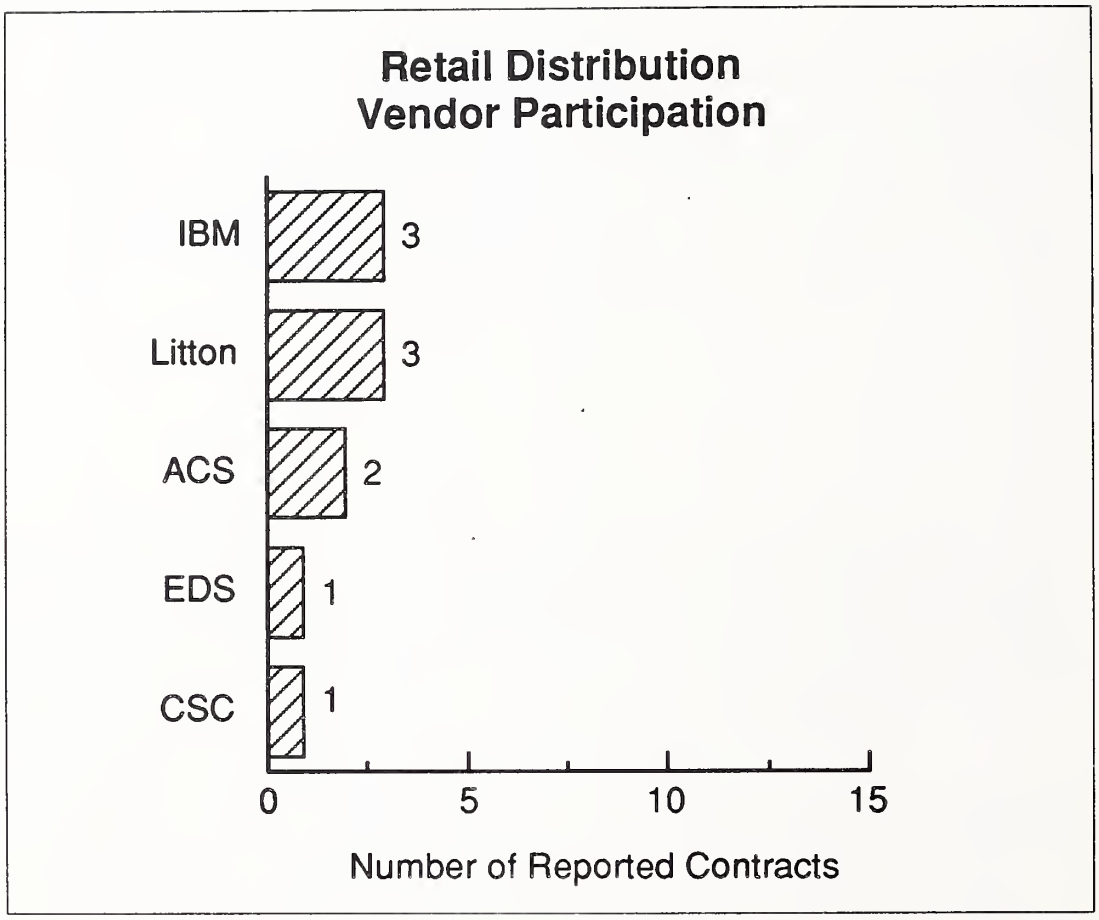
EXHIBIT III-11

Retail Distribution Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	0	0
1990	6	172
1991 (to 10/91)	4	466

Exhibit III-12 illustrates that no vendor currently dominates this industry. Those that have been in it for some time, Litton and ACS, seem to have slowed down in activity. However, the newcomer, IBM, is doing well and will probably score other wins by virtue of its presence as a strong hardware vendor in this market sector.

EXHIBIT III-12



Retail distribution is an industry with significant communications needs, since most retailers must manage multiple locations and need to interface with their suppliers as well. To date, this has not led to network management activity, however, because EDI has been the route most of these organizations have chosen to meet this requirement.

The contract mix, in terms of length of contract, is interesting to note. The following breakdown for these representative contracts probably typifies this industry as a whole:

- Less than five years 1
- Five years 4
- Ten years 5

This is one of the few industries where long-term contracts may predominate, though by a narrow margin. INPUT believes this results from IBM's activity in this market.

INPUT expects this market to grow at a 24% CAGR for the forecast period 1991 to 1996, primarily because of the continued high rate of activity of IBM and the currently low base of revenue.

E
Business Services

Only a few companies in this vertical industry have awarded contracts so far. Exhibit III-13 illustrates that EDS is the only identified vendor in this market. This industry is a diverse mix of firms whose services range from providing entertainment and assistance to consumers to providing consulting to business firms. As a result, it is a difficult market to penetrate.

EXHIBIT III-13

Business Services Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
Continental Airlines	2,100	EDS
National Car Rental	500	EDS
Hospitality Franchise System	88	EDS
Capitol Records	35	EDS
Loews Anatole Hotel (TX)	15	EDS
Marine Spill Response	5	EDS

When grouped by award year, as in Exhibit III-14, it is apparent that EDS has had more success recently. Its strategy has become clear. The Continental Airlines, National Car and Hospitality Franchise contracts all involve acquisition or joint development of reservations software and related information technology. In all cases, EDS retains rights to that technology, which it can then leverage. Look for more activity from EDS in the hospitality subsegment of this vertical industry.

EXHIBIT III-14

Business Services Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	1	35
1990	1	15
1991 (to 10/91)	4	2,693

INPUT expects EDS to dominate the hospitality portion of this industry. IBM is poised to enter, also. There are rumors that Marriott may outsource to IBM. No other vendor seems likely to make inroads here, even though the financial picture in this industry looks grim and several organizations could benefit from an outsourcing arrangement.

F
Insurance

The insurance industry has traditionally been the bastion of resistance to outsourcing. The most prominent resistance comes from the CIO at Metropolitan Life. He publicly argues on many occasions that his internal staff can implement the same methods and procedures an outsourcing vendor does to reduce costs and improve efficiency. With an IS department the magnitude of that at Metropolitan Life, that may be so. However, INPUT still sees potential in that marketplace. Exhibit III-15 demonstrates that EDS, at least, has found the market productive.

EXHIBIT III-15

Insurance Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
Blue Shield—CA	120	EDS
Robert Plan Corp.	100	Perot
North American Life	97	CSC
New York Life	75	Cybertels
Whitehall Insurance	35	EDS
Security Mutual Life—NY	24	EDS

Blue Cross and the other medical insurance providers should provide a high-potential market. EDS provides platform systems operations for Blue Shield of California, yet there were no recorded outsourcing contracts in that segment of the market prior to the EDS win. The other Blue Shield contracts covered only processing services. In fact, the yearly totals grouping in Exhibit III-16 shows that there was little activity prior to 1991.

EXHIBIT III-16

Insurance Industry Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	0	0
1990	2	59
1991 (to 10/91)	4	392

The small sample of contracts in this market makes it more difficult to develop industry-specific generalities. However, the data shows that all the identified contracts have a minimum duration of ten years, with two of them stretching to twelve years. This is the only vertical industry in which this was observed.

The insurance industry is showing many of the signs of an industry ready to increase its receptivity to outsourcing. With some of the same problems as the banking community, even its innate conservatism, it should eventually react to its financial woes in much the same way. There is potential for large contracts in an industry that is known for its large investment in processing capacity and staff. Midsize companies will likely be the first good prospects for outsourcing vendors in this market.

G

State and Local Government

The state and local government marketplace has been issuing mixed signals to outsourcing vendors. There is a pent-up need for upgraded and enhanced systems. Obsolete systems are breaking down under the increased requirements placed upon them by the demand for more services. The IT budgets of most states are suffering from the same restrictions and shortages as the federal government and the other segments of the public revenue-based budgets. Yet there seem to be some good awards being made at the state level.

It is more difficult to determine if the local government entities are also outsourcing, because the smaller size of these awards keeps them out of the press and local vendors get a larger share of these. The large municipalities, such as New York and Chicago, behave more like the states and counties in their buying patterns and are good candidates for outsourcing.

Exhibit III-17 lists some awards of significant size at the state, county and local level. The awards can be large when a large buying entity is involved. Many of the systems are for human services-related operations, usually involving processing data gathered from many locations, and distributing case histories across the state.

EXHIBIT III-17

State and Local Government Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
New York State—Medicaid	149	CSC
State of Georgia—Medicaid	78	EDS
New York City Transit	50	CSC
MD Benefits System	25	ACS
Texas Comptrollers Office	20	EDS
State of Indiana—Medicaid	20	EDS
Los Angeles County	15	ACS
State of Texas	15	EDS
City of Chicago Parking Authority	10	EDS
Massachusetts Registry of Motor Vehicles	9	EDS
California State Unemployment Commission	2.5	SHL
Michigan Department of Social Services	2.5	SHL

EDS and CSC seem to be penetrating the Medicaid servicing area. More contracts can be expected to develop here as these two firms leverage past successes.

Exhibit III-18 lists the same contracts grouped by year. Some vendors have been active in this vertical market for some time. These vendors should be able to leverage the systems they manage in one state to apply the same expertise to another state. However, except for the Medicaid situation, that pattern has not yet emerged. One vendor commented that it is not easy to transfer a system developed in one state to another state without a major re-engineering effort.

EXHIBIT III-18

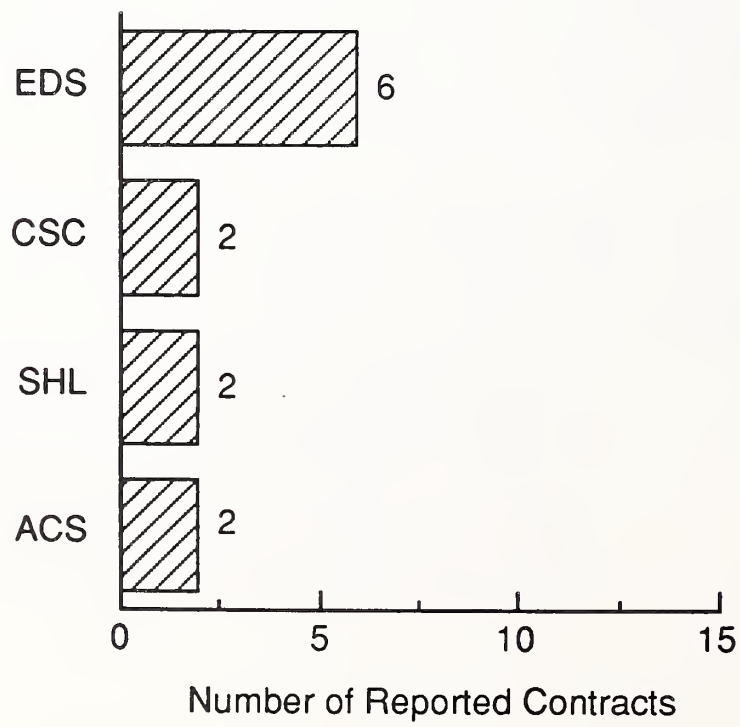
State and Local Government Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	2	35
1990	4	63
1991 (to 10/91)	6	199

Exhibit III-19 demonstrates the variety of vendor activity in the state and local government sector. EDS still has the lion's share but ACS Commercial Services, CSC and SHL Systemhouse have been able to penetrate this market also. INPUT projects that firms selling software and services to state and local governments, such as SHL and SCT, are well positioned to begin providing outsourcing services to these entities. They will become more active in the next year.

EXHIBIT III-19

State and Local Government Vendor Participation



The pattern of contract duration in this vertical industry differs somewhat from most other industry sectors. There are few short-term contracts. Only one is for less than five years. Those greater than five years are of six or seven years' duration. The contract pattern is listed below.

- Less than five years 1
- Five years 6
- Greater than five years 5

There appears to be significant potential in this market because so many entities need to perform the very same tasks. A tendency exists in many states to use system integrators to implement and upgrade the required system and then have either the internal staff or the vendor operate it. This has a dampening effect on the total outsourcing potential, because revenue from opportunities that start as SI opportunities is counted as systems integration revenue by INPUT. This phenomenon does provide opportunities for vendors with strong systems integration capabilities. Two examples come from Boeing Computer Services, which operates a supercomputer center for the State of Alabama and a communications network for the Commonwealth of Pennsylvania.

H

Federal Government

The federal government industry sector has long been the "big leagues" for systems integrators and outsourcing vendors. This market had the largest contracts with the longest durations. The major outsourcing vendors dominated the market because the stakes were so high. In addition, the rules of engagement were unique, because federal procurement policies dictate very different buying practices from the commercial market.

Some of this is changing, as illustrated in Exhibit III-20. There are still very large contracts being awarded in this market, but they are now dwarfed by such large commercial contracts as General Dynamics and Continental Airlines. The dominant vendors are still the large outsourcing firms, but other successful government contractors, such as AMS and Martin Marietta, are also providing outsourcing services to the federal government.

Note that INPUT has chosen to include the two contractors for FTS 2000 in the federal government telecommunications contract list. This is because of the large size of these contracts and the large percentage of expenditures devoted to operations.

EXHIBIT III-20

Federal Government Contracts Ranked by Value

Client	Contract Value ($M)	Vendor
U.S. Department of Housing and Urban Development	525	Martin Marietta
U.S. Postal Service	270	SHL
FTS 2000	270	AT&T
NASA Ames Research Center	220	CSC
FTS 2000	180	U.S. Sprint
Defense Communications Agency	55	EDS
U.S. Department of the Interior—MMS	54	AMS
U.S. Small Business Administration	45	EDS
Environmental Protection Agency	30	CSC
National Oceanic and Atmospheric Agency	26	EDS
NASA Langley Research	20	Unisys
U.S. Treasury Department	14	SHL
U.S. Department of Justice—Immigration	6	EDS

Exhibit III-21 lists the same contracts grouped by year of award. It is obvious that there are contracts that have been in existence for some time. Yet there is a regular stream of opportunities emerging as agencies continue to upgrade their systems and provide enhanced services to the public.

EXHIBIT III-21

Federal Government Contracts—1989-1991

Year	Number of Contracts	Value ($M)
1989	2	450
1990	5	616
1991 (to 10/91)	6	650

Surprisingly, Exhibit III-22 illustrates that there is room for many vendors in the market. Though EDS still dominates, there are other vendors who have established themselves as contractors to the federal government. These contractors will probably make the difficult transition to commercial markets. CSC has done so and Martin Marietta has recently won an outsourcing contract in the wholesale distribution market.

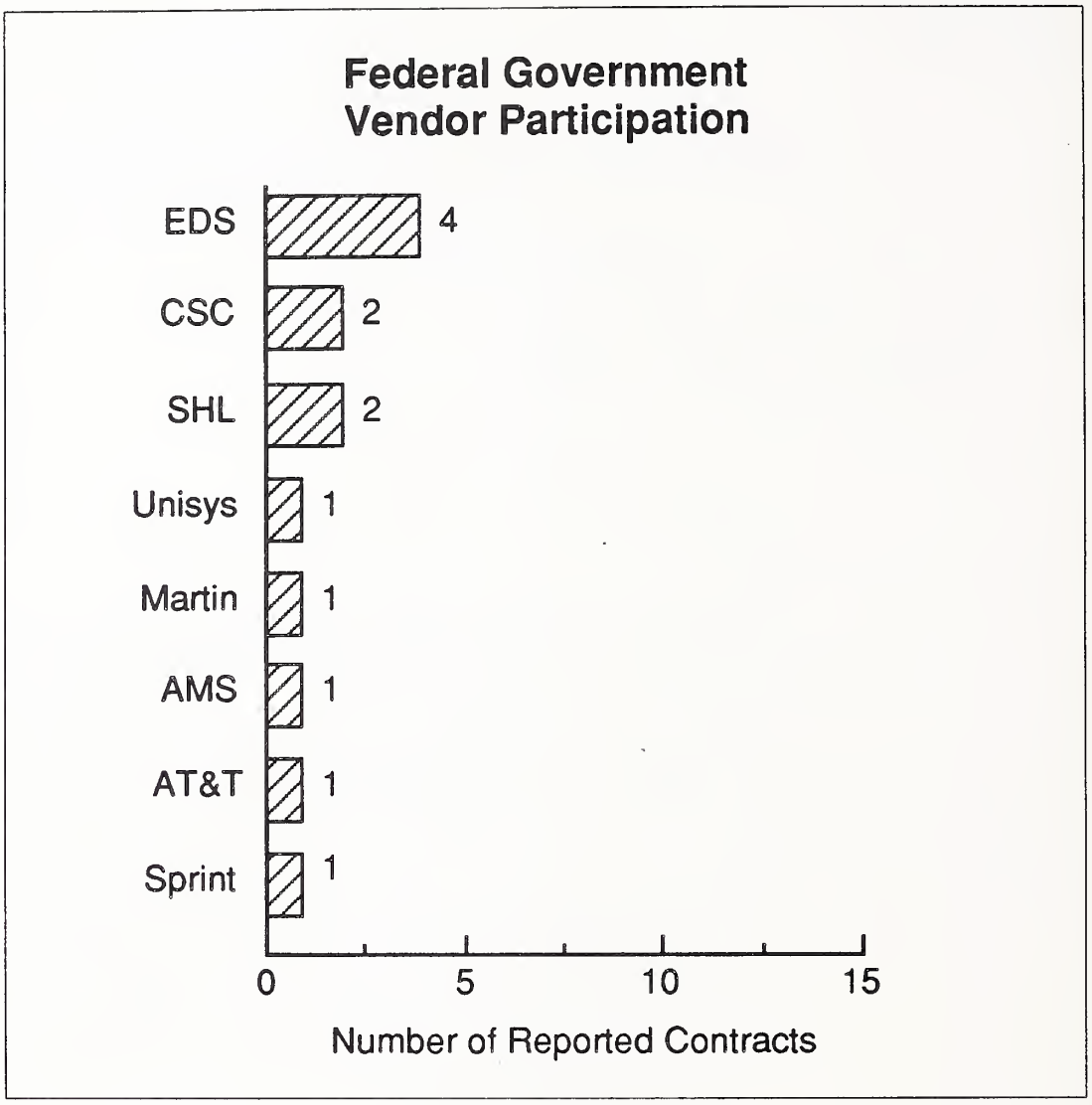
Note that IBM and other aerospace firms are not mentioned in the list. This reflects the fact that many outsourcing contracts begin as systems integration contracts and, thus, do not show up in this sector. In the case of IBM, its federal division was not anxious to pursue outsourcing contracts in the past. That may change in view of the success of ISSC in the commercial market.

The contract length pattern in the federal marketplace is as follows:

- Less than five years 0
- Five years 7
- Greater than five years 6

There are no contracts of less than five years reported. The tendency is for the longest contracts to also be the highest value, though this is not universally true.

EXHIBIT III-22



I
Summary

This sampling of contract awards by vertical industry reinforces the conclusions drawn by INPUT in its market analysis and vendor analysis reports. It also presents the market data in more discrete elements. This is particularly useful for vendors who want to analyze a particular market segment more closely to assess their own entry into the market or change their own strategy toward that particular vertical industry market.

The market has now reached the point of maturity that warrants vendors' tracking contracts that are likely to come up for renewal in the near future. Long a practice in the federal market, where contract information is more readily available, tracking contracts has now become feasible in the commercial market also. Vendors must weigh the merits of hiding their awards from competition against the benefits of publicizing their wins to enhance their image as a primary outsourcing vendor with other prospects. So far, the advantage of gaining additional credibility outweighs the protective strategy.

As discussed further in Chapter V of this report, there is a pattern in the market as a whole that resembles a bandwagon effect. That is, one big award may stimulate other prospects to make the outsourcing decision sooner. By tracking the award pattern in an industry, it is possible to assess the degree of maturity in that submarket and the likely receptivity of prospects to outsourcing as the solution to their IS needs.

The astute observer may find other emerging patterns in this data that are of tactical marketing value. The INPUT presentation of this data provides a service in that it assembles in one place awards data that, though readily available on an individual basis, is much more useful when presented in the aggregate.

IV

Vendor Analysis

INPUT compiles and publishes comprehensive systems operations vendor profiles as part of its Systems Operations/Outsourcing Program. These profiles can be found in Volume III of the binders that are part of that program. An extensive comparative analysis is also prepared as part of that study. The material presented here is fully consistent with what is presented in that volume. It is intended to present a representative set of each featured vendor's contracts as a tool to better analyze the market strategy for that vendor.

This change in perspective provides a tactical tool for each vendor to better address competitors' market activity and develop a parallel or contrasting strategy as appropriate.

This chapter profiles the activity of eight vendors. The number of contracts indicates how active they are and how forthcoming they are with awards announcements. Most vendors only issue releases about their major contracts, and many refrain from talking about the value of the contract. This does make data gathering more challenging and has led to the estimation of the value of many of the contracts based on the user's IS budget and other factors.

A
EDS

EDS holds the largest market share (14% of 1990 revenue). This reflects three factors:

- EDS has been in the outsourcing business for 29 years, starting when it was called facilities management and had much more limited scope.
- EDS has negotiated some of the largest contracts held in the industry, such as those for Continental Airlines and Enron Corp.

- EDS shows activity in a number of vertical industries, as evident in Exhibit IV-1. Note that the number of identified contracts is simply the count of those in the data base and those announced publicly. It does not represent the total set of awards for this vendor or any other.

EXHIBIT IV-1

EDS Industry Penetration

Industry	Number of Contracts
Banking	16
Process Manufacturing	9
Business Services	6
Discrete Manufacturing	5
Insurance	5
Federal Government	5
State and Local Governments	5
Telecommunications	2
Health Services	1
Retail	1

With identified awards in ten vertical industries, EDS continues to capitalize on its existing relationships in many vertical industries. In a market where prior experience within an industry is important, EDS is well positioned to continue its pattern of growth.

Exhibit IV-2 lists a few of EDS' larger contracts to illustrate the breadth of its major contracts and the functions performed for clients.

The table heading abbreviations have the following meanings:

- Plat - Platform operations (processing)

- App - Applications operations (applications software development and/ or maintenance)
- Net - Network operations management
- DT - Desktop services (the management of the PC/workstation inventory, its associated LANs and software, and help desk services)

EXHIBIT IV-2

EDS Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
Continental Airlines	2,100	10	X	X	X	
Enron Corporation	750	10	X	X		
First City Bancorp (TX)	600	10	X			
National Car Rental	500	10	X	X	X	X
First Fidelity Bancorp (NJ)	450	10	X			

The list of sample contracts illustrates a few elements of EDS' strategy.

- EDS favors long-term contracts of 10 years or more.
- EDS assumes responsibility for applications development whenever possible. In the Continental and National Car cases, access to the resulting software was a key element of the negotiations.
- Banks seem more reluctant to turn over software development to the vendor, at least in EDS' case.
- EDS has received some of the largest contracts to be awarded in the outsourcing marketplace to date.

As mentioned elsewhere in this report, EDS is one of the few vendors active in the business services and insurance industries. EDS can be expected to continue its pursuit of a number of major opportunities across a broad range of vertical industries.

B

IBM (ISSC)

IBM has recently emerged as a force in the market with the formation of the Integrated Systems Services Corporation (ISSC). It held numerous outsourcing contracts prior to that time. With the formation of ISSC, a new focus was placed on the aggressive pursuit of the services business. The early results have been positive, and INPUT expects IBM to stay in the market, particularly in light of the announced corporate reorganization. This seems to indicate that more of the company will be modeled after ISSC's independent operating structure.

Exhibit IV-3 illustrates that ISSC has penetrated relatively few vertical industries to date. In fact, many of its contracts—in the banking industry for example—predate the formation of ISSC. However, IBM's presence as a hardware and software vendor in most of the other vertical markets will certainly give it entrees on which to capitalize, as it has in the retail industry.

EXHIBIT IV-3

IBM Industry Penetration

Industry	Number of Contracts
Banking	12
Retail Services	3
State and Local Governments	1
Transportation	1
Utilities	1

ISSC is actively participating in certain vertical industries in which none of the other market leaders have any presence. Transportation and utilities are examples. It can effectively leverage its strong supplier relationships in these less active segments of the market. ISCC may well evolve as the only strong player in those smaller markets.

As might be expected, ISSC is also strong in the banking industry. That industry seems to have enough opportunities for all participants.

Exhibit IV-4 lists some of IBM's major awards. Eastman Kodak tops the list and has gotten extensive exposure, because the contract was a milestone in the industry at the time it was awarded. It is worth noting, however, that Kodak chose to outsource all but the applications development activity, but did so with three different vendors. The asterisks in the chart represents that fact. This pattern has not been repeated often in the market since that time.

EXHIBIT IV-4

IBM Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
Eastman Kodak	500	10	X		*	*
Continental Bank	450	10	X	X		
Zale Corp.	286	10	X			
Riggs Bank	160	10	X			
Comdata Holdings	120	5	X			

From a review of these contracts, it is evident that ISSC is also finding reluctance in the banking community to let it assume responsibility for applications development. Even in the case of Continental Bank, ISSC is doing applications operations outsourcing that includes applications software responsibility. However, Ernst & Young functions as the subcontractor on-site doing the work.

There may be actual reluctance on the part of many clients to turn everything over to IBM through ISSC, though EDS seems to have overcome that problem on many of its contracts. ISSC does intend to assume applications operations responsibility whenever possible, so this pattern should change as ISSC matures as a vendor in the outsourcing market.

C

Andersen Consulting

Andersen Consulting emerged as an early successful participant in the outsourcing market, but more recently has seen a slowdown of activity. Management has stated plans to de-emphasize the data center operations portion of outsourcing and concentrate on the areas it knows best—the applications software development and maintenance portion.

Exhibit IV-5 shows that Andersen has not yet been able to capitalize on its strong consulting presence in a wide range of vertical industries. Note that Andersen has little presence in the banking community. Its recently announced alliance with Systematics is obviously a recognition of this fact, though it is likely to result in systems integration and consulting engagements rather than outsourcing contracts.

EXHIBIT IV-5

Andersen Consulting Industry Penetration

Industry	Number of Contracts
Process Manufacturing	3
Discrete Manufacturing	1
Health Services	1

Comments from users and prospects indicate that Andersen has a problem when it recommends itself as an outsourcing vendor to a client during a consulting engagement. Several users have questioned the propriety of that recommendation. As a result, Andersen's broad industry coverage may be overrated as a leverage point in the outsourcing market.

Exhibit IV-6 presents some of the major contracts awarded to Andersen. Most of these occurred some time ago. Andersen should not be counted out of this market, however, since it still has adequate processing capacity in the center acquired from Sun Refining and needs to use it to capacity.

EXHIBIT IV-6

Andersen Consulting Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
Sun Refining	175	10	X		X	
Maxus Energy	60	5	X	X	X	
Volunteer Hospitals of America	50	10	X	X		

Andersen could emerge as a force in the applications operations market, if it can leverage the large talent pool available in applications development and manage those activities. It also seems to be receptive to teaming. The Systematics partnership mentioned earlier may be a way to de-emphasize its data center operations involvement while capitalizing on its development and integration skills.

Though this report covers the U.S. outsourcing market, it should be noted that Andersen Consulting in the U.K. has entered into a milestone outsourcing agreement with BP Exploration. It has signed an agreement to take over an entire business operation, that of the accounting department, including all staff functions and processing and applications software requirements. It is not only assuming responsibility for the IS function, in this case, but for the administrative functions as well. This business operations outsourcing is a trend many major vendors are encouraging for the future.

D

CSC

Had INPUT developed this analysis in the beginning of 1991, CSC would not have been included as one of the highlighted vendors. As Exhibit IV-7 illustrates, much of its major outsourcing activity came from the federal and state and local government vertical industries. The recent milestone win at General Dynamics changed all this.

EXHIBIT IV-7

CSC Industry Penetration

Industry	Number of Contracts
Federal Government	2
State and Local Governments	2
Discrete Manufacturing	1
Retail	1
Insurance	1

CSC certainly has the resources to expand its penetration in the commercial outsourcing market. Much of its resource base is experienced in consulting and software development activity. However, it now has a base of 2,600 new General Dynamics people with whom to work, as well as three new data centers with excess capacity.

As Exhibit IV-8 illustrates, the GD deal is by far the biggest CSC has ever received and may well start a bandwagon effect for CSC. CSC has certainly gained credibility with the GD win and can be expected to remain a force in the commercial market after a slow start there.

CSC has found niches in which it operates well, such as the management of medical claims processing. It should be able to leverage that experience with other prospects.

EXHIBIT IV-8

CSC Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
General Dynamics	3,000	10	X	X	X	
NASA Ames Research Center	220	7	X	X		
New York State-Medicaid	149	5.5	X			
North American Life	97	10	X			

E

The Genix Group

As evident in Exhibit IV-9, Genix has been particularly active in the two manufacturing vertical industry markets. Considering its origins as the IS department of National Steel, it is not surprising that it has chosen to play on its strength.

There is still much potential in the two manufacturing market segments. If Genix can form further alliances with software vendors, it should be a successful outsourcing vendor to that market. Its merger last year with MCN, a utility-based conglomerate, has not yet had any effect on the markets in which Genix is active.

EXHIBIT IV-9

Genix Group Industry Penetration

Industry	Number of Contracts
Discrete Manufacturing	5
Process Manufacturing	3

Primarily a platform operations outsourcing vendor, Genix needs to formulate a strategy to participate in the applications operations outsourcing market. Its recent contract with Computer Technology Management (CTM) is one approach to this strategy. As shown in Exhibit IV-10, this $25 million contract provides processing operations for CTM. CTM, in turn, has a contract with Libbey-Owens-Ford (LOF) to support all IS needs of the client, including processing and applications management. What is really unique is that CTM was formed by the former CIO of LOF and has, as assets, the former processing equipment and the staff of LOF.

EXHIBIT IV-10

Genix Group Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
Wheeling-Pittsburgh Steel	70	10	X			
AM General Division of LTV	30	5	X			
Computer Technology Management	25	5	X			

The Genix Group has been concentrating on providing platform operations outsourcing, and its unique relationship with CTM may be a good diversification. It should be noted, however, that the applications management vendor is always closer to the decision maker in those arrangements. This leaves the platform outsourcing vendor more vulnerable. CTM has a ten-year contract with Libbey-Owens-Ford and only a five-year agreement with Genix.

F

Power Computing

Power Computing has succeeded in the process manufacturing vertical industry, as illustrated in Exhibit IV-11. Its one contract in the health services market, with EPIC Healthcare, was a surprise to industry watchers. It does, however, indicate the possibility to diversify, especially for a platform outsourcing vendor.

EXHIBIT IV-11

Power Computing Industry Penetration

Industry	Number of Contracts
Process Manufacturing	8
Health Services	1

As shown in Exhibit IV-12, there is a little twist to the EPIC Healthcare contract. The client wanted to outsource the upgrading of workstations and minis at the hospital sites and provide for the ongoing support of these facilities. A separate outsourcing contract was awarded to Data General for those services. It is obviously a good fit for DG and represents its first known foray into desktop services.

EXHIBIT IV-12

Power Computing Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
American Ultramar	15	5	X			
Trinity Industries	13	3	X			
EPIC Healthcare	12	5	X			*

Power Computing appears to be pursuing a strategy of concentrating on platform operations outsourcing. It runs the risk of finding itself in a commodity market where it has difficulty differentiating its product from that of the competition. So far it has relied on price and its expertise in data center management. It may, however, have to develop alliances with software vendors or acquire related assets to expand its market base.

G

ACS Commercial Services

When a company relatively new to the outsourcing market shows activity in four vertical industries, it signals an aggressive player. As Exhibit IV-13 indicates, ACS Commercial Services is active in retail, health services, telecommunications and state and local government markets. It also has a significant number of processing contracts in the financial services sector. This probably reflects both an opportunistic approach to the market and the diversity of the companies that were assembled to make up the new company, ACS, three years ago.

EXHIBIT IV-13

ACS Industry Penetration

Industry	Number of Contracts
Retail	2
State and Local Governments	2
Health Services	1
Telecommunications	1

Exhibit IV-14 illustrates that ACS has acquired some large contracts in its short history as an outsourcing vendor. The Southland Corporation contract, in particular, gave ACS the assets it needed to pursue the market aggressively. The company not only assumed the processing assets of the client, it also acquired the office building in which Southland was housed. This provided Southland the much-needed cash with which to emerge from Chapter 11 protection.

INPUT expects ACS to aggressively acquire new contracts in a variety of vertical industries. In late 1991, it undertook extensive reorganization which has not yet been publicly announced. The reorganization is designed to streamline the structure of an organization that grew rapidly by acquisition and must now be tailored to react rapidly to the market.

EXHIBIT IV-14

ACS Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
International Telecharge	160	10	X			
Southland Corp.	100	10	X			
MD State Benefits	25	5	X			

H

Systematics

Since Systematics has essentially been a provider of outsourcing services to the banking vertical industry exclusively, no industry penetration chart is presented. The influence of its new parent, ALLTEL Corporation, is beginning to have an effect. The company has organized a separate division to service the telecommunications industry, particularly in administrative operations for the cellular phone business.

Exhibit IV-15 illustrates that the largest of Systematics' contracts are in the banking industry, as might be expected. Systematics has a good reputation for service and quality of applications software. As a result, it has a high renewal rate even though the majority of its contracts are of five-year duration. The Republic contract, cited in the following exhibit, was recently renewed for an additional five years.

Systematics' move into another vertical market is a healthy strategy for this established outsourcing vendor. It is proceeding very conservatively, building on a base of existing knowledge and business contacts in the cellular telephone submarket of the telecommunications industry. Since that segment of the industry is still in its early growth stages, Systematics should be positioned to acquire more business in that area.

EXHIBIT IV-15

Systematics Major Contracts

Client	Value ($M)	Length (Years)	Plat	App	Net	DT
Federal Home Loan Banks (SF)	180	5	X	X		
Republic Bank	16	5	X	X		
Prudential Bank (Atlanta)	10	5	X	X		

I
Summary

The vendors profiled in this analysis represent the leaders in the market and a representative sample of vendors who have shown strength in smaller niches or show signs of expanding their scope. The review was based on a sampling of contract data, not a complete set. In fact, data for some companies was much more accessible than for others. In all cases, however, INPUT felt that the data available warranted discussion.

As the market evolves, certain trends and patterns emerge:

- The platform operations market is becoming more of a commodity market, where vendors will have a hard time differentiating their product from that of others. A price war may already be under way here.

- Applications operations continues to be the outsourcing option promoted by most vendors. Many prospects are, however, still reluctant to turn over that much control to a vendor.

- Very few vendors have the capability to provide all potential outsourcing services to the client, from platform operations to desktop services. When the need arises, some clients have entered into separate agreements with several vendors to provide the full range of services. The larger vendors are forming alliances or acquiring assets to address this need.

- The first indication of business operations outsourcing potential emerged when Andersen took over accounting operations for BP Exploration. Upon analysis, the National Car Rental agreement with EDS has many of the same elements.

Outsourcing vendors will evolve in response to market demands and according to a growth strategy deemed appropriate by management. The market forces are certain to be the more important of those two drivers. Any analysis that correctly identifies market trends and changes will be of great strategic value to marketing and sales executives alike.

V

Conclusions and Recommendations

By looking at eight of the most active vertical industry markets and the activity of the major vendors, some measure of the trends in each vertical industry market was derived in the two preceding chapters. Further conclusions and recommendations can be drawn from a look at the market as a whole, particularly by grouping awards activity over the past three years.

A
Conclusions

Overall activity in the outsourcing market has increased noticeably in the past three years. What was apparent in the analysis of each vertical industry studied in Chapter III is even more evident when each year is reviewed as a whole. Exhibits V-1, V-2 and V-3 illustrate the level of activity in each year and identify the milestone contracts in each year. Contracts that introduced a new element to the outsourcing equation, were notable for their size, or were significant for other reasons are identified as milestone contracts. They help to clarify what is going on in the outsourcing market as a whole.

The INPUT data base has only 22 contracts identified for 1989. (see Exhibit V-1). These represent activity in six vertical industries. The total value of these contracts is $1,275 million, which gives an average contract value of $58 million. The value is somewhat inflated because it includes the two FTS 2000 contracts awarded to AT&T and U.S. Sprint. Without these, the average contract value would be $41 million.

EXHIBIT V-1

1989 Outsourcing Activity

Reported Contracts in 6 Vertical Industries	22
Total Contract Value in Data Base ($M)	1,275
Average Contract Value ($M)	58

Milestone Contracts

American Standard—Genix gets first major outsourcing contract in manufacturing

Southland—ACS outsourcing contract includes acquiring physical plant

Milestone awards included the American Standard agreement with Genix and the Southland agreement with ACS Commercial Services. The first award was significant for two reasons: it was one of the first awards to outsource the entire processing operation; and at a contract value of $500 million for ten years, it remains one of the larger contracts in the discrete manufacturing vertical industry. The Southland award was a case in which the vendor acquired processing and other physical assets, such as Southland's building. It also illustrates how a client can greatly reduce operating losses by outsourcing to a vendor who assumes total responsibility.

In 1990, the pace of outsourcing awards accelerated, as seen in Exhibit V-2. INPUT's data base contains 64 identified contracts in the eight vertical industries being tracked with a total contract value of $6,143 million. This represents a set of contracts with an average value of $96 million, up significantly from 1989.

The Eastman Kodak contract with IBM for systems operations prompted more press attention than any other outsourcing contract. This was probably because of the prominence of both parties in their industries. Additional press attention arose later because the initial contract was followed by parallel outsourcing contracts with DEC and Businessland for network management and desktop services, respectively.

EXHIBIT V-2

1990 Outsourcing Activity

Reported Contracts in 8 Vertical Industries	64
Total Contract Value in Data Base ($M)	6,143
Average Contract Value ($M)	96

Milestone Contracts

Eastman Kodak—IBM to manage processing center

Continental Airlines—EDS takes over platform and applications, rights to software

The Continental Airlines contract with EDS was the first of the megacontracts and one with a very checkered evolution, being on-again/off-again several times until finally evolving into its present form. It is significant not only for its size but also because EDS made a significant cash infusion into Continental's accounts at the start of the contract. In return, EDS has a right to the applications software developed for Continental's reservation system.

In 1991, a total of 57 contracts are represented in the data base, all recorded in the first nine months of the year. By year end, the number should exceed that recorded for last year. Contracts are in all eight of the targeted industries and represent a total value approaching ten billion dollars ($9,078 million). This yields an average contract value of $159 million, another significant increase from the previous year.

The three identified milestone contracts and their significance have been discussed earlier. As mentioned, the General Dynamics/CSC agreement represents the largest outsourcing award to date and also represents the biggest transfer of assets that has been reported, namely three major data centers and 2,600 people. The National Car Rental/EDS agreement is a business operations outsourcing contract that may set some new rules for the partnership relationship between client and vendor. And the Continental Bank contract with IBM and Ernst & Young as a significant subcontractor represents a very large bank contract. It had an interesting element that reflects somewhat on how CIOs have come to view the outsourcing vendor. The CIO who negotiated the agreement with IBM subsequently

EXHIBIT V-3

1991 Outsourcing Activity (to 10/91)

Reported Contracts in 8 Vertical Industries	57
Total Contract Value in Data Base ($M)	9,078
Average Contract Value ($M)	159

Milestone Contracts

General Dynamics—CSC takes over processing and applications development

National Car Rental—EDS takes over processing, applications and customer relations

Continental Bank—IBM takes over processing, Ernst & Young does applications

left Continental Bank to pursue other opportunities. It was not an unfriendly termination. John Gigerich, Continental's CIO, said: *"It was a logical extension once* [the plan] *was in place. Who builds it is much less important than deciding the what and the how."*

This attitude reflects a diminishing suspicion in the ranks of CIOs towards outsourcing vendors and their motives.

B
Projections

The above data is valuable only if it can lead to intelligent projections about the future trends in the outsourcing market. Obviously, user expenditures in this marketplace continue to expand at a healthy rate in spite of the economic downturn in the general U.S. economy. In fact, that downturn may be having a stimulating effect on the outsourcing market growth rate as more organizations choose outsourcing as a means of reducing their capital expenditures and information systems operating expenses.

The data suggests that a bandwagon effect stimulates market growth also. Awards data, analyzed by N. Venkatraman and Lawrence Loh and released as a working paper at the MIT Sloan School of Management, suggests this. The working paper finds a significant increase in the rate of outsourcing awards after Eastman Kodak outsourced its processing operation to IBM and its network management to Digital Equipment.[1] A brief review of the awards data compiled as part of this report shows the same pattern.

The next step is to predict events that will trigger further bandwagon effects. Though it is too early to be certain, several recent awards have the potential to be such agreements:

- Continental Airlines' agreement with EDS represents the largest investment to date that a vendor has made in a client's assets.

- National Car Rental represents the assumption of not only software management and processing responsibilities by EDS, but also management of the actual reservations operations. The clerks in the reservation booths work for EDS. This assumption of business operations responsibility has its parallel in the assumption of all accounting functions by Andersen Consulting for BP Exploration in the U.K.

- The General Dynamics decision to turn over all processing and most applications systems development and maintenance to CSC is still the largest outsourcing contract award to date and is likely to remain so for some time. The large number of development staff transferred to the vendor is particularly significant.

- The Continental Bank of Chicago deal with IBM is also large. More significant, however, may be Ernst & Young's involvement. Ernst & Young has been seeking to enter the ranks of outsourcing vendors for some time. However, its first significant entry was as IBM's subcontractor for the software development effort at Continental Bank. This may well be a route E & Y continues to follow.

C
Recommendations

The user motivations and vendor strategies that emerge from this review of major awards in the last three years leads INPUT to make the recommendations summarized in Exhibit V-4 to vendors active in the outsourcing market.

[1] N. Venkatraman and L. Loh, *Outsourcing as a Mechanism of Information Technology Governance: A Test of Alternative Diffusion Models*

EXHIBIT V-4

Recommendations

- Be prepared to assume risks
- Complement capabilities with alliances
- Expect longer, larger contracts
- Look for more than processing operations

More and more, the vendor is willing to assume substantial risks in order to close the deal with the prospect. This has become a standard operating practice with many of the outsourcing vendors, one which helps differentiate them from the competition. The larger vendors generally have more resources with which to play this trump card. There are instances when:

- Data centers have been acquired from the prospect for cash
- More than 2,000 programmers and operations people were transferred to the vendor payroll
- Part of the agreement included a cash outlay by the vendor for future software rights

In all these cases, the vendor is betting on the eventual business viability of the client. To date, no client organization has failed, though several that were under Chapter 11 protection during the outsourcing negotiations have emerged as viable concerns. There is no doubt that an organization that chooses to outsource solely to alleviate its short-term financial problems will eventually fail. The outsourcing vendor involved will be left holding assets it must then convert to other profitable ventures. The outsourcing market has reached the level of maturity in which all viable vendors must assess the risks involved in each proposed deal realistically and be ready to turn some down.

Vendors can address the risk while enhancing their own positions in the marketplace by forming alliances with other participants in the market who can complement the primary vendor's resources. Even IBM (ISSC) needs to team with Ernst & Young to meet the requirements of Continental Bank of Chicago. IBM's primary motivation in this case is indeed the capabilities enhancement, but it should also benefit by sharing the risks with another vendor.

Vendors will need to continue to use this double-benefit tactic to address the market demands while reducing their own exposure.

The move to larger contracts seems to be accelerating. The General Dynamics, Continental Bank and United Technology contracts are three recent examples of very large contracts, generally awarded for long terms—at least ten years. As the trend toward applications operations accelerates, in which the vendor is responsible for the applications software development as well as the processing platform, the value of awards will increase further. As network management and desktop services become an intrinsic part of the outsourcing agreement, the trend toward larger contracts will continue.

As contracts become larger and risks increase, another trend is likely to develop. The platform operations portion of the entire outsourcing equation is likely to become a commodity priced item. Beware the vendor that remains primarily a platform operations vendor. There will be increasing need for each vendor to differentiate itself from the competition, be it by industry expertise or software availability. Recent examples indicate that some prospects are negotiating hard when they are only looking for platform operations. In those cases, the vendor may be seriously impacting profit margins in order to win. The platform vendor can enhance its position most rapidly by forming alliances. Acquiring complementary assets is a viable—though more costly—solution also.

In summary, the outsourcing market continues to require more sophisticated approaches as it expands and matures. Vendors have to assess risks more carefully. They need to manage their own assets and those of their alliance partners effectively. Finally, they must recognize the need to have financial resources in place that allow them to acquire the client's assets when required. Successful outsourcing vendors will have good answers for these and other market challenges in the coming year.