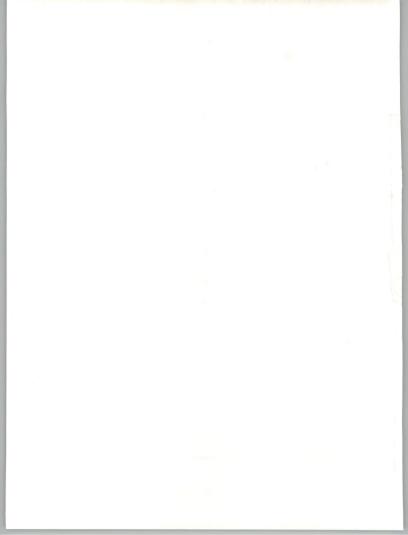
Market Analysis Program (MAP)

Industry Sector/ Cross-Industry Markets 1988-1993

Appendix C: Forecast Reconciliation

1280 Villa Street, Mountain View, CA 94041 (415) 961-3300

INPUT



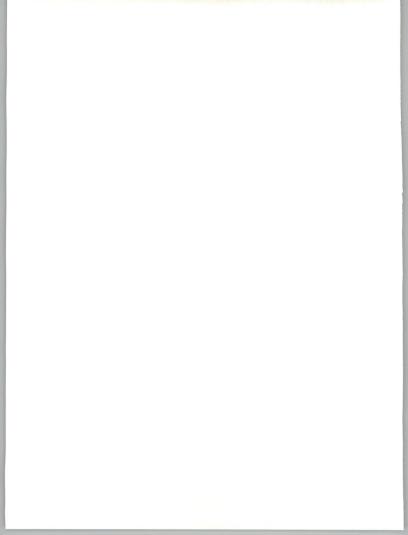
DECEMBER 1988

INDUSTRY SECTOR/CROSS-INDUSTRY MARKETS 1988-1993

APPENDIX C: FORECAST RECONCILIATION



1280 Villa Street, Mountain View, California 94041-1194



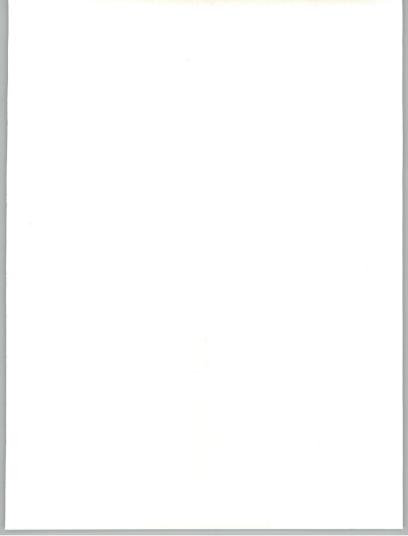
Published by INPUT 1280 Villa Street Mountain View, CA 94041-1194 U.S.A.

Market Analysis Program (MAP)

Industry Sector/Cross-Industry Markets, 1988-1993 Appendix C: Forecast Reconciliation

Copyright ©1988 by INPUT. All rights reserved. Printed in the United 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.

MAVR-C • 381 • 1988



Exhibits

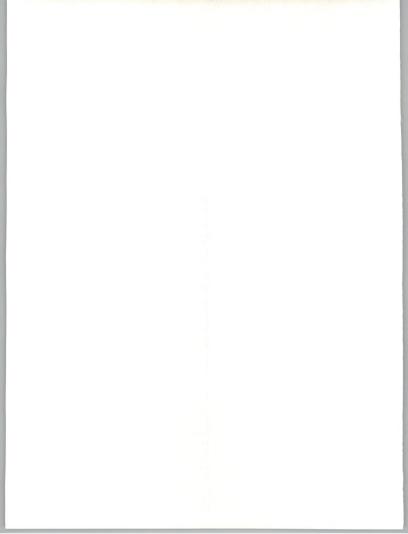
С	

-1	Processing/Network Services-Data Base	V-C-1
	Reconciliation of Market Forecast by Industry Sector	
-2		V-C-2
_	Market Forecast by Industry Sector	
-3		V-C-3
	Market Forecast by Software Type	
-4		V-C-4
	Market Forecast by Industry Sector	
-5		V-C-5
	Market Forecast by Industry Sector	
-6	Discrete Manufacturing Sector—Data Base	V-C-6
	Reconciliation of Market Forecast by Delivery Mode	
-7		V-C-7
	Reconciliation of Market Forecast by Delivery Mode	
-8	Transportation Sector-Data Base Reconciliation of	V-C-8
	Market Forecast by Delivery Mode	
-9	Utilities Sector-Data Base Reconciliation of Market	V-C-9
	Forecast by Delivery Mode	
-10	Telecommunications Sector-Data Base	V-C-10
	Reconciliation of Market Forecast by Delivery Mode	
-11	Wholesale Distribution Sector-Data Base	V-C-11
	Reconciliation of Market Forecast by Delivery Mode	
-12	Retail Distribution Sector-Data Base Reconciliation	V-C-12
	of Market Forecast by Delivery Mode	
-13	Banking and Finance Sector-Data Base	V-C-13
	Reconciliation of Market Forecast by Delivery Mode	
-14	Insurance Sector-Data Base Reconciliation of	V-C-14
	Market Forecast by Delivery Mode	
-15	Medical Sector-Data Base Reconciliation of	V-C-15
	Market Forecast by Delivery Mode	
-16	Education Sector-Data Base Reconciliation of	V-C-16
	Market Forecast by Delivery Mode	
-17	Services Sector-Data Base Reconciliation of	V-C-17
	Market Forecast by Delivery Mode	
-18	Federal Government Sector-Data Base	V-C-18
-0	Reconciliation of Market Forecast by Delivery Mode	
	recommendation of manager of boundary mode	

© 1988 by INPUT. Reproduction Prohibited.

INPUT

i

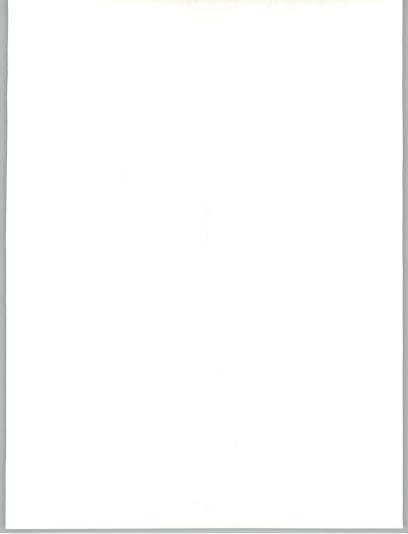


Exhibits (Continued)

С

-19	State and Local Government Sector—Data Base	V-C-19
	Reconciliation of Market Forecast by Delivery Mode	
-20	Other Industry-Specific Sector-Data Base	V-C-20
	Reconciliation of Market Forecast by Delivery Mode	
-21	Accounting Cross-Industry Sector-Data Base	V-C-21
	Reconciliation of Market Forecast by Delivery Mode	
-22	Education and Training Cross-Industry Sector-Data	V-C-22
	Base Reconciliation of Market Forecast by Delivery	
	Mode	
-23	Engineering and Scientific Cross-Industry Sector-	V-C-23
	Data Base Reconciliation of Market Forecast by	
	Delivery Mode	
-24	Human Resources Cross-Industry Sector-Data Base	V-C-24
	Reconciliation of Market Forecast by Delivery Mode	
-25	Planning and Analysis Cross-Industry Sector-Data	V-C-25
	Base Reconciliation of Market Forecast by Delivery	
	Mode	
-26	Other Cross-Industry Sector-Data Base	V-C-26
	Reconciliation of Market Forecast by Delivery Mode	

MAVR-C



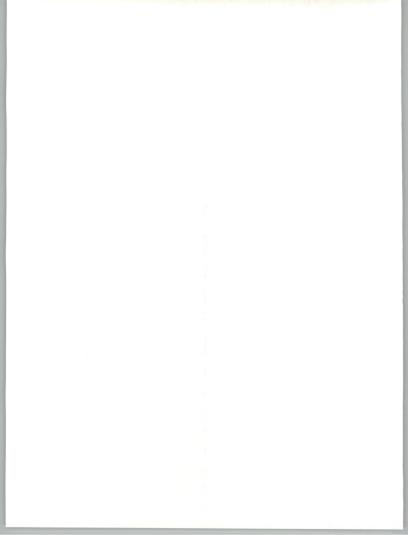


Appendix: Forecast Data Base Reconciliation

EXHIBIT C-1

PROCESSING/NETWORK SERVICES DATA BASE RECONCILIATION OF MARKET FORECAST BY INDUSTRY SECTOR (\$ Millions)

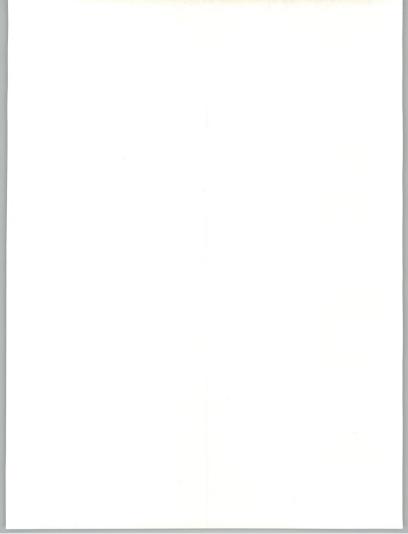
Industry Sector	1987	987 Marke 1988 Forecast		1987	1992 Mark 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Information Services Industry	30,305	34,110	-11	55,313	67,195	-18	13	15
Discrete Manufacturing Process Manufacturing Transportation Utilities Telecommunications Distribution. Banking & Finance Insurance Medical. Education Services Federal Government State & Local Government Other Industry Sector	785 930 260 150 425 4,390 790 1,290 1,290 1,140 570 570 650	1,015 1,140 1,470 125 520 605 3,630 860 1,215 330 905 1,300 690 590	-23 -18 -82 20 -2 -30 21 -8 6 -55 26 -55 26 -56 -17	1,390 1,730 540 255 1,150 749 8,865 1,350 2,620 230 2,060 745 1,150 1,050	1,830 2,475 3,015 260 1,120 1,530 7,730 1,700 2,690 1,710 2,090 1,450 1,100	-30 -82 -2 3 -51 -51 -3 -51 20 -64 -21	12 13 16 11 12 15 11 15 9 13 6 15 10	13 17 15 16 17 20 16 15 17 7 14 10 16 13
Total Industry Sectors	12,610	14,395	-12	23,884	29,170	-18	14	15
Cross-Industry Sector Accounting Education & Training	1,020	950 90	7	1,140 130	1,120 110		2	3
Engineering & Scientific Human Resources Planning & Analysis Other Cross-Industry Sector	260 1,060 235 630	110 990 220 380	136 7 7 66	340 1,930 230 830	140 1,900 185 760	143 2 24	6 13 -0. 6	5 14 -3 15
Total Cross-Industry Sectors	17,695	19,715	-10	31,429	38,025	-17	12	14



APPLICATION SOFTWARE DATA BASE RECONCILIATION OF MARKET FORECAST BY INDUSTRY SECTOR

(\$ Millions)

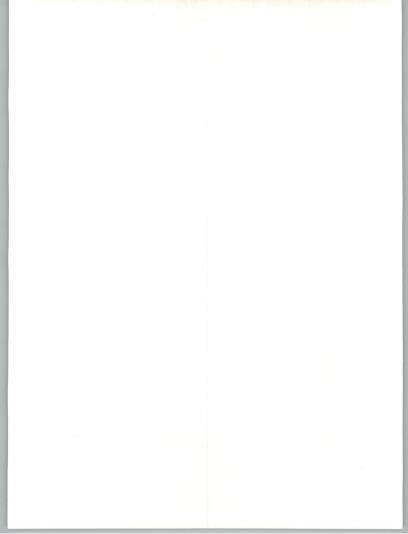
		987 Marke			1992 Mark	~	CAGR 87-92	CAGR 87-92
	1987	1988	31	1987	1988	el	1987	1988
Industry Sector			Varianco		Forecast	Variance		
Industry Sector	TOICCasi	TUICUASI	(%)	lorecasi	TUICCASI	(%)	(%)	(%)
			(70)			(70)	(70)	(70)
Total Application Software Industry	15,696	15,900	-1	34,908	38,030	-8	17	19
Discrete Manufacturing	1,180	1,130	4	2,550	2,710	-6	17	19
Process Manufacturing	150	145	3	230	360	-36	9	20
Transportation	230	215	7	590	590	0	21	22
Utilities	150	145	3	380	340	12	20	19
Telecommunications	110	110	0	410	455	-10	3	33
Distribution	373	470	-21	834	1,590	-48	17	28
Banking & Finance	1,380	1,490	-7	3,035	3,300	-8	17	17
Insurance	480	455	5	1,120	1,330	-16	18	24
Medical	590	570	4	1,420	1,280	11	19	18
Education	105	450	-77	210	830	-75	15	13
Services	180	270	-33	500	710	-30	23	21
Federal Government	90	180	-50	220	390	-44	20	17
State & Local Government	70	65	8	170	210	-19	19	26
Other Industry Sector	130	130	0	390	310	26	25	19
Total Industry Sectors	5,218	5,825	-10	12,059	14,405	-16	18	20
Cross-Industry Sector								
Accounting	1,330	1,270	5	2,260	2,690	-16	11	16
Education & Training	110	110	0	290	350	-17	21	26
Engineering & Scientific	290	310	-6	910	970	-6	26	26
Human Resources	630	690	-9	900	1,000	-10	7	8
Planning & Analysis	1,630	1,210	35	2,820	2,670	6	12	17
Other Cross-Industry Sector	980	285	244	2,830	630	349	24	17
Total Cross-Industry Sectors	10,478	10,075	4	22,849	23,625	-3	17	19



SYSTEMS SOFTWARE DATA BASE RECONCILIATION OF MARKET FORECAST BY SOFTWARE TYPE (\$ Millions)

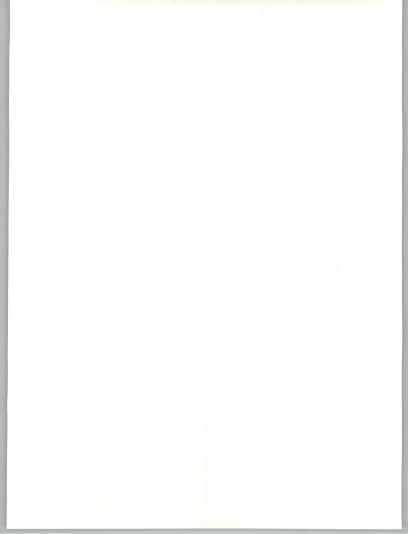
Industry Sector	1987	987 Marke 1988 Forecast	Variance	1987	1992 Mark 1988 Forecast	Variance		
			(%)			(%)	(%)	(%)
Total Systems Software Industry	9,560	9,880	-3	29,645	25,880	15	25	21
Application Development Tools	3,440	3,760	-9	9,340	10,480	-11	22	23
Mainframe and Minicomputer	2,660	3,050	-13	6,560	6,810	-4	20	17
Workstation/PC	780	710	10	2,780	3,670	-24	29	39
Systems Control	3,930	4,150	-5	14,220	10,260	39	29	20
Mainframe and Minicomputer	3,370	3,560	-5	11,750	7,150	64	28	15
Workstation/PC	560	590	-5	2,470	3,110	-21	35	39
Data Center Management	2,190	1,970	11	6,085	5,140	18	23	21
Mainframe and Minicomputer	2,150	1,900	13	5,820	4,520	29	22	19
Workstation/PC	40	70	-43	265	620	-57	46	55
Mainframe and Minicomputer	8,180	8,510	-4	24,130	18,480	31	24	17
Application Development Tools	2,660	3,050	-13	6,560	6,810	-4	20	17
Systems Control	3,370	3,560	-5	11,750	7,150	64	28	15
Data Center Management	2,150	1,900	13	5,820	4,520	29	22	19
Workstation/PC	1,380	1,370	0	5,515	7,400	-25	32	40
Application Development Tools	780	710	10	2,780	3,670	-24	29	39
Systems Control	560	590	-5	2,470	3,110	-21	35	39
Data Center Management	40	70	-43	265	620	-57	46	55

MAVR-C



TURNKEY SYSTEMS DATA BASE RECONCILIATION OF MARKET FORECAST BY INDUSTRY SECTOR (\$ Millions)

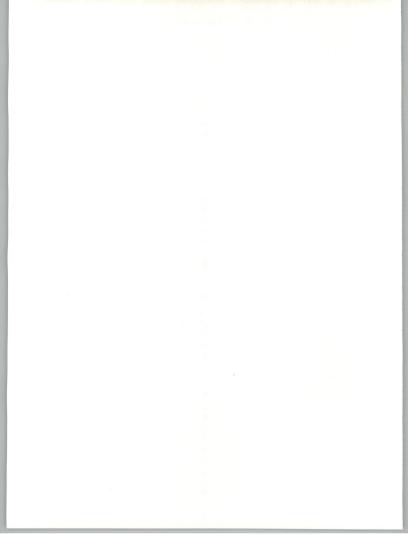
	1	987 Marke 1988	et	1987	1992 Mark 1988	CAGR 87-92 1987	CAGR 87-92 1988	
Industry Sector	Forecast	Forecast	Variance (%)	Forecast	Forecast	Variance (%)	Forecast (%)	Forecas (%)
Total Turnkey Systems Industry	14,667	14,820	-1	23,028	24,020	-4	9	10
Discrete Manufacturing	1.860	1.660	12	3.000	2,790	8	10	11
Process Manufacturing	370	370	0	590	580	2	10	9
Transportation	150	140	7	260	235	11	12	11
Jtilities	30	30	ò	60	50	20	15	11
Telecommunications	250	240	4	480	470	2	14	14
Distribution	306	895	-66	429	1,485	-71	7	11
Banking & Finance	740	710	4	1,250	1,170	7	11	11
nsurance	200	200	0	360	320	12	12	10
Aedical	630	610	3	1.020	1.040	-2	10	11
Education	110	170	-35	140	270	-48	5	10
Services	410	410	0	640	700	-9	9	11
ederal Government	390	370	5	590	520	13	9	7
State & Local Government	120	110	9	240	200	20	15	13
Other Industry Sector	130	320	-59	220	500	-56	11	9
Total Industry Sectors	5,696	6,235	-9	9,279	10,330	-10	10	11
Cross-Industry Sector								
Accounting	410	390	5	510	460	11	4	3
Education & Training.	150	140	7	190	180	6	5	5
Engineering & Scientific	350	310	13	510	490	4	8	10
Human Resources	235	100	135	300	130	131	5	5
Planning & Analysis	280	270	4	370	330	12	6	4
Other Cross-Industry Sector	1,210	340	256	1,540	550	180	5	10
Total Cross-Industry Sectors	8,971	8,585	4	13,749	13,690	0	9	10



PROFESSIONAL SERVICES DATA BASE RECONCILIATION OF MARKET FORECAST BY INDUSTRY SECTOR (\$ Millions)

		987 Marke	ət		1992 Mark	et	CAGR 87-92	CAGR 87-92
	1987	1988		1987	1988		1987	_ 1988
Industry Sector	Forecast	Forecast	Variance (%)	Forecast	Forecast	Variance (%)	Forecast (%)	Forecas (%)
Total Professional	14,335	12,715	13	33,237	27,705	20	18	17
Services Industry								
Discrete Manufacturing	2,590	2,460	5	6,590	6,270	5	21	21
Process Manufacturing	1,230	1,220	0	3,715	3,320	12	25	22
Transportation	180	150	20	530	310	71	24	16
Utilities	360	370	-3	720	620	16	15	11
Telecommunications	590	610	-3	1,360	1,255	8	18	16
Distribution	450	380	18	937	895	5	16	19
Banking & Finance	1,720	1,600	8	3,870	3,820	1	18	19
Insurance.	1,050	1,050	0	2,240	2,260	-0	16	17
Medical	310	260	19	850	580	47	22	17
Education	75	50	50	120	105	14	10	16
Services	180	100	80	505	220	130	23	17
Federal Government	3,510	2,550	38	6,250	4,530	38	12	12
State & Local Government	1,770	1,655	7	4,780	2,990	60	22	13
Other Industry Sector	320	260	23	770	530	45	19	15
Professional Services								
Consulting	2,460	2,520	-2	6,360	6,520	-2	21	21
Education and Training	1,610	1,635	-2	4,180	3,820	9	21	18
Software Development	7,555	7,540	0	14,470	15,655	-8	14	16
Systems Operations	990	1,020	-3	1,570	1,710	-8	10	11

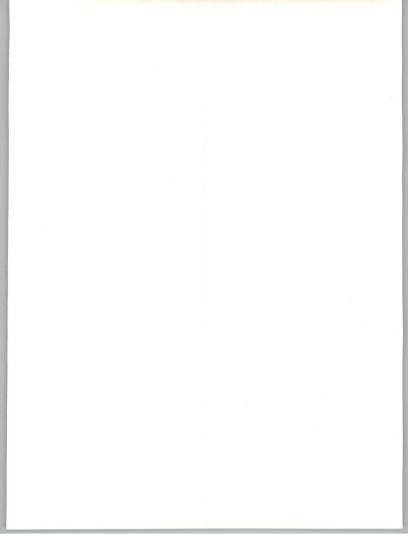
Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.



DISCRETE MANUFACTURING SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	1992 Mark 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Discrete Manufacturing Sector	6,415	6,265	2	13,530	13,600	0	16	17
Processing/Network Services	785	1,015	-23	1,390	1,830	-24	12	13
Application Software Products	1,180	1,130	4	2,550	2,710	-6	17	19
Turnkey Systems	1,860	1,660	12	3,000	2,790	8	10	11
Professional Services	2,590	2,460	5	6,590	6,270	5	21	21

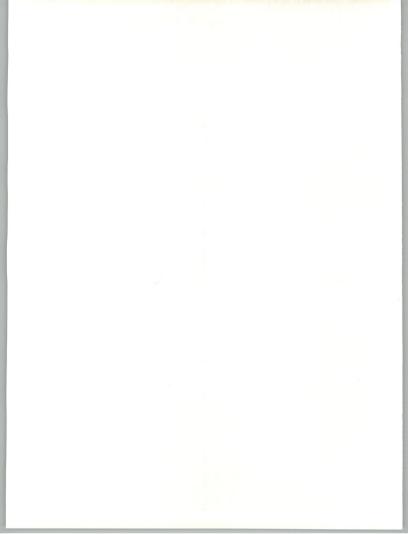
Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.



PROCESS MANUFACTURING SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

	1987 Market 1987 1988			1987	1992 Mark 1988	CAGR 87-92 1987	CAGR 87-92 1988	
Industry Sector	Forecast	Forecast	Variance (%)	Forecast	Forecast	Variance (%)	Forecast (%)	Forecast (%)
Total Process Manufacturing Sector	2,680	2,875	-7	6,265	6,735	-7	19	19
Processing/Network Services	930	1,140	-18	1,730	2,475	-30	13	17
Application Software Products	150	145	3	230	360	-36	9	20
Turnkey Systems	370	370	0	590	580	2	10	9
Professional Services	1,230	1,220	0	3,715	3,320	12	25	22

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

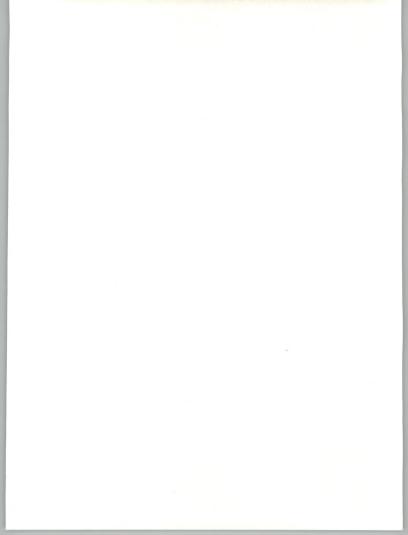


TRANSPORTATION SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Transportation Sector	820	1,975	-58	1,920	4,150	-54	19	16
Processing/Network Services	260	1,470	-82	540	3,015	-82	16	15
Application Software Products	230	215	7	590	590	0	21	22
Turnkey Systems	150	140	7	260	235	11	12	11
Professional Services	180	150	20	530	310	71	24	16

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

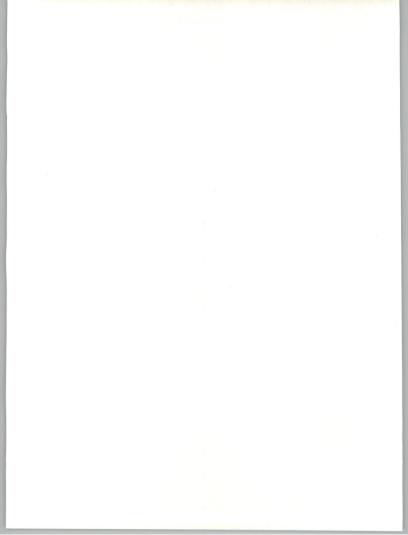


UTILITIES SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Utilities Sector	690	670	3	1,415	1,270	11	15	14
Processing/Network Services	150	125	20	255	260	-2	11	16
Application Software Products	150	145	3	380	340	12	20	19
Turnkey Systems	30	30	0	60	50	20	15	11
Professional Services	360	370	-3	720	620	16	15	11

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

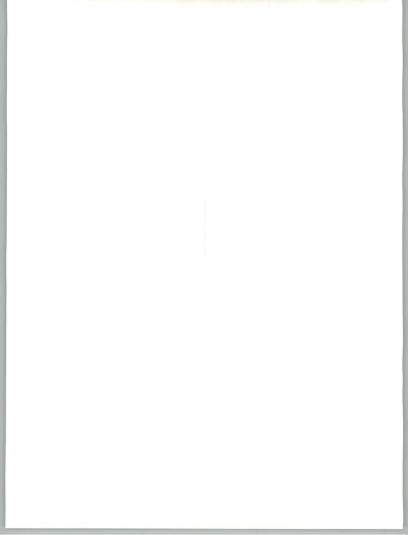


TELECOMMUNCIATIONS SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Mark 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Telecommunications Sector	1,460	1,480	-1	3,400	3,300	3	18	17
Processing/Network Services	510	520	-2	1,150	1,120	3	18	17
Application Software Products	110	110	0	410	455	-10	30	33
Turnkey Systems	250	240	4	480	470	2	14	14
Professional Services	590	610	-3	1,360	1,255	8	18	16

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.



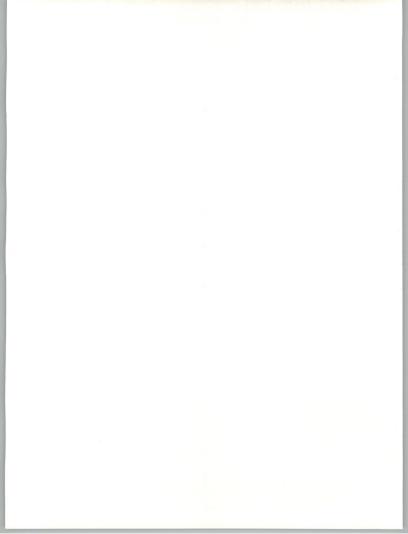
WHOLESALE DISTRIBUTION SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Wholesale Distribution Sector	1,554	1,265	23	2,949	2,975	-1	14	19
Processing/Network Services	425	415	2	749	1,000	-25	12	19
Application Software Products	373	290	29	834	875	-5	17	25
Turnkey Systems	306	320	-4	429	570	-25	7	12
Professional Services	450	240	88	937	530	77	16	17

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

INPUT

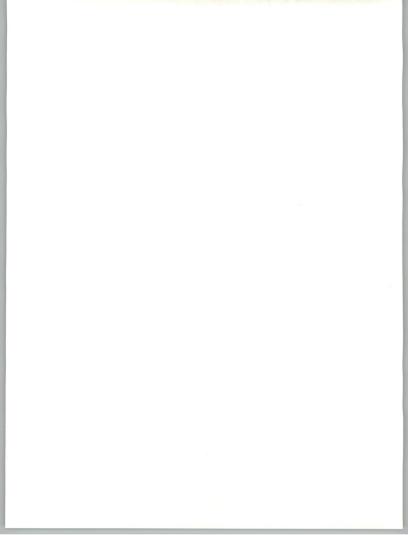


RETAIL DISTRIBUTION SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Retail Distribution Sector	1,378	1,085	27	3,142	2,525	24	18	18
Processing/Network Services	677	190	256	1,360	530	157	15	23
Application Software Products	142	180	-21	501	715	-30	29	32
Turnkey Systems	295	575	-49	630	915	-31	16	10
Professional Services	264	140	89	651	365	78	20	21

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.



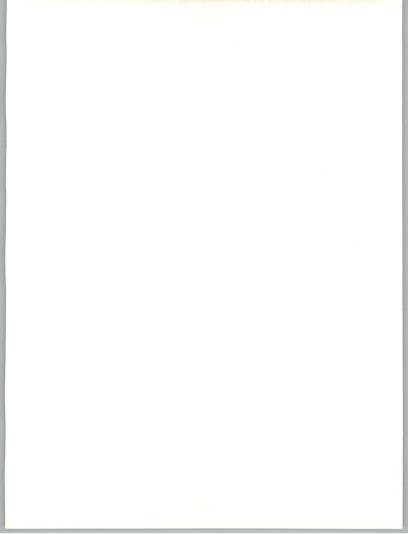
BANKING AND FINANCE SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Banking and Finance Sector	8,230	7,430	11	17,020	16,020	6	16	17
Processing/Network Services	4,390	3,630	21	8,865	7,730	15	15	16
Application Software Products	1,380	1,490	-7	3,035	3,300	-8	17	17
Turnkey Systems	740	710	4	1,250	1,170	7	11	11
Professional Services	1,720	1,600	8	3,870	3,820	1	18	19

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

MAVR-C



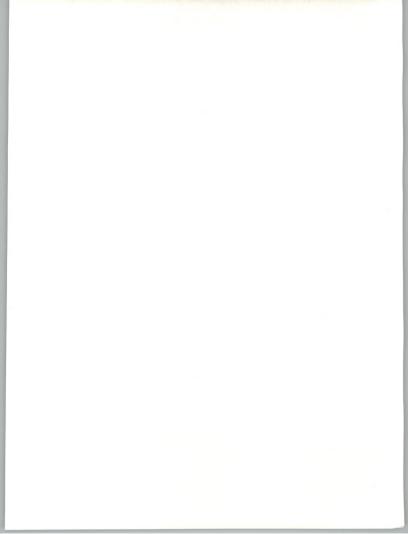
INSURANCE SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Insurance Sector	2,520	2,565	-2	5,070	5,610	-10	15	17
Processing/Network Services	790	860	-8	1,350	1,700	-21	11	15
Application Software Products	480	455	5	1,120	1,330	-16	18	24
Turnkey Systems	200	200	0	360	320	12	12	10
Professional Services	1,050	1,050	0	2,240	2,260	-1	16	17

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

V-C-14

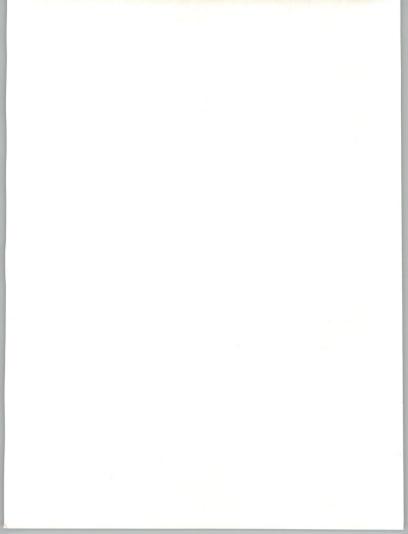


MEDICAL SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Mark 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Medical Sector	2,820	2,655	6	5,910	5,590	6	16	16
Processing/Network Services	1,290	1,215	6	2,620	2,690	-3	15	17
Application Software Products	590	570	4	1,420	1,280	11	19	18
Turnkey Systems	630	610	3	1,020	1,040	-2	10	11
Professional Services	310	260	19	850	580	47	22	17

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

MAVR-C



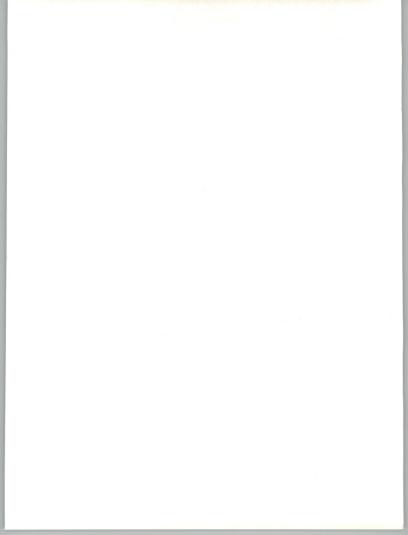
EDUCATION SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1 1987 Forecast	987 Marke 1988 Forecast	et Variance (%)	1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Education Sector	440	1,000	-56	700	1,675	-58	10	11
Processing/Network Services	150	330	-55	230	470	-51	9	7
Application Software Products	105	450	-77	210	830	-75	15	13
Turnkey Systems	110	170	-35	140	270	-48	5	10
Professional Services	75	50	50	120	105	14	10	16

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

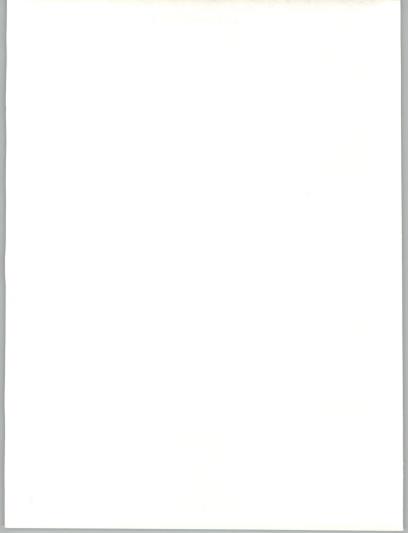
V-C-16



SERVICES SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Services Sector	1,910	1,685	13	3,705	3,340	11	14	15
Processing/Network Services	1,140	905	26	2,060	1,710	20	13	14
Application Software Products	180	270	-33	500	710	-30	23	21
Turnkey Systems	410	410	0	640	700	-9	9	11
Professional Services	180	100	80	505	220	130	23	17

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

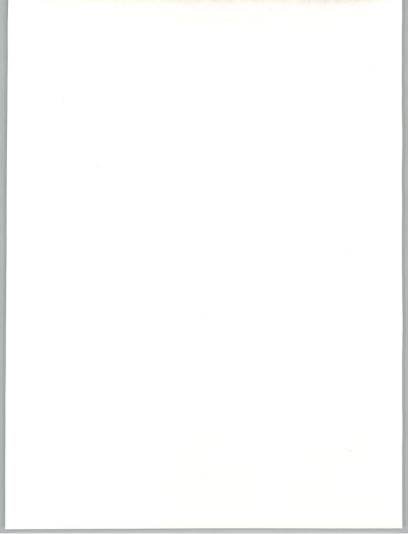


FEDERAL GOVERNMENT SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Federal Government Sector	4,560	4,400	4	7,805	7,530	4	11	11
Processing/Network Services	570	1,300	-56	745	2,090	-64	6	10
Application Software Products	90	180	-50	220	390	-44	20	17
Turnkey Systems	390	370	5	590	520	13	9	7
Professional Services	3,510	2,550	38	6,250	4,530	38	12	12

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

INPUT



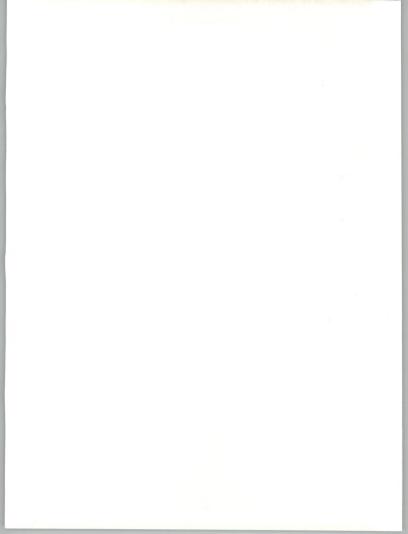
STATE AND LOCAL GOVERNMENT SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

(\$ Millions)

Industry Sector	1 1987 Forecast	987 Marke 1988 Forecast	et Variance (%)	1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total State and Local Government Sector	2,530	2,520	0	6,340	4,850	31	20	14
Processing/Network Services	570	690	-17	1,150	1,450	-21	15	16
Application Software Products	70	65	8	170	210	-19	19	26
Turnkey Systems	120	110	9	240	200	20	15	13
Professional Services	1,770	1,655	7	4,780	2,990	60	22	13

Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

MAVR-C

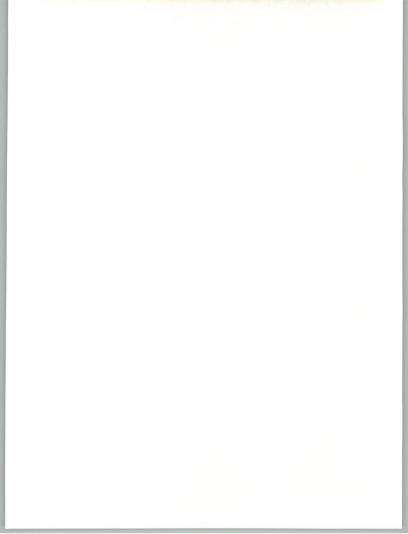


OTHER INDUSTRY-SPECIFIC SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

Industry Sector	1 1987 Forecast	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Other Industry- Specific Sector	1,230	1,300	-5	2,430	2,440	0	15	13
Processing/Network Services	650	590	10	1,050	1,100	-5	10	13
Application Software Products	130	130	0	390	310	26	25	19
Turnkey Systems	130	320	-59	220	500	-56	11	9
Professional Services	320	260	23	770	530	45	19	15

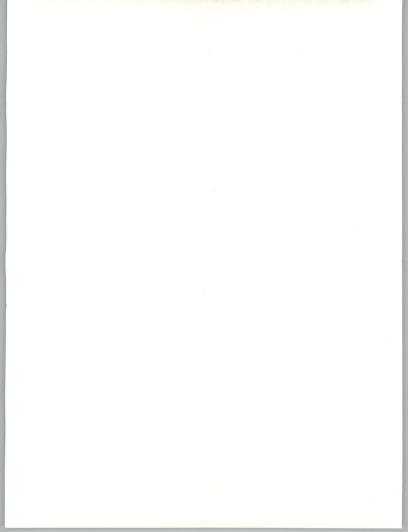
Note: INPUT's 1987 Professional Services forecast includes Systems Integration software revenues.

V-C-20



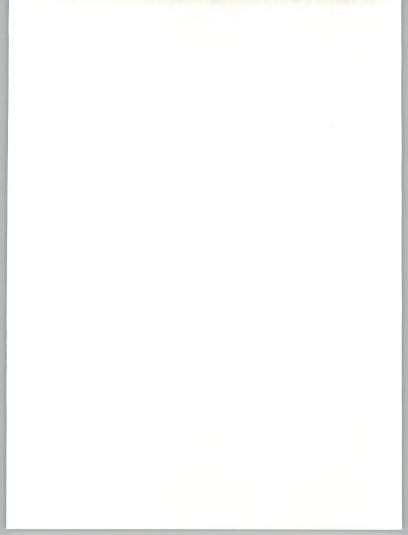
ACCOUNTING CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE (\$ Millions)

	1987 Market				992 Mark	CAGR 87-92 1987	CAGF 87-92 1988	
Industry Sector	1987 Forecast	1988 Forecast	Variance (%)	1987 Forecast	1988 Forecast	Variance (%)		
Total Accounting Sector	2,760	2,610	6	3,910	4,270	-8	7	10
Processing/Network Services	1,020	950	7	1,140	1,120	2	2	3
Application Software Products	1,330	1,270	5	2,260	2,690	-16	11	16
Turnkey Systems	410	390	5	510	460	11	4	3



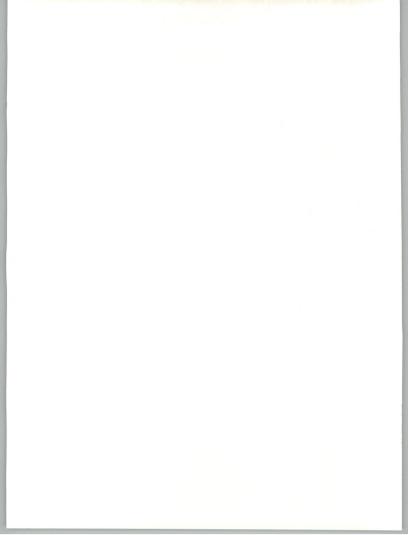
EDUCATION AND TRAINING CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Education and Training Sector	350	340	3	610	640	-5	12	13
Processing/Network Services	90	90	0	130	110	18	8	4
Application Software Products	110	110	0	290	350	-17	21	26
Turnkey Systems	150	140	7	190	180	6	5	5



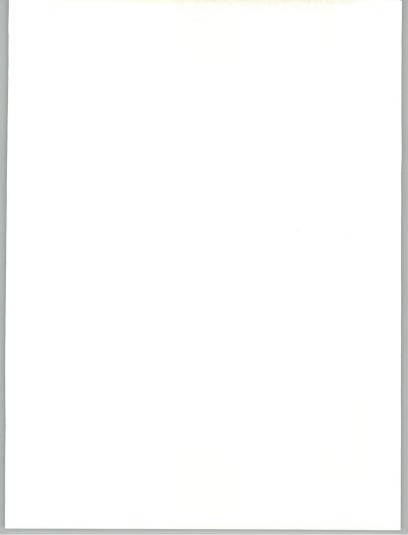
ENGINEERING AND SCIENTIFIC CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecasi (%)
Total Engineering and Scientific Sector	900	730	23	1,760	1,600	10	14	17
Processing/Network Services	260	110	136	340	140	143	6	5
Application Software Products	290	310	-6	910	970	-6	26	26
Turnkey Systems	350	310	13	510	490	4	8	10



HUMAN RESOURCES CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Human Resources Sector	1,925	1,780	8	3,130	3,030	3	10	11
Processing/Network Services	1,060	990	7	1,930	1,900	2	13	14
Application Software Products	630	690	-9	900	1,000	-10	7	8
Turnkey Systems	235	100	135	300	130	131	5	5



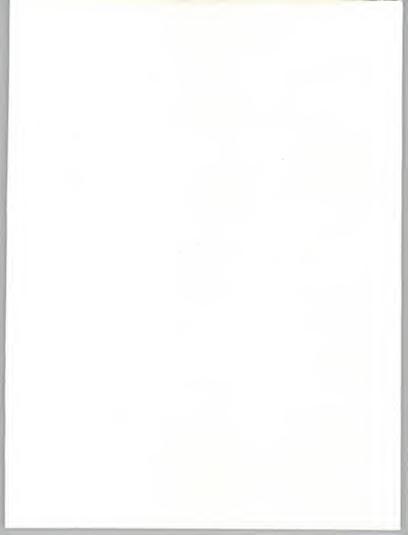
PLANNING AND ANALYSIS CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

Industry Sector	1 1987 Forecast	987 Marke 1988 Forecast		1987	992 Mark 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecas (%)
Total Planning and Analysis Sector	2,145	1,700	26	3,420	3,185	7	10	13
Processing/Network Services	235	220	7	230	185	24	0	-3
Application Software Products	1,630	1,210	35	2,820	2,670	6	12	17
Turnkey Systems	280	270	4	370	330	12	6	4



OTHER CROSS-INDUSTRY SECTOR DATA BASE RECONCILIATION OF MARKET FORECAST BY DELIVERY MODE

Industry Sector	1987	987 Marke 1988 Forecast		1987	992 Marke 1988 Forecast		CAGR 87-92 1987 Forecast (%)	CAGR 87-92 1988 Forecast (%)
Total Other Cross- Industry Sector	2,820	1,005	181	5,200	1,940	168	13	14
Processing/Network Services	630	380	66	830	760	9	6	15
Application Software Products	980	285	244	2,830	630	349	24	17
Turnkey Systems	1,210	340	256	1,540	550	180	5	10



About INPUT

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

Continuous-information advisory services, proprietary research/ consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services (software, processing services, turnkey systems, systems integration, professional services, communications, systems/software maintenance and support).

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

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

-INPUT OFFICES -

North America

Headquarters

1280 Villa Street Mountain View, CA 94041-1194 (415) 961-3300 Telex 171407 Fax (415) 961-3966

New York

280 North Central Avenue, Suite 303 Hartsdale, NY 10530-1894 (914) 682-8880 Fax (914) 682-8479

959 Route 46 East, Suite 201 Parsippany, NJ 07054 (201) 299-6999 Telex 134630 Fax (201) 263-8341

Washington, D.C. 8298 Old Courthouse Road Vienna, VA 22182 (703) 847-6870 Fax (703) 847-6872

International

Europe Piccadilly House 33/37 Regent Street London SW1Y 4NF, England (01) 493-9335 Telex 27113 Fax (01) 629-0179

Paris

29 rue de Leningrad 75008 Paris, France (16) 44-80-48-43 Fax (16) 44-80-40-23

Japan FKI, Future Knowledge Institute Saida Building, 4-6, Kanda Sakuma-cho Chiyooda-ku, Tokyo 101, Japan (03) 864-4026 Fax (03) 864-4114

