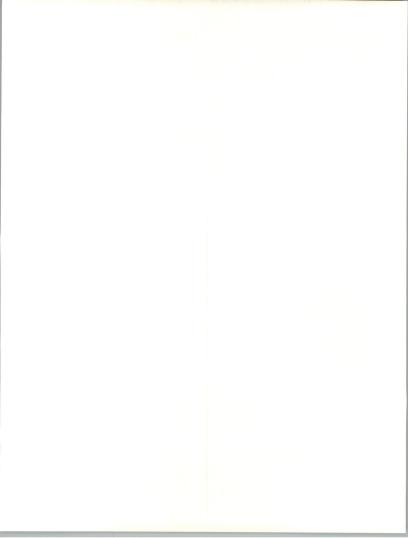
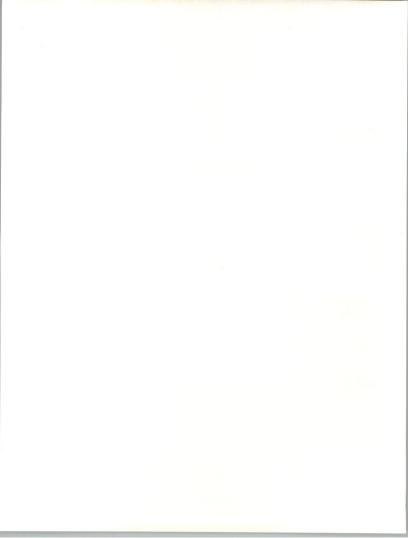
Market Analysis Program (MAP)	
	Industry Sector Markets 1991-1996
	Business Services Sector
	INPUT*



# INDUSTRY SECTOR MARKETS 1991-1996

# **BUSINESS SERVICES SECTOR**





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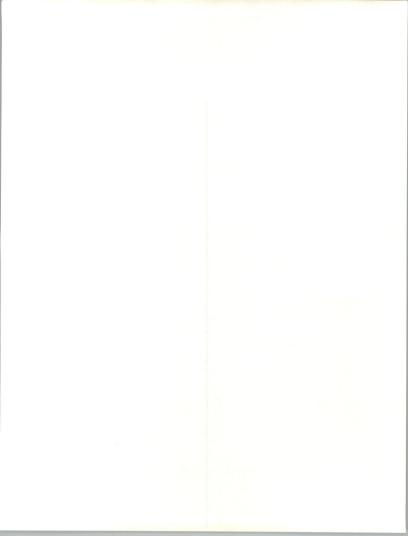
#### Market Analysis Program (MAP)

Industry Sector Markets, 1991-1996 Business Services Sector

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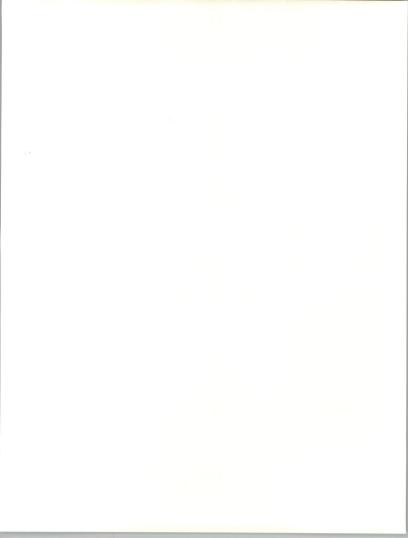
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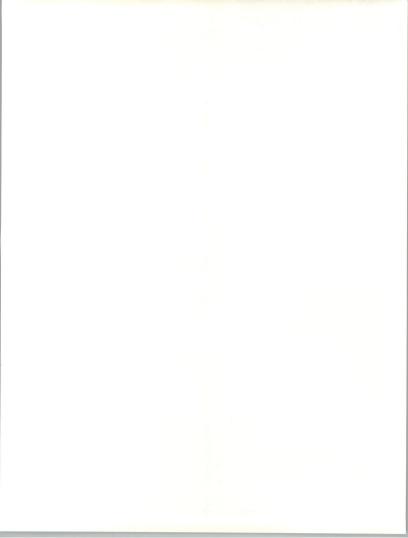
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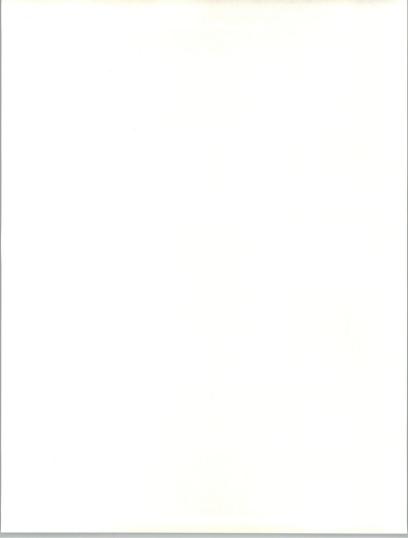
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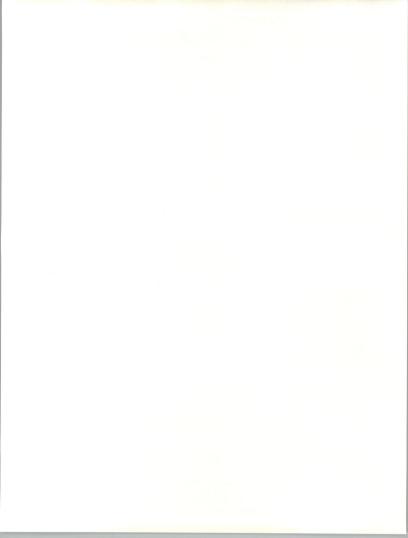


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В

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- -2 Business Services Sector—1991 MAP Data Base Reconciliation





# Introduction

#### A

## Purpose and Organization

#### 1. Purpose

The objectives of this forecast update are to:

- Identify the business and technological issues and trends that are driving the use of information services within the business services sector.
- Forecast user expenditures during the next five years on information services for the business services sector
- Discuss the competitive environment, and profile leading vendors in the business services sector

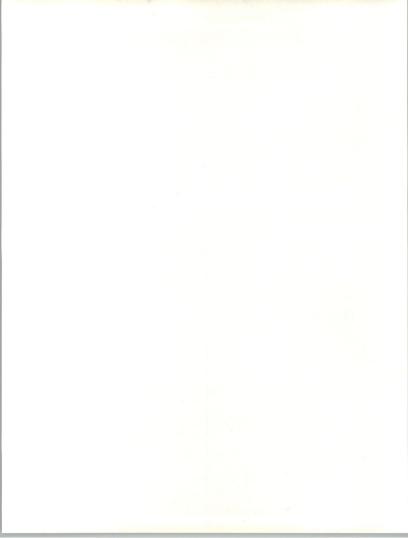
Emphasis is on updating INPUT's 1990 forecasts and forecast assumptions for the business services industry sector, and on what has changed for the forces impacting this market over the last 12 months. A discussion of the competitive environment and profiles of several leading vendors are also included.

The report provides readers with insights and information that will help:

- · Review the forces shaping the market
- Develop internal corporate financial projections
- Identify new markets and product and services opportunities
- · Assess the competitive trends
- Determine potential market directions
- Assist in prioritizing investments

#### 2. Organization

This report consists of four chapters and two appendixes. The report is organized as follows:



- Chapter I—Introduction—introduces and defines the business services sector and information services delivery modes
- Chapter II—Trends, Events, and Issues—describes the current business services environment and factors that can have an impact on the use of information services
- Chapter III—Information Services Market—presents information services user expenditures forecasts by delivery mode and submode for the business services sector
- Chapter IV—Competitive Environment—synopsis of vendor profiles and competitive events occurring over the last 12 months
- Appendix A—Definitions—cross-industry sector and information services definitions in this report are defined. For all of INPUT's information services industry definitions, consult INPUT's Definition of Terms in the Overview binder of the Market Analysis Program.
- Appendix B—Forecast Data Base—detailed forecast by delivery mode and submode for the business services sector. Appendix B also contains a reconciliation of the previous year's forecast.

#### В

## **Description of Business Services Sector**

The services sector contains a number of widely varying businesses that provide services for a fee or on a contractual basis rather than produce tangible goods. Another common characteristic is that these businesses are participating in a massive transition in the U.S. from an industrial to a service-oriented economy. Exhibit I-1 shows the sectors covered in this report.

Last year the services asterisked in Exhibit 1-1—such as services provided by hotel, automotive repair, motion pictures, recreation, and social services organizations—were treated as a separate consumer services sector by INPUT. This year, however, these services are included within the overall business services sector.



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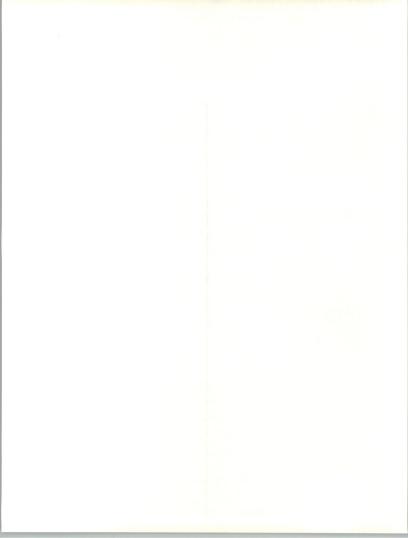
## **Components of Business Services Sector**

SIC	Subsector	No. of Establishments (Thousands)	Receipts (\$ Billions)
65	Real Estate	205.6	38.1
70	Hotels, Other Lodging Places*	46.8	51.9
72	Personal Services*	185.4	31.5
73	Business Services	251.9	166.3
75	Automotive Repair, Services, Parking*	151.2	51.4
76	Miscellaneous Repair Services*	65.5	20.8
78,79,84	Amusement and Recreation Services, including Motion Pictures and Museum*	99.5	57.6
81	Legal Services	138.2	67.0
83	Social Services*	43.1	73.0
86	Membership Organizations*	50.0	20.6
87	Engineering, Accounting, Research Management, and Related Services	205.0	127.3
89	Services n.e.c.	22.0	3.8
	Total	1,464.2	709.3

Source: 1987 Census of Service Industries \*Previously classified as consumer services

INPUT previously included SIC 472X, arrangement of passenger transport such as airline reservation systems, as part of the consumer services sector. This SIC is now a component of the transportation services sector.

The business services sector includes a broad range of activities. Each of the categories in Exhibit I-1 can be further broken down. Real estate, for example, includes operators and lessors, agents and managers, title abstract offices, and land subdividers and developers. Business services, SIC 73XX, includes numerous types of businesses, as Exhibit II-2 shows. Hotels include tourist accommodations and travel courts. Personal services include laundry and cleaning services, photographic studios, beauty and barber shops, and funeral establishments.



#### EXHIBIT I-2

## SIC 73XX—Business Services Types of Businesses

- Advertising (731)
- Credit reporting/collection agencies (732)
- Mailing, reproduction, commercial art/photography, stenographic (733)
- · Dwelling and building services (734)
- · Equipment rental/leasing (735)
- Personnel agencies (736)
- Programming, data processing, and other computer-related services (737)
- · Miscellaneous business services (738)

Most of the categories can be broken down into still smaller categories; there are computing services aimed at some of the individual categories. Independent Business Software, for example, makes turnkey systems for automotive dismantlers. DHD, Inc. has an applications software product for cemetery management. GTech has a focused processing services business for the gaming industry.

The majority of firms in the business services arena are of the mom-and-pop variety. In legal services, for example, out of tens of thousands of law firms, only 1500 (fewer than 2%) have 25 or more lawyers, and only 750 firms have 50 lawyers or more. Of the roughly 40,000 firms in the engineering, architectural, and surveying segments, fewer than a hundred employ over 500 people, and three quarters employ fewer than 20. According to the Architect Institute of America (AIA), 85% of all architectural firms employ fewer than 6 people.

A fundamental reason for this high degree of fragmentation is that services are often produced on the customer's premises or the customer must come to where the service is produced; thus the vendor must have a presence in the region where the customers are. Other factors encouraging fragmentation are the diverse market needs and low market entry barriers.



## **Related Reports**

Related reports of interest to the reader are:

- · U.S. Application Solutions Market Analysis Report, 1991-1996
- U.S. Systems Software Products Market Analysis Report, 1991-1996
- · U.S. Professional Services Market Analysis Report, 1991-1996
- U.S. Systems Integration Market Analysis Report, 1991-1996
- U.S. Systems Operations Market Analysis Report, 1991-1996
- U.S. Network Services Market Analysis Report, 1991-1996
- U.S. Industry Sector Markets, 1991-1996 (15 reports on all major industry sectors)
- U.S. Cross-Industry Sector Markets, 1991-1996 (7 reports on information services that serve all vertical-industry sectors—e.g., accounting.)







# Trends, Events, and Issues

Tracking trends in services is difficult because services are so diverse: a barber, for example, has little in common with a computer programmer, or a mechanic with a real-estate agent. Nonetheless, INPUT has attempted to summarize key business trends that impact most business services firms, as Exhibit II-1 shows. These trends have been underway over the last several years and will continue through the forecast period.

#### EXHIBIT II-1

### Business Services Sector Key Business Trends

- · Increased workforce in services
- Economic slowdown
- · Cost pressures
- · Spotty productivity improvements
- Innovative marketing
- Delivery of new types of services

The transition continues in the U.S. from an industrial to a serviceoriented economy. According to the Bureau of Labor Statistics, business services will add 2.7 million new jobs between 1988 and 2000. The 2.7 million increase represents almost 1 out of every 6 new wage and salary jobs added for all industry sectors between 1988 and 2000. This growth is in contrast to manufacturing employment, which is projected to shrink slightly, from 19.4 million in 1988 to 19.1 million at the turn of the century.

Services firms in general are less sensitive to economic conditions because they don't have heavy fixed costs. As the economy contracts, purchasing of external business services—rather than creating an internal infrastructure—is viewed as a way to contain costs.



Nonetheless, there are a number of examples of negative effects on business services:

- Because fewer transactions will occur, the kinds of business services
  that will feel the pinch are involved in buying and selling—e.g., realestate brokers and agents, and credit-reporting agencies.
- The smaller services firms—of which there are many—must proceed with caution because as the economy contracts, so may the customer base of small companies.
- Slower growth in disposable income means slower growth in consumer spending on services. However, demand for services is typically not as closely tied to the general economy as is the demand for goods.
- The recession is causing an economic retrenchment for the lodging industry in general. Hotel construction is down compared to the 1980s.
- Advertising spending in the U.S. will decline this year for the first time in 30 years. For the year, spending will total \$126.7 billion. That figure is a 1.5% decline from the \$128.6 billion spent last year.
- The current real-estate market slump, the worst since the 1930s, is expected by a wide range of experts to persist for four or five years. The office vacancy rate is 19.5% nationwide.

Although productivity is difficult to measure in services, productivity problems are apparent in some sectors. For example, the rapid growth of new brands and products helps explain the poor productivity performance of the repair industry. More makes of imported cars mean specialized repair shops. Hotel, exercise, and recreation activities have all added services and increased training for personnel. Complexity has led to increasing costs and pressures on margins.

As some of the business services subsectors contract and productivity is called into question, people are seeking more direct and innovative ways to market services. Historically the professional side of business services has not actively marketed itself. Now firms in this sector are grappling with questions such as what they can do to improve marketing strategies and distinguish themselves from the competition. Use of targeted directmail campaigns is on the increase.

Hotels, for example, benefit by having the ability to gather and analyze information on who their customers are and why they purchased so they can figure out how to garner repeat business. Hotels, likewise, are looking for new sources of revenue through various additional in-room amenities. For law firms, certain legal areas will decline over the next 10 years—



such as traditional labor law, real-estate development cases, and consulting for venture capital financing. Environmental law, bankruptcy, corporate reorganization, and telecommunications will increase in importance.

Many of the business services subsegments provide services that are difficult to differentiate. Enhanced service differentiation, and therefore potentially higher profit margins, may be achievable by increasing the added value of the business. For example, some accounting firms are now offering short-term loans to cover the cost of income tax payments.

Service providers—like companies in all industries—are looking to information services and technology to boost profits or at least minimize losses—although, historically, services have not been big spenders on information services. The economic downturn has revealed the need for more attention to planning, back-office operations, and the use of information services in many subsectors.

IS purchases are being made more on a replacement basis, rather than a great number of first-time buyers. Decisions are being made on a cost-savings basis.

Information services that help to achieve the objectives of increasing operating efficiencies, fine-tuning operations, and making marketing more innovative are positively influenced by trends and issues impacting services.

Improved service as a whole, particularly the ability to respond to requests for information before and during the sale, and for service during and after the sale, is a key business trend today. The trend is fueled to some extent by the general shift toward service as a product and the trend toward a service economy. Information services that enhance availability of—and access to—information will experience healthy growth.

On the down side, IS purchase decisions are taking longer, and more stringent justifications are required.

Key technology trends—not unique to business services—are listed in Exhibit II-2.



#### EXHIBIT II-2

## Business Services Sector Key Technology Trends

- Integration with other systems and services, including external information services
- · Open systems
- · Replacement purchases





# Information Services Market Forecast

This chapter presents user expenditure forecasts for the business services sector by delivery mode. Assumptions driving the forecasts are provided. Information in this chapter draws on the trends, events, and issues presented in Chapter II and on the competitive environment discussed in Chapter IV.

Section A, Overview, discusses the overall size and growth rate of user expenditures for the business services sector. Section B, Delivery Mode Analysis, breaks out this same forecast into INPUT's delivery modes.

#### A

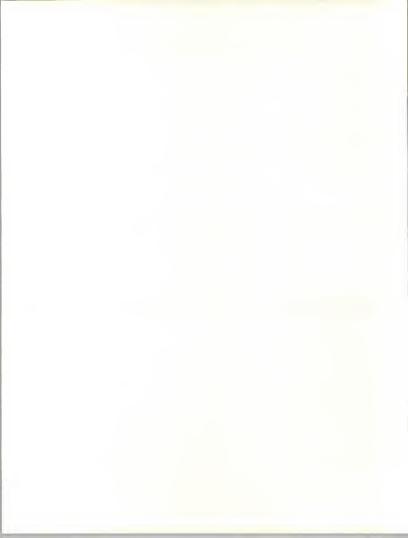
#### Overview

Growth is being fueled by continued pressure to operate more efficiently. As more-powerful hardware and software make it possible to automate businesses at lower and lower costs, penetration of smaller services firms will continue.

As many of the largest services subsectors rely on providing expertise on demand, information services that enhance easy access to information will continue to grow rapidly, as noted in Exhibit III-1. IS products and services that keep knowledge workers informed and close to their customers are key. Thus, although needs are not sharply focused, there are new demands for networks and on-line data bases.

Nonetheless, lack of technical expertise within this industry will continue to slow any major change. The fragmented nature of business services markets in piles a time-consuming marketing and sales approach, one that requires a great deal of promotion, education, and training.

Even the largest subsectors present few large-scale opportunities. The larger customers in each business services market have already established IS purchasing patterns, and information services requirements are being met at least on some level in all IS categories. Because the business services sector as a whole has not been as progressive in adopting technology, any fundamental changes in products, services, and IS



expenditures will be slower to evolve than for product-oriented industry sectors. In some sectors (Big Six accounting firms, large engineering companies) the capabilities exist for in-house management of major projects, which will lessen the size of the IS market.

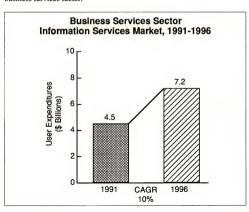
### EXHIBIT III-1

# Business Services Sector Information Services—Driving Forces

- · Continued demands for efficiency
- · Importance of information access
- Nontechnical markets
- · Few large enterprises
- · Fragmented nature of markets
- · Slow to change

INPUT's forecasted growth rate for the business services sector of 10% is 1% lower than the rate forecast in 1990. This year's forecast, provided in Exhibit III-2, reflects INPUT's generally lower growth rates for processing services and professional services as a whole—rather than any changes in INPUT assumptions about driving forces specific to the business services sector.

#### EXHIBIT III-2





The forecast also reflects lower expenditures on overall minicomputerbased applications software products than anticipated last year.

B

## Delivery Mode Analysis

Exhibit III-3 provides forecasts of user expenditures by delivery mode. Small businesses are less likely to purchase systems operations, systems integration, and professional services; because the business services sector is composed predominantly of small businesses, expenditures on these delivery modes are low compared to turnkey systems, applications software products, and network services.

The fastest growing delivery modes, nonetheless, are systems operations and systems integration. The reason is largely that these two sectors have a smaller expenditure base to begin with.

Processing services will remain the largest delivery mode in the market although, by 1996, expenditures on applications software products will have just about caught up.

## 1. Applications Software Products

The applications software products market will remain strong and will grow from \$880 million in 1991 to \$1,791 million in 1996, a compound annual growth rate of 15%—as Exhibit III-4 shows. This growth will more than double expenditures by 1996

Over 60% of expenditures are for PC and workstation-based applications software products. Minicomputer and mainframe-based software growth is on the decline as companies transition to networked PCs. By 1996 almost three times more will be spent on workstation/PC-based applications software products than on mainframe and minicomputer-based products combined.

## 2. Processing Services

Business Services is one of the slowest growth industry sectors for processing services—well below the 7% CAGR for processing services for all sectors combined. Exhibit III-5 provides INPUT's 1991-1996 forecast for processing services within the business services sector.

III-3



**EXHIBIT III-3** 

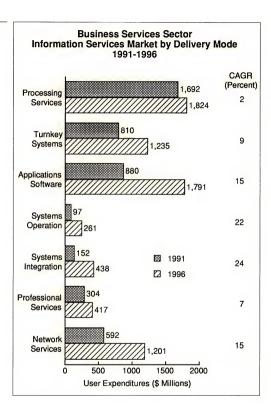




EXHIBIT III-4

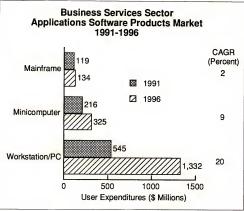
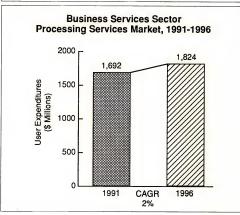
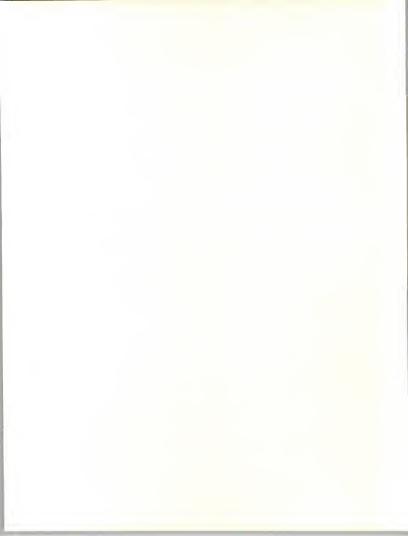


EXHIBIT III-5





The largest single subsector using processing services is accounting firms—for tax preparation. This market continues to remain strong although it, too, is feeling erosion from increasing purchases of inexpensive PC-based tax preparation software.

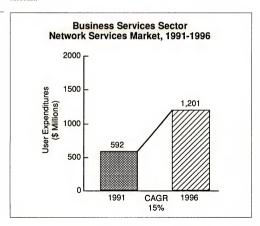
Even small companies that a few years ago were purchasers of processing services now prefer to purchase microcomputer-based applications software products. To bolster sales, processing services firms have provided remote transaction processing and printing services—thereby allowing customers to have more control over their own data entry and printout. Remote services have perhaps slowed the inevitable erosion of expenditures on processing services.

Processing services purchased by consumer services firms are showing the greatest decline. The protracted economic slump has an adverse impact on processing services such as travel reservations.

### 3. Network Services

An estimated 13% of this sector's 1991 IS expenditures, network services are expected to experience an overall growth rate of 15% compounded annually, resulting in expenditures of \$1.2 billion by 1996, as Exhibit III-6 shows. This forecasted CAGR remains the same as INPUT's 1990 forecast.

EXHIBIT III-6





The majority of network services expenditures is for electronic information services—as opposed to network applications such as EDI and commercial electronic mail. Many of the business-oriented services firms, particularly accounting and law offices, require constant access to information. Data bases and directories that best lend themselves to online distribution require frequent updating and other services involving transactions. Alternative in-house paper-based systems are more costly and in many cases literally impossible to maintain.

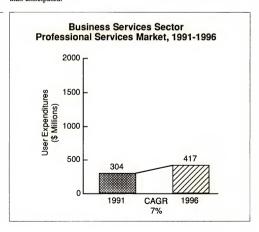
New variations and specialized information that suit the fragmented nature of the business services sector will become increasingly available and fuel growth for this delivery mode.

Difficulty of use, along with relatively high costs, is a major growth inhibitor for network services. Data availability on CD-ROMs for more static information will be a growth limiter.

## 4. Professional Services

This year's professional services forecast for the business services sector is down from 10% CAGR to 7% CAGR, as Exhibit III-7 shows. INPUT believes the effects of the protracted economic downturn will last longer than anticipated.

EXHIBIT III-7





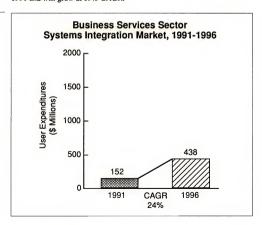
INPUT also believes that reduced growth in expenditures on professional services is attributable to the following:

- A shift in consulting and software development services toward systems-integration-based services
- A trend to enhance and modify currently existing applications to meet needs instead of developing new application systems
- · Turnkey vendors' expansion of sales of professional services
- Software product vendors' expansion of software modification and enhancement

## 5. Systems Integration

Exhibit III-8 shows that the forecast for systems integration shows limited potential—\$152 million in 1991—though growth is 24% compounded annually. By way of comparison, discrete-manifecturing represents a \$1.1 billion systems integration market that is also growing at a 25% CAGR. Total SI expenditures by all industry sectors are \$7.7 billion for 1991 and will grow at 19% CAGR.

## EXHIBIT III-8





Forecasted growth represents prospects in business services for specialized software development, most likely workstation-based. The communications hardware component is comparatively larger than other sectors because of strong network interest.

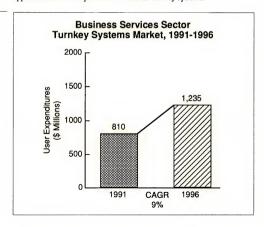
Systems integration expenditures typically represent large contracts only. INPUT assumes that only the large business services companies will use systems integrators over the forecast period.

## 6. Turnkey Systems

Turnkey systems are small businesses' answer to systems operation (except that the customer owns the equipment) and systems integration needs. The turnkey system vendor or VAR provides hardware, applications software, professional services, and other needed equipment and peripherals.

Expenditures on this delivery mode are forecast to grow at 9% compounded annually, as Exhibit III-9 shows. This CAGR is the same as the forecast for turnkey systems expenditures as a whole for all industry sectors. The highest growth will be in the professional services and applications software products' content of turnkey systems.

EXHIBIT III-9



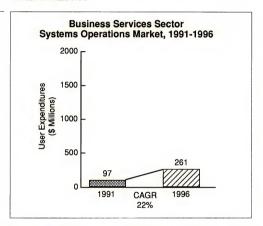


The primary growth promoter is that the business services sector will continue to be dominated by small businesses. The decreasing hardware content of a turnkey system continues to be a growth inhibitor.

## 7. Systems Operations

As indicated in Exhibit III-10, systems operations, a relatively newer mode of service in business services, will grow at a healthy CAGR of 22% between 1991 and 1996.

**EXHIBIT III-10** 



The less complex IS needs of smaller firms that populate the business services sector means less need for systems operations. But, in large part due to its small base, systems operations is the most rapidly growing delivery mode for the business services sector.

Management of computer/communications operations by third parties continues to be a major IS industry trend overall in the 1990s. Recent economic troubles faced by many firms have shifted the reason for outsourcing systems operations to a more cost-savings-based rationale. Large services companies—such as hotel chains and large entertainment and amusement businesses—want to concentrate on their core businesses and leave technology-intensive support services, such as information systems, to experts.





## Competitive Environment

### A

## Vendor Characteristics and Trends

As the largest customers in each target market are already established customers, applications software products, turnkey systems, processing services, and network services vendors are all repackaging products/ services to meet the needs of progressively smaller customers. Marketing and selling relatively low-priced products and services to such diverse sets of relatively small customers requires targeted selling strategies, which can be expensive.

- Applications software products—Business services firms are beyond the
  initial astonishment that an applications software product works. Now
  buyers are more discerning and know there are differences between
  various vendors' product offerings. Ease of use and efficiency are
  becoming increasingly important.
- Turnkey systems—Vendors of this delivery mode are growing by expanding outside the normal range of VAR/turnkey offerings, notably systems integration. Many are reeling from the adjustments of the computer/software industry away from the proprietary.
- Processing services—The trend continues to be the provision of specialized and remote-processing services that may have more added value and therefore higher margins, and diversification into other delivery modes, particularly applications software products and systems operations. Vendors of this delivery mode are predominantly regional or local.
- Network services—Network services vendors are continually adding and/or repackaging services to meet specialized needs. Vendors will continue to do well in this delivery mode.

Systems operations, systems integration, and, to a lesser extent, professional services firms, will continue to service larger customers.



- Systems operations—Vendors do not as a rule target business services as a specific market for systems operations; vendors' services are made available to a variety of firms within a variety of industries.
- Systems integration—There are not many SI vendors in the limited business services market. IBM is the principal computer equipment provider; GTE and some small communications houses provide network integration. Andersen Consulting, EDS, and SHL Systemhouse have installed integrated systems in the marketplace and can be expected to continue. Systems integration is recognized not only as a source of revenue and profits, but also as an important distribution channel for products and services.
- Professional services—The majority of firms that provide professional services to the services sector are small and have small local customers.
   These vendors must continually seek out new customers as sales prospects for services are increasingly eroded by VARs and other resellers.

## В

## **Leading Vendors**

Because of the highly fragmented nature of the market, thousands of IS vendors sell products and services to the business services sector. Over 100 IS vendors sell applications software products to the hospitality industry alone; at least 60 vendors sell software to accounting firms. The leaders, delivery mode type, and business services markets are listed in Exhibit IV-1.



## EXHIBIT IV-1A

## **Business Services Sector—Leading Vendors**

Company	Subsector	Products/Services
ACCI	Eng., arch.	Software
ADP	Various	Processing services
Alternative Management Svs.	Real estate	Software
Andersen Consulting	Accounting	Software
	Various	Prof. svcs., SI
Autodesk (CAD)	Eng., arch.	Software
Barrister	Legal	Turnkey
CDC	Various	Processing services
ChipSoft	Tax prep.	Software
CCH Computax	Accounting	Software, processing service
CMS	Legal	Turnkey
CompuCraft	Accounting	Processing services
Computer Language	Accounting	Software
Computerized Lodging	Hotels	Software, turnkey
Computer Task Group	Various	Prof. services, SI
Computrac	Legal	Turnkey
Coopers and Lybrand	Various	Prof. services, SI
EDS	Various	Prof. services, SI, SO
EECO	Hotels	Turnkey
Ernst & Young	Various	Prof. services, SI
GTech	Gaming	Process. services, turnkey
GSI Transcomm	Cons. services	Software
Harper-Shuman	Cons.services	Software
Harris & Paulson	Legal	Turnkey
Hotel Information Sys.	Hotels	Turnkey



## **EXHIBIT IV-1B**

## **Business Services Sector—Leading Vendors (Cont.)**

Company	Subsector	Products/Services
Intergraph	Eng. arch.	Software
Jonas & Erickson	Real estate	Software
Lacerte	Tax prep.	Software
McDonnell Douglas (CAD)	Eng., arch.	Software
Mead Data Central	Legal	Network services
Prentice-Hall	Accounting	Software
Price Waterhouse	Various	Prof. svs., SI
Prime (CAD)	Eng., arch.	Software
Quorum	Legal	Turnkey
SCS Compute	Accounting	Software, processing
SHL Systemhouse	Various	Systems integration
Softa Group	Real est.	Turnkey
TACS	Accounting	Processing services
TenMan	Real est.	Turnkey
Triad	Auto. parts	Turnkey
Timberline	Real est.	Software
TMC	Legal	Turnkey
TOM Software	Cons. svs.	Software
West Publishing	Legal	Network services
Wind-2 One	Eng., arch.	Software

#### C

## Vendor Profiles

The companies profiled below are a cross-section of leading vendors in the business services sector.

# 1. ChipSoft, 6256 Greenwich Drive, Suite 400, San Diego, CA 92122, (619) 453-4446

ChipSoft, incorporated in 1984, specializes in tax preparation software. Revenues were approximately \$35 million for the year ended July 30, 1991. The company has grown at a compound rate of 35% per year over the past seven years.



ChipSoft has the largest market share—over 50% of installations—of the professional tax preparer market. In the fall of 1991 ChipSoft acquired Park Technologies, a small professional tax preparation software vendor.

The company's strategy in recent years has been expansion by offering multiplatform products—DOS, Windows, and Macintosh environments—and also expansion by offering tax preparation software for consumers as well as tax professionals. In July 1991 ChipSoft acquired Softview, the developer of MacInTax tax preparation software for the Macintosh.

ChipSoft also is now pursuing a modular approach to enhancements for its base TurboTax ProSeries 1040 product. The three modules added for the 1991 tax season are practice management, a networking module, and a data input sheets module (which makes the product look like a traditional processing services application).

# 2. Computerized Lodging Systems, Inc., 3760 Kilroy Airport Way, Third Floor, Long Beach, CA 90806, (213) 988-1100

Computerized Lodging Systems, Inc. (CLS), founded in 1974, develops and markets turnkey systems for the lodging and hospitality industry. The company is a VAR for NCR, Unisys, MAI, and Hewlett-Packard minicomputers.

In April 1990, CLS was acquired by MAI Systems Corp. (formerly MAI Basic Four), a \$400 million systems integrator and VAR in Tustin, CA. CLS now operates as a wholly owned subsidiary of MAI.

CLS is among the largest providers of turnkey systems to the hospitality industry. The company specializes in creating interproperty networks to the management to its various properties, a strategy that permits fewer onsite management personnel.

CLS' systems now interface to telephone, in-room movie, in-room bar, energy management, point-of-sale, and central reservations systems—and to CLS' own yield management system. Interfaces are being developed to link properties to banks for automated cash transfers, to reservations sources via two-way information exchange, and to each other via transparent networks that link central management to properties.

CLS' 1990 revenue reached \$22 million, a 5% increase over 1989 revenue. CLS management states that the company has been profitable for the past 14 years but anticipates that revenues will decline slightly in 1991 because of a sluggish U.S. hotel industry and the disposition of a CLS subsidiary during mid-1991.



# 3. Computer Language Research (Fast-Tax), 2395 Midway Road, Carrollton, TX 75006, (214) 250-7000

Under the trade name Fast-Tax, Computer Language Research, founded in 1964, provides tax-processing services, software products, and turnkey systems to accounting firms, corporations, partnerships, and banks. Until 1986, CLR provided mainframe processing services only; 70% of clients still use CLR processing services. CLR has been hard hit by the transition from sole reliance on processing services; 1990 sales were \$100 million, down from \$117.4 million the previous year.

Fast-Tax, a division of CLR, has targeted the medium-to-large accounting firm market with a fairly sophisticated PC and LAN-based tax preparation package. CLR is also an equipment reseller for IBM and Intel microcomputers, HP printers, and various peripherals—including CD-ROM drives. CLR software is provided on a CD.

Exemplary of the increasing integration of applications software products with data bases, Fast-Tax recently entered into an agreement with Research Institute of America/Warren Gorham and Lamont whereby Fast-Tax will offer electronic versions of RIA/WG&L tax publications to its clients. The relationship between Fast-Tax and RIA/WG&L is the first of its kind between a major publisher of tax publications and a leading provider of computerized tax automation systems.

Fast-Tax will incorporate into its software electronic versions of publications from RIA/WG&L; the initial release will be in January 1992.

Fast-Tax also markets electronic forms automation software and equipment for use in tax-processing activities and other forms-intensive businesses such as insurance companies, mortgage banks, financial services organizations, and federal and state government.

# 4. Electronic Data Systems Corporation (EDS), 7171 Forest Lane, Dallas, TX 75230, 214-661-6000

EDS, founded in 1962, is a leading information and communication services company that provides information processing, consulting, systems management, systems integration, and communications services. Target markets are the financial, insurance, commercial, and communications industries domestically and internationally. EDS also provides services to state governments and the federal government.



EDS does not split out its customer base of 7,000 into clients for whom EDS performs systems integration or systems operations functions exclusively. The customer base is as follows:

- 6938 commercial clients
- 40 state and local government operations
- · 12 federal government agencies

Although business services are not a target market, an example of a recent systems operations contract with a services firm is a \$500 million applications development contract signed in 1991 with National Car Rental System, Inc. EDS will maintain, run, and update data processing and networking operations. National Car Rental will have access to EDS personnel resources for special projects, and EDS will be able to call on former National IS employees for other projects. National will use EDS as a marketing outlet for the strategic software that National develops for the car rental industry. National is working with EDS on a system that will automate car rental returns by allowing cars to automatically transmit information to a central computer via radio frequency link as the cars enter National los

EDS intends to close similar deals with the airlines and hotel sectors to acquire a trio of reservation software acquisitions. EDS will establish an extensive travel information system if it obtains all the necessary components; potential users of such a system include travel agents, corporate travel departments, the general public, and car rental, airline, and lodging companies.

An example of a systems integration contract is: in partnership with Price Waterhouse, EDS is developing a real-estate management system for the Resolution Trust Corporation.

EDS, the pioneer in facilities management, has broadened its services and is the clear leader in the commercial systems operations business. EDS' size, experience, and financial resources will continue to make it a very aggressive and capable competitor in this market. EDS is expected to continue to use systems integration as an important ingredient for acquiring more-lucrative long-term systems operations contracts.

EDS expects to continue to grow significantly in the systems operations market—by expanding penetration in current markets and by entering new markets. In the latter case, the selection criteria to identify new markets will include the size of companies in that sector, the changes in that sector, and how the changes will influence the receptivity of prospects to systems operations. In addition, the market sector will have to include enough viable prospects to make entry a profitable venture for EDS.



## 5. Mead Data Central, Subsidiary of Mead Corporation, 9393 Springboro Pike, P.O. Box 933, Dayton, OH 45401, (513) 865-6800

Mead Data Central (MDC) is the second largest on-line library provider, trailing only Knight-Ridder's Dialog service. The company provides a series of on-line data base information retrieval services to over 200,000 subscribers worldwide. MDC's two largest services are LEXIS (legal search services) and NEXIS (news and business information service).

MDC derives its revenues from a wide variety of subscribers—including law firms, corporations, government agencies and courts, publishers, broadcasters, banks, management consultants, public relations and advertising firms, and law schools.

LEXIS is being used in essentially all of the largest 150 U.S. law offices. Even so, according to MDC, fewer than 10% of lawyers use the service.

MDC's fiscal 1990 revenues were \$440 million. The company's 1990 sales growth of 10% was lower than in the previous several years. In order to continue the high levels of growth of the previous several years, Mead is:

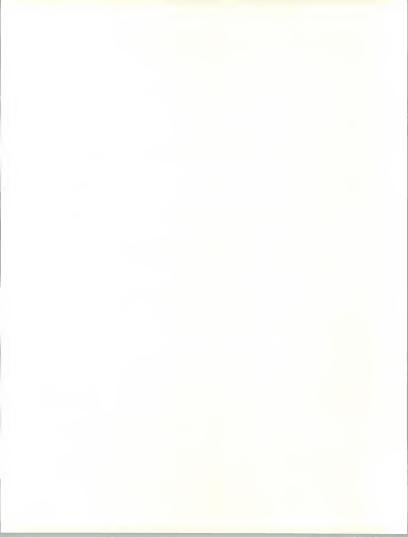
- Packaging LEXIS offerings and pricing toward smaller law offices
- · Selling LEXIS services to local or state bar associations and law schools
- · Expanding on-line services in international law

MDC is also creating new services for entirely new markets. For example, in 1990 MDC added an entertainment library directed toward the information needs of not only lawyers but also agents, publicists, motion picture and amusement companies; a Europe 1992 Library; and an environmental library. These libraries are specialized subsets and expansions of previously existing MDC libraries.

MDC is also regularly enhancing its Turbo software, which is new search software that allows users to search Lexis/Nexis data bases on-line in a more user friendly manner that doesn't require in-depth knowledge. MDC achieves its ease of use through predefined searches.

# Quorum Legal Systems (formerly Quorum Systems), 5165 Campus Drive, Plymouth Meeting, PA 19462, (215) 825-7500

Quorum Legal Systems provides processing services, software products, and turnkey systems to over 200 law firms and corporate legal departments for financial management, accounting, word processing, and litigation support. The company is an authorized distributor for DEC and an industry remarketer for IBM.



Quorum Legal Systems was founded in 1969 as Compute-R-Systems and was purchased by Control Data Corporation (CDC) in late 1984. Quorum operated as a division of CDC (as Quorum Systems) until June 1991, when Quorum Systems was acquired by ASA International and renamed Quorum Legal Systems.

Quorum's Desktop Integration Services helps law firms to integrate a variety of PC-based software packages with existing hardware and operating systems.

Professional services provided include software modifications, disaster recover, education, system capacity planning/tuning, maintenance, and consulting.

Quorum Legal Systems' competitors include The Minicomputer Company, CMS/DATA, CompuTrac, Elite, and Juris.

# 7. Timberline Software Corporation, 9405 S.W. Gemini, Beaverton, OR 97005, (503) 626-6776

Timberline Software Corporation primarily provides microcomputerbased accounting and information management application software products to three target markets—construction, property management, and architecture/engineering.

The company operated as Timberline Systems, Inc. through 1986 and also sold Texas Instruments computers with Timberline minicomputer software products. This hardware resale business was discontinued in March 1986, and the company changed its name to Timberline Software Corporation to more accurately reflect its software product business. Timberline continues to provide minicomputer software and related services to TI users.

During 1990, to better manage the company's growth, Timberline formed product-oriented business groups, each responsible for its own product content, development, and support. These groups include property management, construction accounting, and construction estimating.

Total 1990 revenues reached \$12.7 million, an 18% increase over 1989 revenue of \$10.7 million. Net income declined 44%—from \$769,439 in 1989 to \$429,492 in 1990.







## **Definitions**

No industry-specific definitions have been used in this report.

See the separate volume, INPUT's *Definition of Terms*, for the general definitions of industry structure and delivery modes used throughout INPUT reports.







# Forecast Data Base

A

### Forecast Data Base

Exhibit B-1 presents the detailed 1990-1996 forecast for the business services sector.



EXHIBIT B-1

## Business Services Sector User Expenditure Forecast by Delivery Mode, 1990-1996

Delivery Modes	1990 (\$M)	Growth 90-91 (%)	1991 (\$M)	1992 (\$M)	1993 (\$M)	1994 (\$M)	1995 (\$M)	1996 (\$M)	CAGR 91-96 (%)
Sector Total	4,182	8	4,527	4,935	5,398	5,943	6,529	7,167	10
Processing Services	1,644	2	1.692	1,722	1,751	1,778	1,807	1,824	2
- Transaction Processing	1,644	2	1,692	1,722	1,751	1,778	1,807	1,824	2
Turnkey Systems	743	9	810	885	962	1,045	1,129	1,235	9
- Equipment	357	9	389	425	462	502	542	593	9
- Software Products	267	9	292	319	346	376	406	445	9
- Applications	230	9	251	274	298	324	350	383	9
- Systems	37	9	41	44	48	52	56	62	9
- Professional Services	119	9	130	142	154	167	181	198	9
Applications Software Products	759	16	880	1,017	1,177	1,367	1,590	1,791	15
- Mainframe	115	3	119	122	124	128	131	134	2
- Minicomputer	196	10	216	236	256	278	303	325	9
- Workstation/PC	448	22	545	659	797	961	1,156	1,332	20
Systems Operations	80	21	97	119	144	177	216	261	22
- Platform Sys Oprns	31	19	37	45	54	65	77	89	19
- Applications Sys Oprns	49	22	60	74	90	112	139	172	23
Systems Integration	127	20	152	188	235	307	356	438	24
- Equipment	30	20	36	45	56	74	85	105	24
- Software Products	17	20	20	24	31	40	46	57	24
- Applications	14	20	17	21	26	34	39	48	24
- Systems	3	20	3	4	5	6	7	9	24
- Professional Services	73	20	87	108	135	177	205	252	24
- Other	7	20	8	10	13	17	20	24	24
Professional Services	281	8	304	323	345	367	391	417	7
- Consulting	65	15	75	83	91	100	110	121	10
- Software Development	180	3	185	194	204	214	224	234	5
- Education & Training	36	22	44	46	50	53	57	62	7
Network Services	548	8	592	681	784	902	1,040	1,201	15
<ul> <li>Electronic Info Svcs</li> </ul>	533	8	575	660	758	870	1,001	1,154	15
- Network Applications	15	13	17	21	26	32	39	47	23



В

### Forecast Reconciliation

Exhibit B-2 presents the forecast reconciliation for the business services sector.

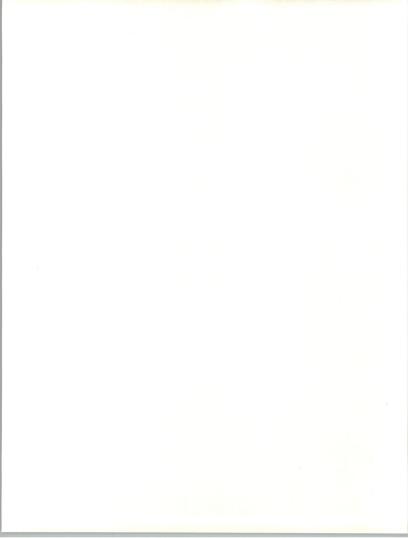
EXHIBIT B-2

# Business Services Sector 1991 MAP Data Base Reconciliation

	1990 Market				1995 Market				90-95	90-95
	1990 Report (Fcst)	1991 Report (Actual)			1990 Report (Fcst)	1991 Report (Fcst)	Variance from 1990 Report		CAGR per data 90 Rpt	CAGR per data 91 Rpt
Delivery Modes	(\$M)	(\$M)	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(%)	(%)	(%)
Total	2,565	4,182	1,614	63	4,281	6,529	2,254	53	11	10
Processing Services	787	1,644	857	109	895	1,807	912	102	3	2
Turnkey Systems	554	743	189	34	814	1,129	315	39	8	9
Applications Software	491	759	268	55	1,063	1,590	527	50	17	16
Systems Operations	17	80	63	371	28	216	188	671	10	22
Systems Integration	51	127	76	149	173	356	189	106	28	23
Professional Services	150	281	131	87	268	391	123	46	12	7
Network Services	515	548	30	6	1,040	1,040	-		15	15

The significant differences between the 1990 and 1991 forecasts are as follows:

- Consumer services sector expenditures have been combined into business services. The 1990 and 1991 report forecast data in Exhibit B-2 reflect this consolidation.
- Airline reservation systems processing services, which were treated as consumer services sector expenditures last year, have been transferred to the transportation sector (\$1.5 billion in 1990; \$2.64 billion in 1995).
- \$575 million of 1990 processing services expenditures were transferred from the accounting cross-industry sector to the services sector. These expenditures are for tax preparation processing services sold to accounting firms and professionals within the industry-specific business services.



- Systems operations expenditures will grow considerably faster this year, as a result of combining consumer services (25% CAGR) with business services (10% CAGR)
- The systems integration market continues to be influenced by changes in the economy and by business' ability to pay. The 1990 expenditures were somewhat less than forecasted in 1990, and the long-term market size has been dampened as a result of reduced near-term spending.
- The professional services forecast is lower than INPUT's 1990 forecast, as described in Chapter III.
- Network expenditures of \$100 million, also treated as consumer services sector expenditures last year, are now in the transportation sector.



## 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.

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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.

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