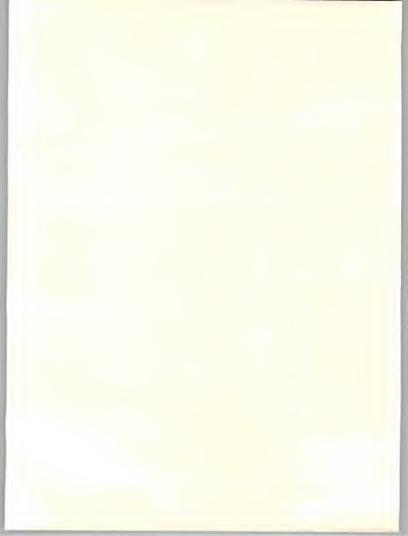
INFORMATION SERVICES VENDOR FINANCIAL WATCH

1990 Annual Performance



Published by INPUT 1280 Villa Street Mountain View, CA 94041-1194 U.S.A.

Vendor Analysis Program (VAP)

Information Services Vendor Financial Watch—1990 Annual Performance

Copyright ©1991 by INPUT. All rights reserved. Printed in the Unified States of America. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

CVVFW • 58 • 1991

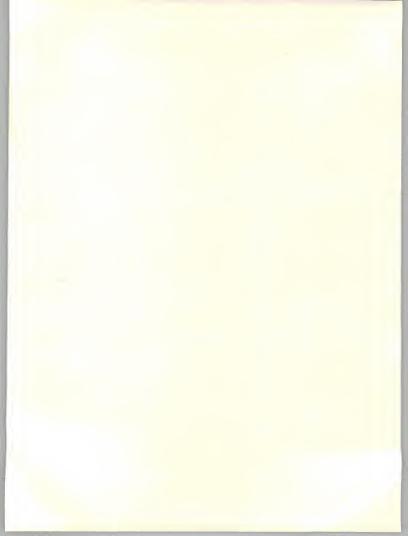
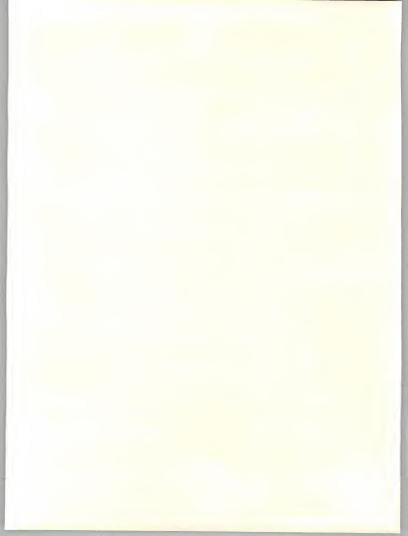


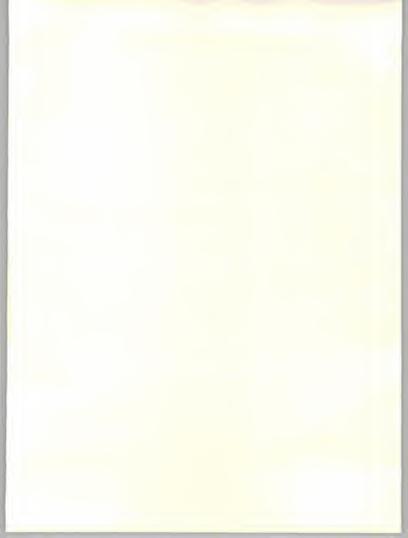
Table of Contents

I	Introduction				
	 A. Objective B. Report Structure C. Data Reported D. Company Changes 1. Companies Added in 1990 2. Companies Moved 3. Companies Removed 	1 2 2 2 2 4 4			
П	Public Information Systems Trends Analysis	5			
III	Processing/Network Services Trends Analysis	9			
IV	Electronic Information Services Trends Analysis	12			
V	Software Products Trends Analysis	14			
	A. Systems Software Products Trends Analysis	14			
	B. Applications Software Products Trends Analysis	15			
	C. Personal Computer versus Other Software Products Companie				
VI	VAR/Tumkey Systems Trends Analysis	22			
VII	Professional Services Trends Analysis	25			
	A. Government Professional Services Trends Analysis	25			
	B. Commercial Professional Services Trends Analysis	27			
	B. Commercial Floressional Services Fronds Finally Sid				



Exhibits

I	-1 Information Services Industry Structure	3
П	-1 Public Information Services Vendors—Revenue and Net Income	5
	-2 Public Information Services Vendors—Growth Rates	7
	-3 Public Information Services Vendors—Revenue Growth versus U.S. Forecast	8
III	-1 Public Processing/Network Services Vendors—Revenue and Net Income	9
	-2 Public Processing/Network Services Companies	11
IV	-1 Public Electronic Information Services Vendors—Revenue and Net Income	13
	-2 Public Electronic Information Services Companies	13
V	-1 Public Systems Software Products Vendors—Revenue and Net Income	14
	-2 Public Systems Software Products Companies	16
	 Public Applications Software Products Vendors—Revenue and Net Income 	17
	 Public Applications Software Products Companies 	18
	-5 Personal Computer versus Other Software Products Compan	
	-6 Public Personal Computer Software Products Companies	19
	-7 Other Public Software Products Companies	20
VI	-1 Public VAR/Turnkey Systems Vendors—Revenue and Net Income	22
	-2 Public VAR/Turnkey Systems Vendors	23
VII	-1 Public Government Professional Services Vendors— Revenue and Net Income	25
	 Public Government Professional Services Companies 	26
	-3 Public Commercial Professional Services Vendors— Revenue and Net Income	27
	-4 Public Commercial Professional Services Vendors	28





Introduction

A

Objective

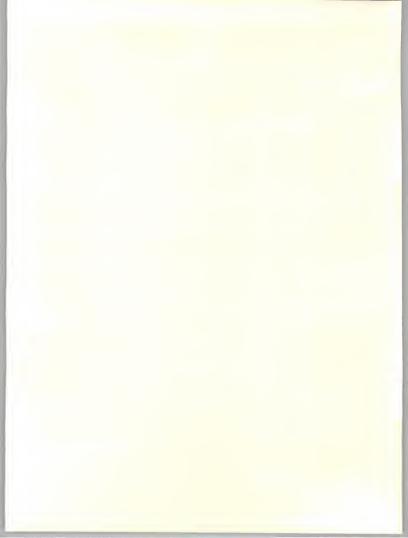
The Vendor Financial Watch (VFW) is INPUT's comparison of the financial performance of public information services companies. It provides vendor-by-vendor and industry-sector comparisons of performance of public companies' active in the U.S. information services industry. The information can be used to compare company performance against the performance of similar companies, sectors of the information industry, and the industry as a whole.

The revenue and net income of each information services industry sector are analyzed. A five-year financial history, from 1986 to 1990, is provided for each sector and the entire industry, along with a two-year history, from 1989 to 1990, for each public company. Extraordinary company results are explained in the footnotes in the appropriate exhibits.

The summary analysis at the beginning of the VFW report analyzes the comparative trends among modes and comments on the overall financial trend of the public companies within the total information services market.

The data contained herein are extracted from published sources, annual reports, and 10-K and 10-Q reports.

This issue of the VFW covers 120 public information services vendors. Only companies that are independent public companies based in the United States are included. The companies have to receive over 50% of their revenues from information services and software products. Companies that are computer manufactures are not included.



В

Report Structure

The VFW report is divided into seven chapters. The remaining chapters are the following:

- Chapter II Total information services industry financial performance
- Chapters III through VII cover the following industry sectors:
 - III Processing/Network Services Companies
 - IV Electronic Information Services Companies
 - V Software Products Companies
 - VI VAR/Turnkey Systems Companies
 - VII Professional Services Companies

The industry sectors are from INPUT's information services industry structure shown in Exhibit I-1. This structure forms the foundation for all of INPUT's market analyses and forecasts.

C

Data Reported

Financial data provided for each vendor includes individual annual revenue and net income and comparisons of performance for 1989 versus 1990. Comparisons of revenue and net income growth rates for each industry sector are provided for 1986 through 1990.

- The data is provided on a calendar-year rather than a fiscal-year basis for meaningful comparison.
- Net income is income after taxes and extraordinary items.
- · Vendors are categorized according to the service mode from which they derive the largest proportion of their 1990 revenues.

D

Company Changes

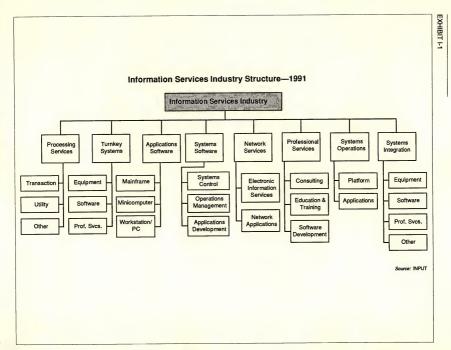
1. Companies Added in 1990

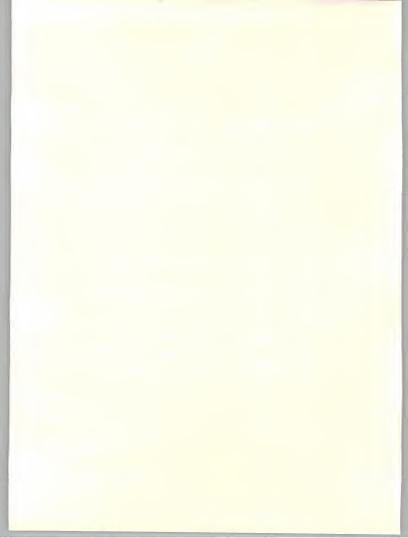
Vendors added to the 1990 VFW are:

- Equifax
- Saztec International
- SunGard Data
- Warner Computer Systems
- · Data Transmission Network
- PC Quote
- Altai
- BMC Software
- Borland
- Goal Systems Index Technology
- KnowledgeWare

- Novell
 - · Phoenix Technologies
- · Rabbit Software
- Spinnaker Software
- Symantec
- Verdix Aldus
- · Consilium
- · Structural Dynamics
- · System Software Associates
- · Valid Logic
- · Wicat Systems







- Cognitive Systems
- · Delphi Information Systems
- Computer Research
- Iverson Xvvision
- Corporate Software

2. Companies Moved

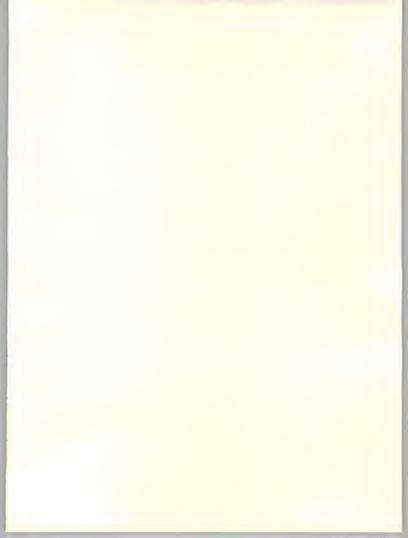
Companies moved from one service mode category to another are the following:

- · Interleaf was moved from turnkey systems to applications software products.
- · American Management Systems was moved from government professional services to commercial professional services.
- Sterling Software was moved from government professional services to systems software.
- · Comptek Research was moved from turnkey systems to government professional services.
- · Scientific Software-Intercomp was moved from applications software products to commercial professional services.

3. Companies Removed

Companies removed from the 1990 VFW are the following:

- · DST Systems is now private
- · GTECH is now private
- · Systematics was acquired by Alltel · Telecredit was acquired by Equifax
- · Epsilon was acquired by American Express
- · Cognos is a Canadian-based company
- Ingres was acquired by ASK Computer Systems
- · Stockholder Systems was acquired by NYNEX
- · Telos was acquired by Contel
- Daisy Systems is undergoing bankruptcy proceedings
- · Worlco no longer files quarterly with the SEC

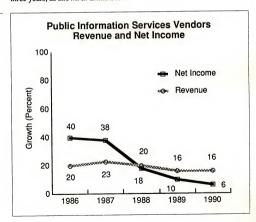


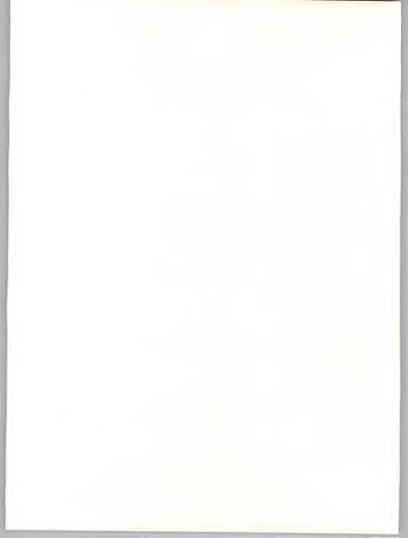


Public Information Systems Trends Analysis

Public information services companies as a group maintained steady growth during the past five years. In 1990, revenues for the group overall grew 16% over the 1989 revenue level. This is the same growth rate as recorded in 1989, slightly below the growth rates of the previous three years, as shown in Exhibit II-1.

EXHIBIT II-1





The most significant revenue growth in 1990 came from systems software, electronic information services, and applications software vendors. However, steady moderate growth was maintained by the government and commercial professional services and VAR/turnkey systems vendors.

Earnings, which have slowed consistently for the information services group as a whole during the past few years, grew only 6% for the year 1990, which is the fifth year in a row that net income growth has been less than the previous year.

Profitability for public information services vendors as a whole averaged 6.8% in 1990. In 1989, profitability averaged a somewhat higher 7%.

Exhibit II-2 provides a five-year history of the revenue and net income growth rates for each industry sector and for the industry as a whole.

Exhibit II-3 provides a comparison of the public company revenue growth and INPUT's most recent forecast of growth for each sector for all companies, both public and private in the U.S. information services industry. In general, the public companies' worldwide revenue growth rates are exceeding the projected growth for the U.S. information services industry.



EXHIBIT II-2

Public Information Services Vendors Growth Rates (Percent)

		Revenue	Net Income
Processing/Network	1986	17	5
Services Companies	1987	16	39
	1988	17	4
	1989	15	22
	1990	11	-8
Electronic	1986	42	2
Information Services	1987	32	45
Companies	1988	30	-9
•	1989	21	99
	1990	23	1255
Systems Software	1986	44	48
Products Companies	1987	57	67
	1988	46	56
	1989	26	20
	1990	25	19
Applications Software	1986	23	53
Products Companies	1987	30	-18
	1988	19	69
	1989	24	39
	1990	21	-11
VAR/Turnkey	1986	10	376
Systems Companies	1987	16	44
	1988	11	-29
	1989	5	-72
	1990	11	-26
Government	1986	16	38
Professional	1987	16	-4
Services Companies	1988	10	37
	1989	9	-31
	1990	10	36
Commercial	1986	20	-36
Professional	1987	14	244
Services Companies	1988	16	62
	1989	13	-31
	1990	14	109
Total Information	1986	20 23	38
Services Companies	1987	23	18
	1988	16	10
	1989		10
	1990	16	Ь

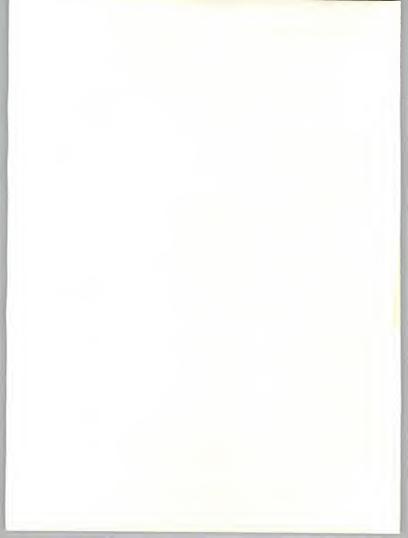


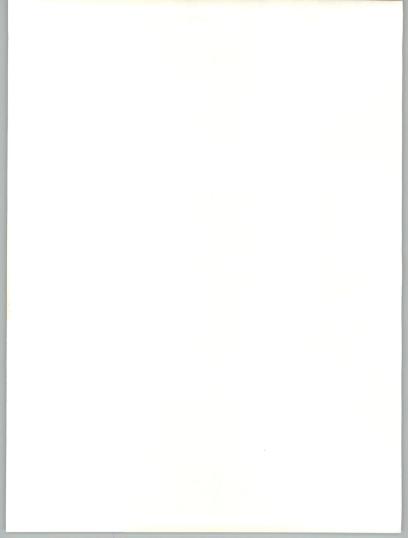
EXHIBIT II-3

Public Information Services Vendors—Revenue Growth versus U.S. Forecast (Percent)

Industry Sector	U.S. Forecast* 1989-1990	Actual** Growth
Processing/Network Services Companies	8	11
Electronic Information Services Companies	17	23
Systems Software Products Companies	13	25
Applications Software Products Companies	12	21
VAR/Turnkey Systems Companies	9	11
Government Professional Services Companies	5	10
Commercial Professional Services Companies	11	14
Total Information Services Companies	12	16

^{*} All information services companies - forecasted growth of U.S. revenue

^{**} Public vs. information services companies - actual growth of worldwide revenue

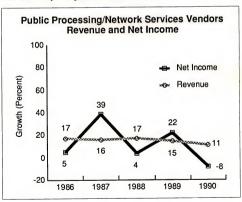




Processing/Network Services Trends Analysis

Revenue growth for the public processing/network services group, as shown in Exhibit III-1, slowed to 11% during 1990. For the period 1986 through 1989, revenue growth had remained relatively constant, ranging between 15% and 17% per year. The actual 11% growth rate was higher than the 8% expected growth rate for this sector.

EXHIBIT III-1



The growth in earnings for this group has fluctuated significantly during the past five years. Earnings declined 8% in 1990, but earnings grew 22% in 1989, 4% in 1988, 39% in 1987, and 5% in 1986. Certainly, the economic environment of 1990 had a negative impact on this sector.



Profitability for the processing/network services group is running slightly below average for the information services industry as a whole. During 1990, the profit margin maintained by the group was 6.7%, close to the industry average of 6.8%.

It must be noted that several public processing/network services firms went private during 1990 and were omitted from this report, including DST Systems, GTECH, and Worlco Data, which is no longer required to file quarterly with the SEC due to its small number of stockholders. Companies acquired during 1990 and omitted from this report include Telecredit, which was acquired by Equifax, and Systematics, which was acquired by Alltel.

Exhibit III-2 lists the revenue and net income performance of the public processing/network services companies included in the 1990 report.

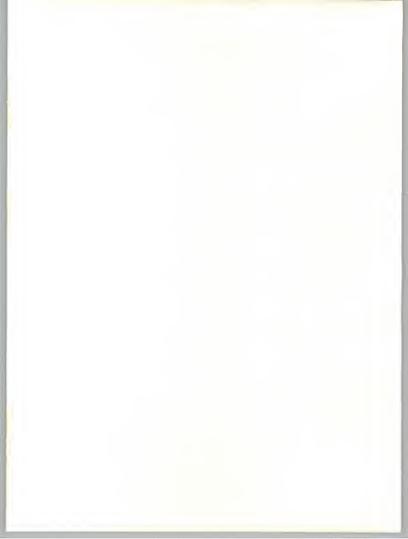
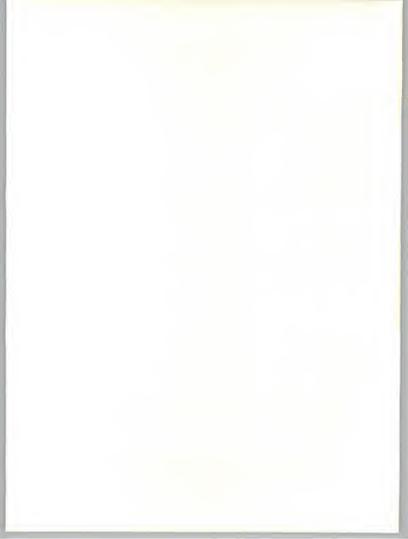


EXHIBIT III-2

Public Processing/Network Services Companies

	Revenue		Net Income			
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change
ADP	1,689.5	1,736.0	3	196.2	219.7	12
COMDATA HOLDINGS	159.0	189.8	19	-11.7	-40.8 ¹	-249
COMP-U-CHECK	7.7	7.3	-5	-1.9	-0.4	79
COMPUTER LANG. RES.	126.1	119.4	-5	0.7	-4.5 ²	-743
COMPUTER SERVICES	15.2	16.4	8	1.4	1.7	21
CONCORD COMP.	31.0	39.6	28	3.8	5.9	55
CYCARE	86.2	79.4	-8	3.1	-11.7 ³	-477
EQUIFAX INC.4	1,001.6	1,078.8	8	63.5	63.9	1
FIRST FIN. MGMT.	666.7	925.1	39	56.8	72.9	28
FISERV	164.0	183.2	12	11.4	13.8	21
M/A/R/C	61.6	73.1	19	2.9	2.8	-3
NAT'L. DATA	269.3	249.6	-7	24.9	-6.1 ⁵	-124
PAYCHEX	110.3	128.8	17	9.6	8.9	-7
PAY-FONE	5.9	5.3	-10	0.0	-0.3	-1,605
SANDATA	11.9	11.9	0	0.2	0.5	150
SAZTEC INT'L.	19.8	20.8	5	1.2	-0.8	-167
SEI	149.1	171.9	15	12.1	12.1	0
SHARED MEDICAL	390.0	403.1	3	23.1	22.7	-2
SUNGARD DATA 6	201.1	262.1	30	17.1	20.5	20
TOTAL SYS. SVCS.	65.9	83.9	27	11.3	12.7	12
WARNER COMPUTER SYS.	31.1	46.8	50	1.1	-0.2	-118
Total	5,263.0	5,832.3	11	426.8	393.3	-8
			1			1

- Includes a \$23 million charge for the prepayment of a non-compete agreement related to acquisitions made from American Express during 1989.
- (2) Includes restructuring charges of \$5.1 million associated with CLR's plan to accelerate the migration of its tax processing business from mainframes to a micro-based network environment.
- (3) Includes pretax charges of \$20.9 million for write-offs and provisions for restructuring related primarily to discontinued software product lines.
- (4) Financials reflect the pooling-of-interests acquisition of Telecredit Inc. during 1990.
- (5) Includes charges totalling \$19.6 million, including a restructuring charge of \$10.7 million, related to the closing of three voice centers.
- (6) Financials reflect the pooling-of-interests acquisition of DYATRON during 1989.





Electronic Information Services Trends Analysis

INPUT examines the public electronic information services vendors separately from the rest of the processing/network services group due to the difference in the market for these services.

Growth for companies focusing on providing electronic information services has slowed since 1986, but remains above the industry average. Growth for 1990 was 23%, somewhat higher than the 17% forecasted for this sector in the U.S. (see Exhibit II-3).

CUC International, the largest of the public electronic information services vendors, had 23% revenue growth in 1990.

Earnings growth has been more volatile for these vendors. For 1990, four of the six vendors in this group achieved earnings growth of over 100%.

Omitted from this report is Epsilon, which was acquired by American Express during 1990.

Exhibit IV-1 provides the five-year history of revenue and net income for this sector. Exhibit IV-2 lists the revenue and net income performance of the public electronic information services companies included in the 1990 report.

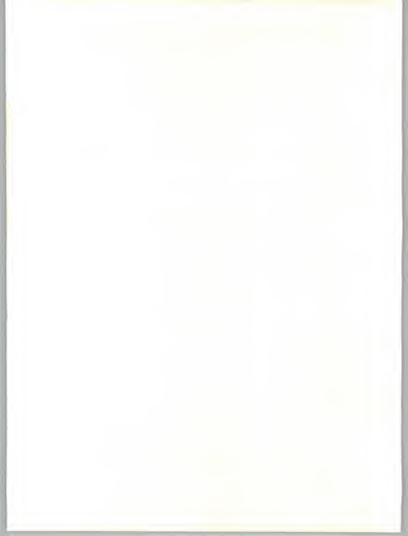


EXHIBIT IV-1

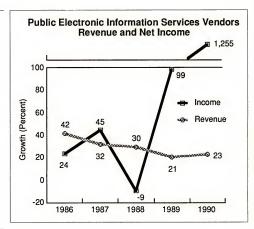


EXHIBIT IV-2

Public Electronic Information Services Companies

		Revenue			Net Income		
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	
ACXIOM	84.9	99.5	17	5.7	4.7	-18	
CUC INT'L.	367.5	453.6	23	8.1 ¹	17.5	116	
DATA TRANSMISSION	14.2	18.0	27	0.5	1.4	180	
INFO. RESOURCES	136.4	167.2	23	-12.1 ²	4.5	369	
LCS INDUSTRIES	33.4	42.5	27	0.2	0.4	100	
PC QUOTE	9.1	10.0	10	-0.4	-1.4	-250	
Total	645.5	790.8	23	2.0	27.1	1255	

- (1) Includes \$4.3 million in recapitalization costs.
- (2) Includes restructuring costs of \$5 million and a \$10.7 million loss from discontinued operations, including three survey-related businesses.





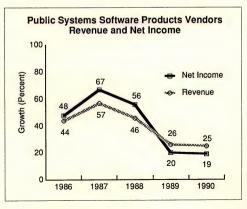
Software Products Trends Analysis

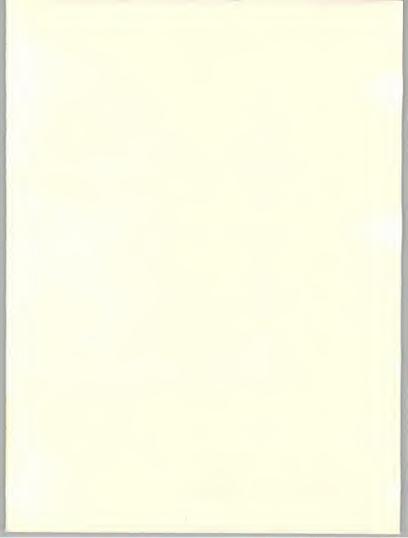
This chapter reports separately on the systems software and applications software products companies and then provides a comparison of the personal computer software products companies with all other software products companies.

A

Systems Software Products Trends Analysis Revenue growth for the systems software products vendors, as shown in Exhibit V-1, was 25% in 1990, compared to 26% in 1989, 46% in 1988, and 57% in 1987. The 25% growth was higher than the projected 14% overall growth rate for the systems software products sector.

EXHIBIT V-1





- Microsoft, now the largest of the public systems software products vendors, grew 55% during 1990.
- Computer Associates, previously the largest, grew 2% during 1990.
- KnowledgeWare had the most substantial growth for the group at 86%, followed by Borland at 83%.

Earnings growth for this group of vendors slowed to 19% during 1990. Vendors performing well above the group's average included Borland and Novell.

Profitability for this group of vendors for 1990 was 10.9%, well above the 6.8% average for the industry.

Significant changes in this sector include:

- The removal of Ingres Corporation because it was acquired by ASK Computer System, an applications software products vendor
- The early 1991 merger of Index Technology and Sage Software to form Intersolv, Inc.

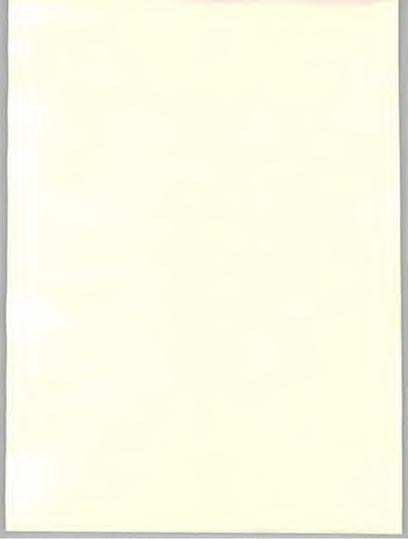
Exhibit V-2 lists the revenue and net income of the public systems software products companies included in the 1990 report.

В

Applications Software Products Trends Analysis

Applications software products vendors have grown steadily during the past few years. In 1990, as shown in Exhibit V-3, revenues for the group grew 21% over the previous year.

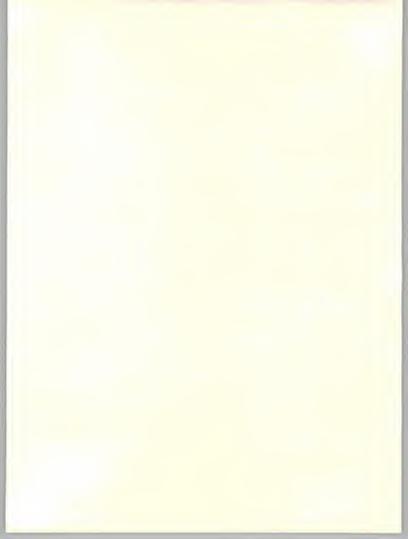
- The most significant growth (45%) was achieved by Cadence Design Systems, which acquired Gateway Design Automation Corporation in a pooling of interests transaction in December 1989, and Automated Systems, Inc. in July 1990.
- This year, Interleaf's results have been included in the applications software segment of this report. In late 1989, the company announced it was exiting the turnkey systems business and focusing on providing software and services.

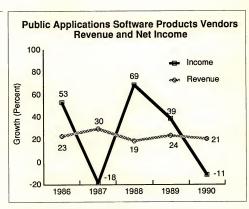


Public Systems Software Products Companies

	Revenue			Net Income			
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	
ADOBE SYSTEMS	121.4	168.7	39	33.7	40.1	19	
ALTAI	5.6	7.3	30	-0.1	-0.4	-300	
ASHTON-TATE	265.3	230.5	-13	-28.6	-18.1	37	
BGS SYSTEMS	20.2	22.3	10	4.0	5.1	28	
BMC SOFTWARE	82.0	125.0	52	17.9	27.8	55	
BOOLE & BABBAGE	78.9	100.2	27	5.4	4.8	-11	
BORLAND	104.4	190.8	83	9.7	22.6	133	
COMPUTER ASSOC.1	1,290.2	1,310.7	2	133.2	162.0	22	
GOAL SYSTEMS 2	86.4	117.0	35	10.5	10.3	-2	
INDEX TECHNOL	38.0	46.7	23	2.3	-1.0	-143	
INFODATA SYS	12.0	12.2	2	-0.8	0.2	125	
INFORMIX S/W	145.0	146.1 3	1	6.4	-46.4 ³	-825	
INTELLICORP	23.4	17.4	-26	1.3	-9.3 ⁴	-815	
KNOWLEDGEWARE	49.7	92.3	86	8.7	11.7	34	
LEGENT	142.8 5	180.5	26	25.4 ⁵	34.7	37	
MICROSOFT	952.8	1,477.8	55	210.5	355.6	69	
NOVELL	429.1	526.3	23	52.6	109.7	109	
ON-LINE S/W	85.0	95.4	12	3.3	3.8	15	
ORACLE 6	753.8	1,058.9	40	88.3	57.4	-35	
PANSOPHIC 7	201.6	234.6	16	19.8	-14.7	-174	
PHOENIX TECH	45.8	38.8	-15	-15.5	-18.4	-19	
RABBIT S/W	5.5	8.5	55	-12.8	-3.3	74	
SAGE SOFTWARE	23.9	30.9	29	2.3	4.2	83	
SPINNAKER S/W	11.3	11.2	-1	-0.5	-3.3	-560	
STERLING S/W	184.4	207.0	12	11.0	12.4	13	
SYMANTEC8	64.9	95.3	47	7.9	6.7	-15	
SYNERCOM TECH.	16.2	12.6	-22	1.1	-0.9	-182	
SYSTEMS CENTER ⁹	78.2	105.5	35	11.9	-27.9 ¹⁰	-334	
VERDIX	10.5	13.4	28	1.6	1.5	-6	
Total	5,328.3	6,683.9	25	610.5	726.9	19	

- (1) Results have been restated to reflect the pooling-of-interests acquisition of Cullinet in September 1989.
- (2) Financials for 1989 have been restated to reflect the pooling-of-interests acquisitions of MVS Software and Essential Software during 1990.
- (3) Results for 1990 have been restated to reflect Informit's recent voluntary adoption of a new, more conservative revenue recognition policy, restructuring costs of \$6 million, and a net negative cumulative adjustment of \$23.3 million for the effect of the change in policy on results from prior years.
- (4) Includes a charge of \$3.2 million from the cumulative effect of a change in the method of revenue recognition.
- (5) Results for 1989 were restated to reflect the pooling-of-interests acquisition of BST, Inc. In November 1989.
- (6) Results for certain quarters of calendar 1989 and 1990 have been restated to reflect a change in the method of revenue recognition and related sales expenses.
- (7) Results for periods prior to April 1990 have been restated to reflect the disposal of the company's graphics business. Losses for 1990 reflect discontinued operations, (including a Brazillan subsidiary) and reorganization expenses.
- (8) Results have been restated to reflect the pooling-of-interests acquisition of Peter Norton Computing.
- (9) Results have been restated to reflect the pooling-of-interests acquisitions of Software Developments International and UNITECH Software Inc.
- (10) Includes a one-time writedown of marketing rights (NET/MASTER) and restructuring expenses of \$23.1 million.





During the past five years, growth in earnings has fluctuated continuously. In 1990, earnings declined 11%, compared to earnings growth of 39% for 1989. Results were negatively impacted by:

- Lotus Development, whose earnings dropped 192% due to a charge against earnings associated with the acquisition of Samna Corporation
- Valid Logic, with \$38 million in restructuring costs due to the decision to withdraw from the hardware distribution business

Profitability for the applications software products group declined to 8% during 1990, but remained above the industry average of 6.8%.

Omitted from the group this year was Stockholder Systems, which was acquired by NYNEX during 1990.

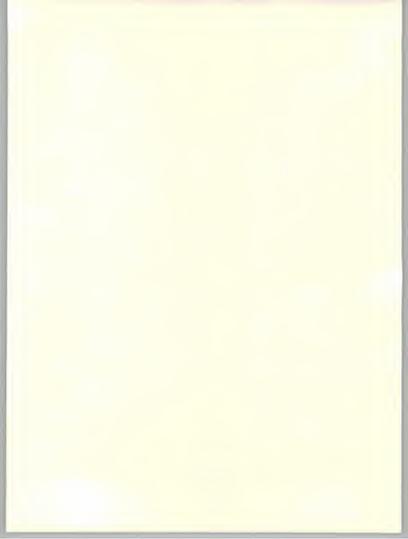
Exhibit V-4 lists the revenue and net income of the public applications software products companies included in the 1990 report.



Public Applications Software Products Companies

		Revenue			Net Income	,
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)
ALDUS	98.6 1	135.0	37	17.1 1	23.8	39
AMERICAN S/W	86.3	99.8	16	17.2	17.6	2
AUTODESK	178.6	237.9	33	46.4	56.8	22
CADENCE DESIGN ²	159.9	231.4	45	26.2	38.0	45
COMSHARE	94.6	115.9	23	6.3	6.4	2
CONSILIUM	25.1	33.0	31	4.2	4.9	17
CYBERTEK	24.0	28.6	19	1.8	3.3	83
FDP	14.7	16.8	14	-0.1	0.5	600
GENESEE	1.7	1.9	12	0.2 ³	0.1	-50
HOGAN SYSTEMS	44.34	44.8	1	5.3 4	0.1	-98
INFO SCIENCE	13.8	12.0	-13	-0.4	0.0	100
INTERLEAF	114.8	84.1	-27	-15.6	-2.1	87
LOTUS DEVELOP	556.0	684.5	23	68.0 ⁵	23.3	-66
MACNEAL SCHWEND	45.0	56.6	26	9.8	11.8	20
POLICY MGMT	265.6	346.1	30	26.8	37.2	39
SILVAR-LISCO	13.6	10.9	-20	-6.1	0.0	100
SOFTWARE PUB	110.4	153.5	39	18.8	20.6	10
S/W SVC AMER.	3.2	3.0	-6	-0.7	-1.1	-57
STRUCTURAL DYNAM	93.6	118.6	27	9.8	13.3	36
SYSTEM SOFT ASSOC	98.6	129.6	31	12.1	17.1	41
TIMBERLINE S/W	10.7	12.7	19	0.8	0.4	-50
VALID LOGIC	173.9	158.5	-9	10.0	-44.1 ⁷	-541
WICAT SYSTEMS	44.5	51.4	16	0.2	2.7	1,250
WORDSTAR	41.9	36.4	-13	-3.3	-3.2	3
Total	2,313.4	2,803.0	21	254.8	227.4	-11

- (1) Restated to reflect the pooling-of-interests acquisition of Silicon Beach Software in February 1990.
- (2) All amounts have been restated to reflect the pooling-of-interests acquisitions of Gateway Design Automation Corporation in December 1989 and Automated Systems, Inc. in July 1990.
- (3) Includes a net gain of nearly \$70,000 from the sale of a building.
- (4) Results for 1989 were restated to reflect the sale of Hogan's BankVision product line.
- (5) Includes a pretax gain of \$6.8 million from the sale of Lotus Information Network Corporation, a provider of real-time stock market information using FM-sideband technology.
- (6) Includes a one-time charge against earnings of \$53 million associated with the acquisition of Samna Corporation in December 1990.
- (7) Includes restructuring costs of \$38.0 million associated with the company's decision to withdraw from the hardware distribution business.



C

Personal Computer versus Other Software Products Companies

Exhibit V-5 provides a summary comparison of the revenue and net income performance of two groups of public software products companies, personal computer software products companies and other software products companies and other software products companies. The companies included in the personal computer group include only those companies that receive the dominant share of their revenue from true personal computer software products.

EXHIBIT V-5

Personal Computer versus Other Software Products Companies

	Revenue Change (Percent)	Net Income Change (Percent)
Personal computer companies	33	52
Other companies	18	-27

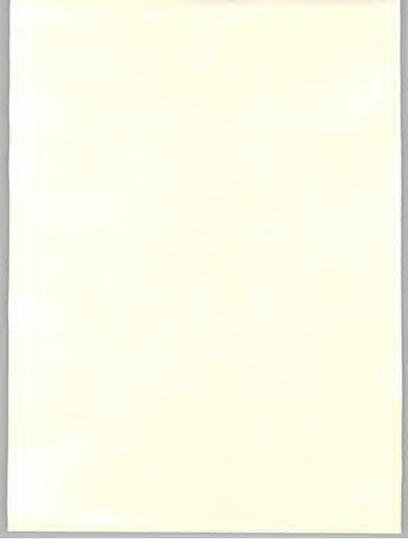
 For example, CASE product vendors such as Index Technology and KnowledgeWare were included in the "other" category since their products, while operating on a personal computer, are tied to the development of more traditional mainframe and minicomputer systems.

Exhibits V-6 and V-7 list the public software products companies by personal computer and "other."

EXHIBIT V-6

Public Personal Computer Software Products Companies

		Revenue			Net Income			
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent		
ADOBE SYSTEMS	121.4	168.7	39	33.7	40.1	19		
ALDUS	98.6	135.0	37	17.1	23.8	39		
ASHTON-TATE	265.3	230.5	-13	-28.6	-18.1	37		
AUTODESK	178.6	237.9	33	46.4	56.8	22		
BORLAND	104.4	190.8	83	9.7	22.6	133		
LOTUS DEVELOP	556.0	684.5	23	68.0	23.3	-66		
MICROSOFT	952.8	1,477.8	55	210.5	355.6	69		
NOVELL	429.1	526.3	23	52.6	109.7	109		
PHOENIX TECH	45.8	38.8	-15	-15.5	-18.4	-19		
RABBIT S/W	5.5	8.5	55	-12.8	-3.3	74		
SOFTWARE PUB	110.4	153.5	39	18.8	20.6	10		
SPINNAKER S/W	11.3	11.2	-1	-0.5	-3.3	-560		
SYMANTEC	64.9	95.3	47	7.9	6.7	-15		
TIMBERLINE S/W	10.7	12.7	19	0.8	0.4	-50		
WICAT SYSTEMS	44.5	51.4	16	0.2	2.7	1250		
WORDSTAR	41.9	36.4	-13	-3.3	-3.2	3		
Total	3,041.2	4,059.3	33	405.0	616.0	52		



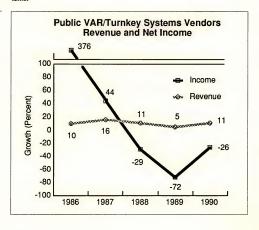


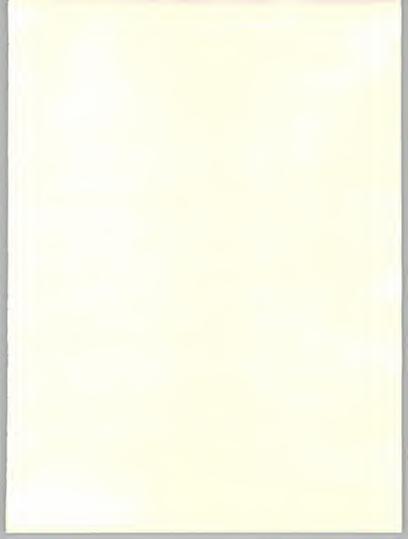
VAR/Turnkey Systems Trends Analysis

Revenue growth for VAR/turnkey systems vendors has been moderate to low during the past five years, as indicated by Exhibit VI-1.

Revenue grew 11% for these vendors in 1990, compared to 5% in 1989 and 11% in 1988. The most significant contributors to the growth in 1990 were C3, Terrano, Corporate Software, and ASK Computer Systems.

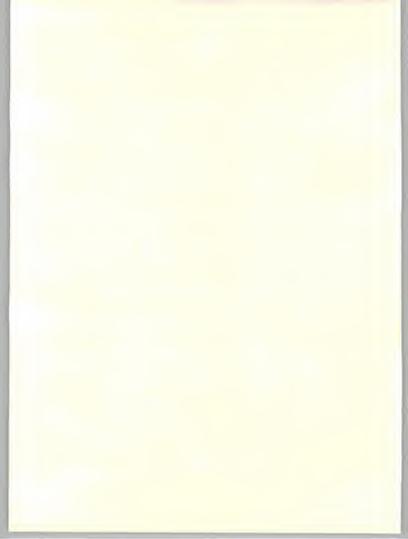
EXHIBIT VI-1





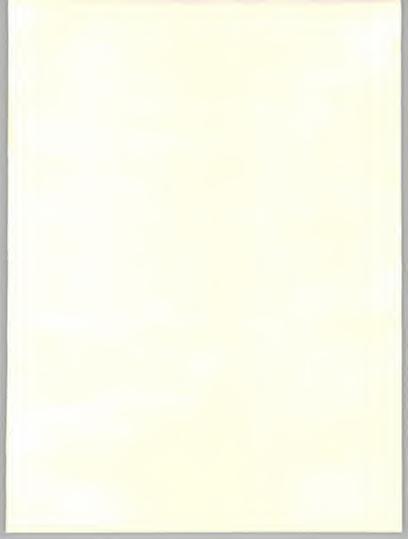
The performance, for revenue and net income, is substantially better for the personal computer companies than for all other companies.

- The performance of Microsoft and Novell are major factors in the excellent performance of personal computer software products companies.
- Ashton-Tate is the largest company in the personal computer software products category having a negative impact on this group's performance.
- A number of significant companies in the "other" category recorded lower growth rates in net income in 1990. Included are Systems Center. Informix, and Oracle.
- The largest company in the "other" category, Computer Associates, recorded a 22% increase in net income in 1990.



Other Public Software Products Companies

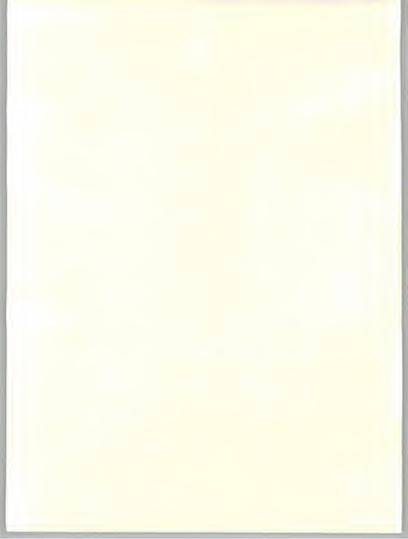
		Revenue			Net Income)
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent
ALTAI	5.6	7.3	30	-0.1	-0.4	-300
AMERICAN S/W	86.3	99.8	16	17.2	17.6	2 2
BGS SYSTEMS	20.2	22.3	10	4.0	5.1	28
BMC SOFTWARE	82.0	125.0	52	17.9	27.8	55
BOOLE & BABBAGE	78.9	100.2	27	5.4	4.8	-11
CADENCE DESIGN	159.9	231.4	45	26.2	38.0	45
COMPUTER ASSOC.	1,290.2	1,310.7	2	133.2	162.0	22
COMSHARE	94.6	115.9	23	6.3	6.4	2
CONSILIUM	25.1	33.0	31	4.2	4.9	17
CYBERTEK	24.0	28.6	19	1.8	3.3	83
FDP	14.7	16.8	14	-0.1	0.5	600
GENESEE	1.7	1.9	12	0.2	0.1	-50
GOAL SYSTEMS	86.4	117.0	35	10.5	10.3	-2
HOGAN SYSTEMS	44.3	44.8	1	5.3	0.1	-98
INDEX TECHNOLOGY	38.0	46.7	23	2.3	-1.0	-143
INFODATA SYS.	12.0	12.2	2	-0.8	0.2	125
INFORMIX S/W	145.0	146.1	1	6.4	-46.4	-825
INFO SCIENCE	13.8	12.0	-13	-0.4	0.0	100
INTELLICORP	23.4	17.4	-26	1.3	-9.3	-815
INTERLEAF	114.8	84.1	-27	-15.6	-2.1	87
KNOWLEDGEWARE	49.7	92.3	86	8.7	11.7	34
LEGENT	142.8	180.5	26	25.4	34.7	37
MACNEAL SCHWEND	45.0	56.6	26	9.8	11.8	20
ON-LINE S/W	85.0	95.4	12	3.3	3.8	15
ORACLE	753.8	1.058.9	40	88.3	57.4	-35
PANSOPHIC	201.6	234.6	16	19.8	-14.7	-174
POLICY MGMT	265.6	346.1	30	26.8	37.2	39
SAGE SOFTWARE	23.9	30.9	29	2.3	4.2	83
SILVAR-LISCO	13.6	10.9	-20	-6.1	0.0	100
S/W SVC. AMER.	3.2	3.0	-6	-0.7	-1.1	-57
STERLING S/W	184.4	207.0	12	11.0	12.4	13
STRUCTURAL DYNAM	93.6	118.6	27	9.8	13.3	36
SYNERCOM TECH.	16.2	12.6	-22	1.1	-0.9	-182
SYSTEMS CENTER	78.2	105.5	35	11.9	-27.9	-334
SYSTEM SOFT ASSOC.	98.6	129.6	31	12.1	17.1	41
VALID LOGIC	173.9	158.5	-9	10.0	-44.1	-541
VERDIX	10.5	13.4	28	1.6	1.5	-6
Total	4.600.5	5.427.6	18	460.3	338.3	-27



Public VAR/Turnkey Systems Vendors

		Revenue			Net Income	
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)
ASA INT'L.	23.8	18.7	-21	0.5	0.3	-40
ASK COMP. SYS!	189.6	249.7	32	9.3	4.7	-49
AUTO-TROL TECH.	76.9	77.2	0	-4.4	-2.1	52
BARRISTER INFO.	31.0	26.4	-15	-7.1 ²	-3.5	51
C3	57.6	90.3	57	-19.3 ³	-0.44	98
CERNER	56.7	51.3	-10	3.6	1.6	-56
COMPUTER RESEARCH	11.4	11.3	-1	-0.1	-0.3	-200
COMPUTRAC	13.4	10.6	-21	1.8	0.1	-94
CORPORATE S/W	135.5	197.0	45	3.2	3.6	13
DELPHI INFO. SYSTEMS	20.1	23.1	15	-1.9	1.5	179
FILENET	83.1	102.9	24	3.0	3.8	27
GERBER SCIENTIFIC	306.1	279.8	-9	33.2	15.1	-55
НВО	203.6	201.5	-1	15.5	7.1 ⁵	-54
INTERGRAPH	860.1	1,044.6	21	79.5 ⁶	62.6	-21
IVERSON	60.3	49.5	-18	1.3	-6.1	-1,374
REYNOLDS & REYNOLDS	594.4 ⁷	607.3	2	26.3	22.0	-16
TERRANO	4.9	6.6	35	0.4	0.8	100
TRIAD SYSTEMS	148.9	143.7	-3	2.7	3.4	26
XYVISION	35.0	29.1	-17	-17.1	-18.1 ⁸	-6
Total	2,912.4	3,220.6	11	130.4	96.1	-26

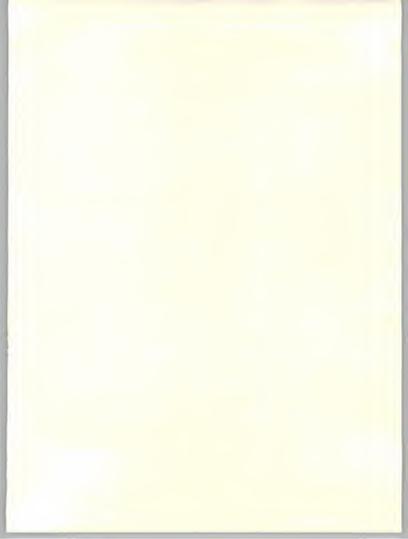
- (1) Includes the results of Ingres Corporation from the date of its acquisition in 1990.
- (2) Restated to include a \$318,000 loss on the subleasing of excess office space.
- (3) Includes interest expenses of over \$12 million associated with loans used to finance the C3 acquisition by Knoll Capital Management L.P.
- (4) Includes an extraordinary gain of \$23.1 million resulting from a financial restructuring of the company during mid-1990.
- (5) Includes a nonrecurring charge of \$3.1 million related to the discontinuance of HBO's clinical equipment maintenance and refurbishment businesses.
- (6) Includes \$13.5 million in pretax gains on the sale of long-term investments.
- (7) Restated to reflect a change in the method of accounting for majority-owned subsidiaries.
- (8) Includes \$6.9 million in restructuring charges and write-downs of assets to phase out the company's proprietary hardware manufacturing business.



Earnings growth for the VAR/turnkey systems group has been somewhat volatile during the past five years. In 1990, earnings declined 26%, after falling 72% during 1989, as shown in Exhibit VI-2.

In 1990, profitability for the group ran below the average for information services vendors overall. The group earned 3.0% on the revenues it generated, compared to the industry average of 6.8%.

Note that Daisy Systems was removed from the list of public VAR/ turnkey systems vendors because it was undergoing bankruptcy proceedings. Comptek Research was moved to the government professional services category.



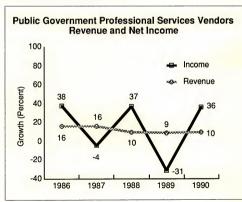


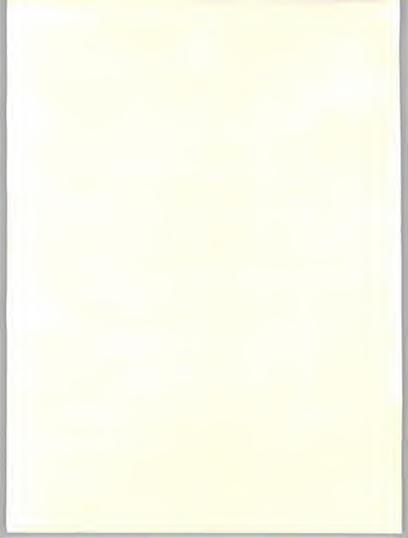
Professional Services Trends Analysis

A

Government Professional Services Trends Analysis Growth for the government professional services vendors has been moderate for most of the past five years. Revenues for these companies grew an average of 10% in 1990, compared to 9% in 1989, 10% in 1988, and 16% in 1987 (see Exhibit VII-1). INPUT forecasted the overall 1990 growth for this sector at 5% in the U.S. Many of the public government sector professional services firms are experiencing their growth by expansion into the commercial sector.

EXHIBIT VII-1





Professional services for the government represents a very mature market targeted by several large vendors, the largest being Computer Sciences Corporation. In 1990, Computer Sciences generated revenues in excess of \$1.6 billion, equal to growth of 16% for the year. Other large government professional services firms include Bolt Beranek & Newman (BBN) and Logicon.

Earnings for the group have fluctuated dramatically during the past several years. The group experienced a 36% increased in earnings during 1990, compared to a 31% decline in earnings during 1989.

Profitability for the government professional services vendors listed in Exhibit VII-2 is well below the average for information services vendors overall. In 1990, the group earned 2.3% on revenues.

EXHIBIT VII-2

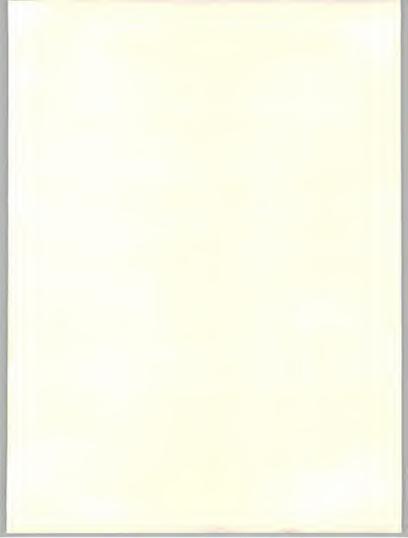
Public Government Professional Services Companies

		Revenue			Net Income	
Company Name	1990 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)
BBN	274.1	266.4	-3	-34.2	-22.21	35
C.A.C.I.	142.6	148.1	4	3.2	3.3	3
COMPUTER DATA SYS.	122.3	126.1	3	2.4	3.4	42
COMPTEK RESEARCH	47.4	51.0	8	1.2	1.4	17
csc	1,442.8	1,679.3	16	58.4	68.0	16
DYNAMICS RES.	88.5	90.5	2	3.6	3.3	-8
INTERMETRICS	46.7	52.4	12	2.0	1.8	-10
LOGICON	254.2	257.3	1	8.6	8.6	0
SOFTECH	48.7	49.4	1	1.1	-4.8 ²	-536
Total	2,467.3	2,720.5	10	46.3	62.8	36

- Includes a \$20.4 restructuring charge, of which \$11.1 million is associated with the downsizing and refocusing of BBN Advanced Computers.
- (2) Includes a \$2.9 million one-time pretax charge for an excess office space lease and SofTech's investment in COMPASS.

Changes in companies included in this sector are the following:

 American Management Systems was moved to the commercial professional services category this year.

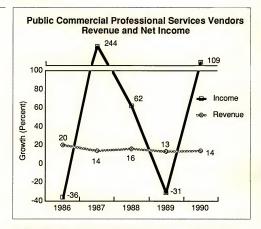


- Sterling Software was moved to the systems software category.
- · Telos was removed from the list because it was acquired by Contel.

В

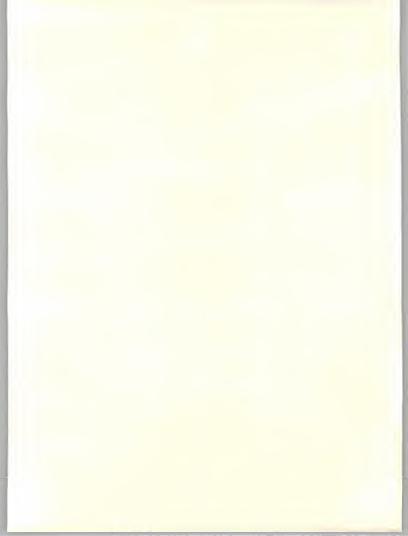
Commercial Professional Services Trends Analysis Growth for the commercial professional services vendors has leveled off during the past four years. Revenues for commercial professional services companies increased 14% from 1989 to 1990, as indicated in Exhibit VII-3.

EXHIBIT VII-3



The largest increases were achieved by Continuum and Brandon Systems. American Management Systems, now the largest of the public commercial professional services companies, grew 16% during 1990. Earnings for this group have fluctuated over the past five years. Earnings rose 109% during 1990, after declining 31% during 1989 and growing 62% during 1988.

Profitability for the commercial professional services group, although lower than the industry average, was higher than for the government professional services group in 1990. Commercial professional services companies earned only 3.6% of revenues on average for the year, compared to 6.8% for the industry as a whole. The performance of each company is listed in Exhibit VII-4.



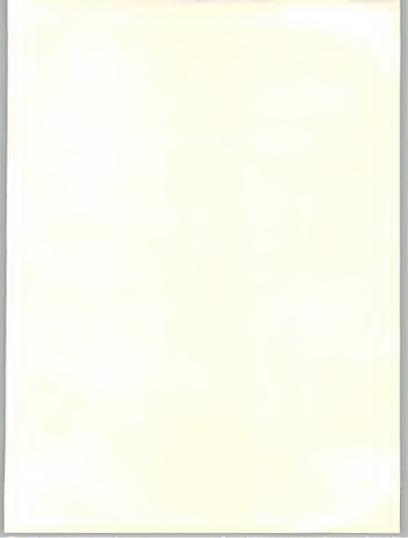
Public Commercial Professional Services Vendors

		Revenue		Net Income			
Company Name	1989 (\$ Million)	1990 (\$ Million)	Change (Percent)	1989 (\$ Million)	1990 (\$ Million)	Change (Percent	
AMER. MGMT. SYS.	225.3	261.9	16	6.2	12.0	94	
ANALYSTS INTL.	98.9	114.2	15	5.4	6.2	15	
BRANDON SYSTEMS	30.6	37.1	21	2.0	2.3	15	
COGNITIVE SYSTEMS	3.4	3.4	0	0.1	-0.6	-700	
COMP. HORIZONS	84.7	99.4	17	-0.3 ¹	3.3	1200	
COMP. TASK GROUP	233.0	243.9	5	-7.8 ²	7.2	192	
CONTINUUM	75.1	97.1	29	3.1	8.1	161	
KEANE	77.2	93.0	20	3.6	5.2	44	
SCIENTIFIC S/W	20.8	19.8	-5	0.5	-9.2 ³	-1940	
SYS. & COMP. TECH.	44.5	51.1	15	3.4	1.1	-68	
TECHNALYSIS	20.7	20.5	-1	2.0	2.2	10	
WORLD WIDE COMP.	17.7	17.2	-3	0.0	0.3		
Total	931.9	1,058.6	14	18.2	38.1	109	

⁽¹⁾ Includes restructuring charges of \$3.3 million associated with a plan to reduce costs.

⁽²⁾ Includes expenses of \$17.4 million for certain restructuring and closing of businesses.

⁽³⁾ Includes a one-time charge of \$2.2 million associated with a change in the method of revenue recognition and \$2.8 million in nonrecurring charges related to an office lease in London and provisions for anticipated losses for one client project.



Code	Company	CVFW-RP
RA04-2	AT&T, Rieck, Craig	1
RA04-24	AT&T, Dalton, Gary R.	1
RA04-47	AT&T, Sokol, Eva	1
RA04-5	AT&T, Huk, Lidia	2
RA04-56	AT&T, Coursen, Samuel	1
RA04-56A	AT&T, Lawton, Marie	2
MATE SOIL	Mary sameon, harre	_
RA04-56C	AT&T, Kozemchak, Edward B.	1
RA04-75	AT&T, Stein, David	i
RA05-4	AMDAHL CORPORATION, Brennan, Timothy F.	2
RA10-11	ANDERSEN CONSULTING, Bott, Harold S.	ī
RA10-15A	ANDERSEN CONSULTING, Battle, A. George	i
RA10-15A		i
KA10-158	ANDERSEN CONSULTING, Heckman, Bob	1
RA10-15T	ANDERSEN CONSULTING, Smith, John D.	1
RA10-2	ANDERSEN CONSULTING, Davis, Jean	2
RA10-21	ANDERSEN CONSULTING, Oltman, John	1
RA10-23	ANDERSEN CONSULTING, York, Philip	1
RA10-25A	ANDERSEN CONSULTING, Shaheen, George T.	1
RA10-25B	ANDERSEN CONSULTING, Rydberg, Gerald	1
RA10-2A	ANDERSEN CONSULTING, Maurer, Margo B.	1
RA10-36	ANDERSEN CONSULTING, Ahern, Robert	1
RA10-37	ANDERSEN CONSULTING, Konvalinka, John	1
RA10-37B	ANDERSEN CONSULTING, Bunnell, John	1
RA10-38	ANDERSEN CONSULTING, Krauss, Michael C.	1
RA59-2	AMERICAN EXPRESS, Hauptman, Mindy	2
	Total and	
RA92-55	SAM ALBERT ASSOCIATES, Albert, Sam	1
RB16-17	BELL ATLANTIC ENTERPRISES, Tobin, Doreen	i
RB16-5	BELL ATLANTIC, Edgerton, Ray	i
RB16-5A	BELL ATLANTIC ENTERPRISES, Radziewicz, C	ż
RB23-1	BROADVIEW ASSOCIATES, Klein, Katherine	2
RB23-2	BROADVIEW ASSOCIATES, Poppel, Harvey	1
KDZJ-Z	BROADVIEW ASSOCIATES, POPPET, naivey	
RB29-1	BELLSOUTH CORPORATION, Lilly, John	1
		i
RB29-15A	BELLSOUTH ENTERPRISES, INC., Carr, Debor	
RB29-1A	BELLSOUTH CORPORATION, Hornbuckle, Jewel	2
RB29-3	BELLSOUTH CORPORATION, Arias, Salvador L	1
RB29-31	BELLSOUTH CORPORATION, Jackson, Rebecca	1
RB30-2	BELLCORE, Adams, Robin S.	1
		_
RB30-4	BELLCORE, Glickman, Linda	2
RB35-6	BULL S.A., Chaussonniere, Didier	2
RB36-1	BARCLAYS DE ZOETE WEDD, INC., Gross, Las	2
RB87-1	BP EXPLORATION, Gahagan, Larry	1
RC12-2	COMPUTER SCIENCES CORPORATION, Lepard, G	4
RC12-5	COMPUTER SCIENCES CORPORATION, Bergstein	1
RC12-5A	COMPUTER SCIENCES CORPORATION, Hoover, W	1
RC12-5B	COMPUTER SCIENCES CORPORATION, Stilling,	1
RC12-6	COMPUTER SCIENCES CORPORATION, Parkus, L	1
RC26-2	COOPERS & LYBRAND, Foy, Patricia	2
RC26-7	COOPERS & LYBRAND, Van Ness, George	1
RC29-1	STM SYSTEMS CORPORATION, Marshall, Jim	2



Code	Company	CVFW-RF
RC34-1	COMPUTER ASSOCIATES, Welch, Mary	CTIWA
RC34-2	COMPUTER ASSOCIATES, Wang, Charles B.	1
RC39-2	CINCINNATI BELL INFORMATION, Long, Diana	1
RC39-29		
	CINCINNATI BELL INFORMATION, Schuler, Sa	
RC39-30	CINCINNATI BELL INFORMATION, Stelzer, Da	
RC39-4A	CINCINNATI BELL, INC., Sawn, Peter	1
RC39-7	CINCINNATI BELL INFORMATION, Schinkal, W	1
RC50-15	COMPUTER TASK GROUP, Lamb, Vincent	1
RC50-2	COMPUTER TASK GROUP, Gohn, Rosemary	2
RC50-6	COMPUTER TASK GROUP, Campbell, David N.	1
RC74-3	APPLE COMPUTER INCORPORATED, Donnalley,	2
RD01-1	DIGITAL EQUIPMENT CORPORATION, Ahern, Ca	1
RD01-2	DIGITAL EQUIPMENT CORPORATION, Library,	
	DIGITAL EQUIPMENT CORPORATION, Elbrary, Ge	1
RD01-22	DIGITAL EQUIPMENT CORPORATION, STAFF, Ge	
RD01-29	DIGITAL EQUIPMENT CORPORATION, Santarlas	1
RD01-2A	DIGITAL EQUIPMENT CORPORATION, Page, Jan	1
RD01-31	DIGITAL EQUIPMENT CORPORATION, Anderson,	1
RD01-32	DIGITAL EQUIPMENT CORPORATION, Beirne, J	1
RD01-33	DIGITAL EQUIPMENT CORPORATION, Yost, Bob	1
RD01-4	DIGITAL EQUIPMENT CORPORATION, North, Ch	1
RD01-47T	DIGITAL EQUIPMENT COROPRATION, Theberge,	1
RD01-47U	DIGITAL EQUIPMENT CORPORATION, Greenwood	1
RD01-47V	DIGITAL EQUIPMENT CORPORATION, Maitland,	1
RD01-5	DIGITAL EQUIPMENT INT'L BV, Quinn, Georg	1
RD01-6	DIGITAL EQUIPMENT CORPORATION, Dimieri,	1
RD01-62	DIGITAL EQUIPMENT CORPORATION, Shields,	1
RD01-63	DIGITAL EQUIPMENT CORPORATION, Scull, Na	1
RD01-65	DIGITAL EQUIPMENT CORPORATION, Baptiste,	1
RD01-65A	DIGITAL EQUIPMENT CORPORATION, Pittinger	1
RD01-75	DIGITAL EQUIPMENT CORPORATION, Gallet, J	1
RD01-75A	DIGITAL EQUIPMENT CORPORATION, Hill, Car	1
RD01-73A	DIGITAL EQUIPMENT CORPORATION, MITT, Cal-	- 1
RD01-91A	DIGITAL EQUIPMENT CORPORATION, SIMOIS, M	- 1
RD01-918	DIGITAL EQUIPMENT CORPORATION, GUTTOTI,	i
RD01-916	DIGITAL EQUIPMENT CORPORATION, SCALDOFOL	- 1
	DELOITTE & TOUCHE, Deverell, Michael G.	1
RD16-1A	DELOTTIE & TOUCHE, Deverett, Michael G.	
RD29-5	DUN & BRADSTREET SOFTWARE, Pasacow, Lee	1
RD29-8	DUN & BRADSTREET SOFTWARE, Smith, Jodie	1
RD29-9	DUN & BRADSTREET SOFTWARE, Cohen, Brian	1
RE01-1	ELECTRONIC DATA SYSTEMS, Curry, Kevin	1
RE01-15	ELECTRONIC DATA SYSTEMS, Fernandes, Gary	1
RE01-29	ELECTRONIC DATA SYSTEMS, Sullivan, Barry	1
RE01-29B	ELECTRONIC DATA SYSTEMS, Johnston, Hank	1
RE01-3	ELECTRONIC DATA SYSTEMS, Hoover, Kathryn	1
RE01-5	ELECTRONIC DATA SYSTEMS, Sharpe, Robert	i
RF08-1	FRANCE TELECOM, Besnard, M. C.	ż
RF11-29	FUJITSU LIMITED, Mutch, Toshio	2
RF40-1A	FMC CORPORATION, Lozier, John	2
	,	



Code	Company	CVFW-RP
RF40-2	FMC CORPORATION, Vilim, John	1
RG02-20	GENERAL ELECTRIC I.S., Fujikura, Ken	2
RG02-27	GENERAL ELECTRIC CONSULTING, Martin, Ear	3
RG02-55	GE CONSULTING SERVICES, Prenoveau, Alan	1
RG05-3	GRUMMAN DATA SYSTEMS, Evans, Robert	3
RG06-2	GTE DATA SERVICES, Valladares, Fernando	1
RG06-4	GTE DATA SERVICES, McMichael, Richard F.	1
RG06-4A	GTE DATA SERVICES, Grabowski, Richard	1
RG06-57	GTE DATA SERVICES, Starkey, William E.	1
RG06-7A	GTE INFORMATION SERVICES, Atchison, Bren	2
RH03-14	HITACHI DATA SYSTEMS, Mascha, Al	1
RH03-21	HITACHI SOFTWARE ENGINEERING, Maeno, Ken	2
RH04-55	HEWLETT-PACKARD, Alberding, Richard C.	1
RH04-57	HEWLETT-PACKARD, Morton, Dean	
RH04-58	HEWLETT-PACKARD, Young, John	1
RI01-11	IBM CANADA LABORATORY, Cule, Paul	1
RI01-12	IBM CORPORATION, Hoge, James T.	
RI01-12B	IBM CORPORATION, Mellor, Clive	1
RI01-12C	IBM CORPORATION, Pelzner, Joel	1
RI01-13	IBM CORPORATION, Leschin, Grant	1
RI01-15	IBM CORPORATION, Ruckert, Ilsa	1
RI01-15Z	IBM CANADA LTD, Nash, Mark	1
RI01-1F	IBM ITALY, Consani, Alberto	1
RI01-3	IBM CORPORATION, McDaniel, Sara	1
RI01-37	IBM CORPORATION, Backle, Chris	2
RI01-55Z	IBM CORPORATION, Berland, Bob	1
RI01-70	IBM CORPORATION, Akers, John F.	1
RI01-71	IBM CORPORATION, Armstrong, J. A.	1
RI01-72	IBM CORPORATION, Armstrong, Michael	1
RI01-72A	IBM CORPORATION, Arroyo, Chris	1
RI01-75	IBM CORPORATION, Conrades, George H.	1
R101-77	IBM CORPORATION, Corley, Robert	1
R101-80	IBM CORPORATION, Ebker, Gerald W.	1
RI01-82	IBM CORPORATION, Guglielmi, Joe M.	1
RI01-83	IBM CORPORATION, Hancock, Ellen M.	1
RI01-84	IBM CORPORATION, Kuehler, Jack	1
RI 01-84A	IBM CORPORATION, Lautenbach, Ned C.	1
RI01-84B	IBM CORPORATION, Lautenbach, Terry	1
RI01-84D	IBM CORPORATION, Lucente, Edward E.	1
RI01-84F	IBM CORPORATION, McDowell, D. E.	1
RI01-84G	IBM CORPORATION, Pickerill, Jim B.	1
RI01-84H	IBM CORPORATION, Schavoir, Peter	1
RI01-841	IBM CORPORATION, Schwartz, Steve B.	1
RI01-84J	IBM CORPORATION, Tang, Victor	1
RI01-84K	IBM CORPORATION, Thompson, Nylene	1
RI01-84L	IBM CORPORATION, Topper, Hal	1
RI01-84M	IBM CORPORATION, Wheeler, Earl F.	1
RI 01-86	IBM CANADA LTD, Besso, Dan L.	1



Code	Company
RI01-87	IBM CORPORATION, Phillips, Sterling
RI01-9	IBM CORPORATION, Hargreaves, Ronald
RI01-90	IBM CANADA LTD., Gutauskas, Sharon L.
RI01-94	IBM CORPORATION, Bailey, Harold
R107-1	INFORMATION ASSOCIATES INC., Marcello, S
107-2	INFORMATION ASSOCIATES, Minno, James J.
173-1	IMI SYSTEMS, INC., Forman, Robert
R179-1	INDUSTRY, SCIENCE & TECHNOLOGY, Martin,
RJ01-1	JAPAN INFO PROCESSING CENTER, Miki, Ryoj
RJ12-17A	JAPAN INFORMATION PROCESSING, Enomoto, A
RK05-1	KIDDER PEABODY, Thompson, Samme
RL04-1	LITTON COMPUTER SERVICES, Wolfe, Ray
RL04-10	LITTON COMPUTER SERVICES, Accounts Payab
RL04-10	LITTON COMPUTER SERVICES, ACCOUNTS PAYABLE LITTON COMPUTER SERVICES, Harrington, Ja
RL04-26	LITTON COMPUTER SERVICES, Harrington, Ja
RL04-26	LITTON COMPUTED CERVICES, BOOUTRA, Henry
RLU4-3 RL04-4	LITTON COMPUTER SERVICES, Schoen, Tom
RL04-4	LITTON COMPUTER SERVICES, Chalker, Jim
104-5	LITTON COMPUTER SERVICES, Bain, Ralph
M02-12	MCDONNELL DOUGLAS, Schroeder, Ted
RM02-17	MCDONNELL DOUGLAS CORPORATION, Gedara, K
M02-17A	MCDONNELL DOUGLAS COMPANY, Sheehan, Kevi
M02-17B	MCDONNELL DOUGLAS COMPANY, Rothfuss, R.
M02-1A	MCDONNELL DOUGLAS I.S., Preston, Jenny
M08-20	MCKINSEY & COMPANY, Schwartz, Susan
A6-80M	MCKINSEY & COMPANY, Kraemer, Linda
RM12-1	MOORE CORPORATION, Wilson, Philip C.
M12-16	MOORE CORPORATION, Rupnik, Louis
M12-5	MOORE CORPORATION, Johnston, Cheryl
RM12-6	MOORE CORPORATION, McFarland, Michael
RM12-6A	MOORE BUSINESS COMMERCIAL SYS., Fisher,
M12-8	MOORE CORPORATION LTD, Stubkjaer, Anders
RM85-2	MELLON BANK CORPORATION, Moore, Dave
RM85-3	MELLON BANK CORPORATION, Theissen, Scott
RN13-10	NYNEX CORPORATION, Mortara, Ken
RN13-12	NYMEX CORPORATION, Watson, Colin
RN13-13	NYNEX CORPORATION, Yezzi, Susan
RN13-14	NYNEX CORPORATION, Engkvist, Theodore
RN13-19	NYNEX CORPORATION, Sacco, Don J.
RN13-7	NYNEX CORPORATION, Sacco, Don J. NYNEX CORPORATION, Scharf, Davida
N14-3	NEC CORPORATION, Matsuoka, Tadashi
N17-2	NIPPON TELEGRAPH & TELEPHONE, Machida, K
RN17-4	NIPPON STEEL CORPORATION, Yoshida, Norio
RN17-7	NIPPON TELEGRAPH & TELEPHONE, Library,
RN24-56	NCR CORPORATION, Denlinger, V. G.
RN24-57	NCR CORPORATION, Nadeu, Bob
RP03-17	PACIFIC BELL, Hancock, Jack
P03-3	PACIFIC BELL/MIC, Hewitt, Jan



CVEU-PP

Code	Company	CALM-KL
RP12-2	PAXUS, Weinman, David	1
RS08-1	SUNGARD DATA SYSTEMS INC., Tarbox, Richa	2
RS45-1	STERLING SOFTWARE, INC., Plumb, William	2
RS45-9	STERLING SOFTWARE INC., Moore, Phillip A	2
RS60-1	SOFTWARE SCIENCES LIMITED, Farrell, Shei	
RT02-4	TANDEM CORPORATION, Gluck, Richard	2
RT08-4	THORN EMI SOFTWARE, Brisbourne, Giles	1
RT08-6	THORN EMI CENTRAL RESEARCH LAB, Gray, Ke	1
RT08-7	THORN EMI SOFTWARE, Shaw, Alison	1 1 2 2
RT08-8	THORN EMI LTD, Southgate, Colin G.	1
RT47-3	TSC, INC., Rabinowitz, Dan	2
RT59-1	TOSHIBA CORPORATION, Imaba, Motoki	2
RU08-3	UNIVERSITY OF CALIFORNIA, West, Richard	2
RU09-2	UNISYS CORPORATION, Ross, Marlene	1
RU09-27	UNISYS CORPORATION, Johnson, Robert E.	1
RU09-7	UNISYS, Coldwell, Jeff	3
RW01-1	WELSH, CARSON, ANDERSON & STOWE, Anderson,	2
RZ05-1	ZIFF-DAVIS TECHNICAL INFO., Holland, Deb	1 3 2 2
		_
ZINTERCOA	ZCALIFORNIA INTERNAL, Wayson, Denny	1
ZINTERCOB	ZCALIFORNIA INTERNAL, Sales/Mkt Librar	
ZINTERCOD	ZCALIFORNIA INTERNAL, Galvan, Terye	2
ZINTERCOE	ZCALIFORNIA INTERNAL, Borsion, Frankie	1 2
ZINTERCOF	ZCALIFORNIA LIBRARY, Library,	ż
ZINTERCOG	ZINPUT FRANCE, Field Salesperson,	1
LIMILKOOG	Ellin of Thance, Treta datesperson,	
ZINTERCOH	ZINPUT NJ LIBRARY & SALES, Sales 1, Li	3
ZINTERCOJ	ZLONDON, Library/Stock,	
ZINTERCOK	ZWASHINGTON, Barbara & Sales,	4 2 2
ZINTERCOL	REGISTER OF COPYRIGHTS, Dep & Acq Div-	2
ZINTERCOM	ZROSS HUTCHISON & ASSOCIATES. Hutchiso	1
ZINTERCON	ZCALIFORNIA INTERNAL, Byles, Torrey	1
LINIERCON	ECALITORATA TATERARE, BYTES, TOTTEY	
ZINTERCOO	INPUT KK, Imai, Tetsuo	,
ZINTERCOV	ZDATA MANAGEMENT INT'L., Min, K.S.	2
ZINTERCOV	Z. INPUT GERMANY, Solbach, Frank	1
ZINTERCON	ZCALIFORNIA INTERNAL, Tayler, Doug	2 2 1
LINIERCOI	Z. CALIFORNIA INTERNAL, Tayter, Doug	,



Report Quality Evaluation

To our clients:

To onsure that the highest standards of report quality are maintained, INPUT would appreciate your assessment of this report. Please take a moment to provide your evaluation of the usefulness and quality of this study. When complete, simply fold, staple, and drop in the mail. Postage has been pre-paid by INPUT if mailed in the U.S.

Thank You.

1.	Report title: Information Services Vendor Financial Watch (CVVFW)				
2.	Please indicate your reason for reading this report: Required reading New product development Susiness/market planning Area of ligh interest Susiness/market planning Other Other				
3.	Please indicate extent report used and overall usefulness: Extent Usefulness (1=Low, 5=High)				
	Read Skimmed 1 2 3 4 5 Executive Overview				
	Executive Overview				
	Complete report				
	Part of report (%)				
4.	How useful were:				
	Data presented				
	Analyses				
	Recommendations				
5.	How useful was the report in these areas:				
	Alert you to new opportunities or approaches				
	Cover new areas not covered elsewhere				
	Confirm existing ideas				
	Meet expectations				
	Other				
7.	n what ways could the report have been improved?				
3.	Other comments or suggestions:				
	Name Title				
	Department	_			
	Company				
	Company Address	_			
	Address				



FOLD HERE



BUSINESS REPLY MAIL

First Class Permit No. 982 Mountain View, CA

POSTAGE WILL BE PAID BY ADDRESSEE

Attention: Marketing Department

INPUT

1280 Villa Street Mountain View, CA 94041-9912 NECESSARY
IF MAILED
IN THE
UNITED STATES



FOLD HERE

