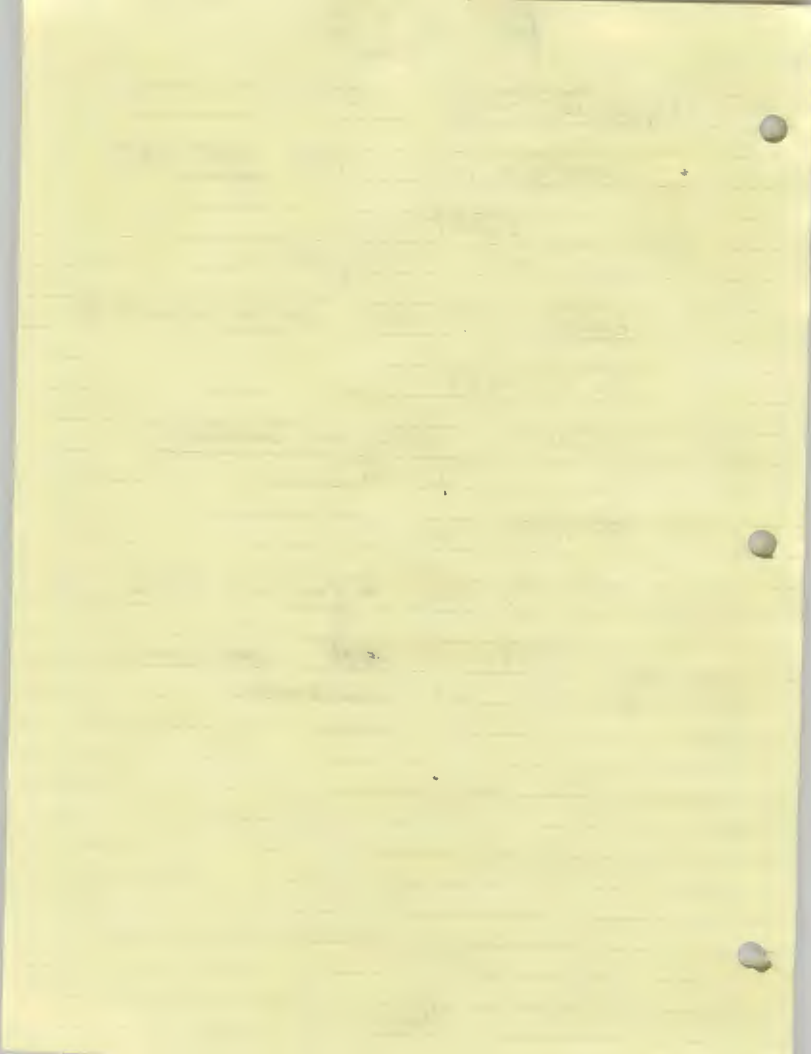# PCM27W

- Chapter IV Exhibit IV-3

   - Currently in process is 14% NOT 44%

   - Exhibit IV-5
     add Sample of 23 users.

- Exhibit IV-8 add # of users as per IV-7.

- Ex IV-9 add 104 users

- Ex IV-10 Spelling error "Department"
  + add 23 users.

- Ex IV-11 add 81 users.

- Ex IV-13 add # of users as per IV-12

- Ex IV-14 add ~~####~~ 15 ~~users~~ implementers
- Ex IV-15 add 16 implementers

Chapter V.

Ex V-1 - Communications __PRODUCTS__

MESSAGING __NOT__ Merging.

also add   23 Implementers
            85 Planners.

Ex V-3   EDI - related __products__

also add   their sample 85

Ex V-4   Translation NOT Translatioons !

Ex V-5   Internet Service __Providers__.

Ex V-8   please add   21 implementers

Ex V-9   Please add   85 users.

Ex V-10   add   85 users

Ex V-11   add   21 implementers

~~Ex V-12   add   23 Implementers~~
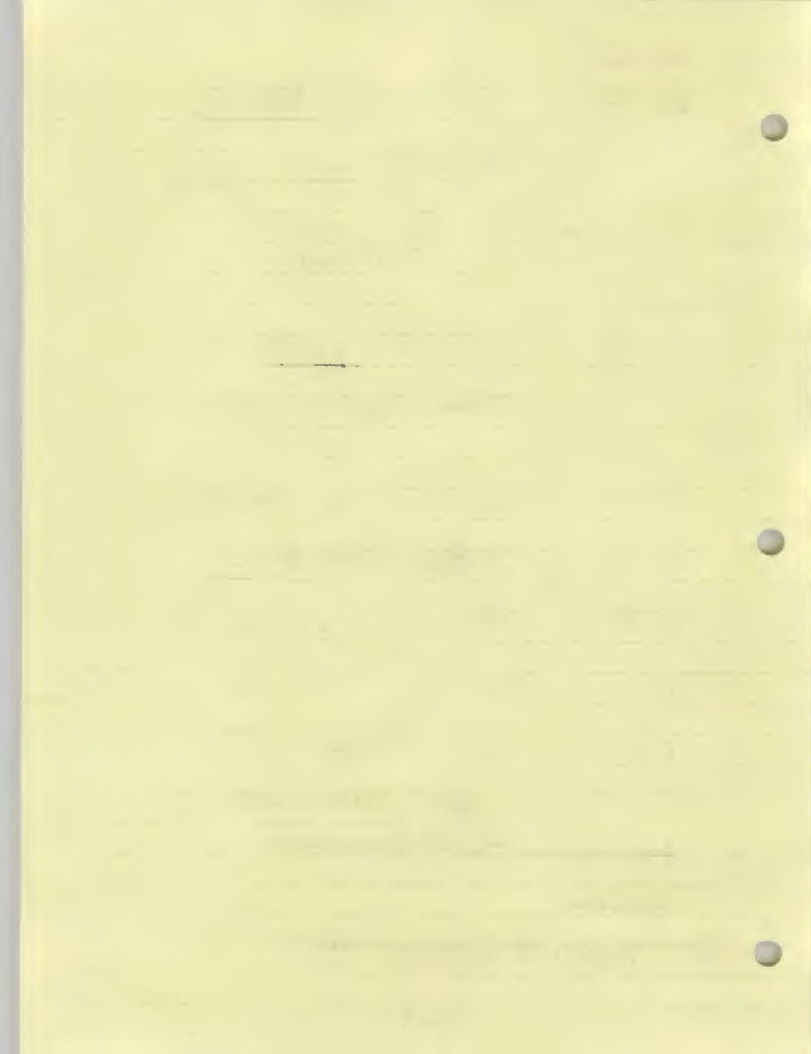
~~Ex V-13~~

N.B. Part of Title appears in __ExV-13__ !

Page 3.

EXHIBIT 1-3

Respondent Distribution by Number of Company Employees.

Number of Company Employees

>50	3
20-50	5
10-20	6
5-10	17
1-5	35
<1/2	44

25   50

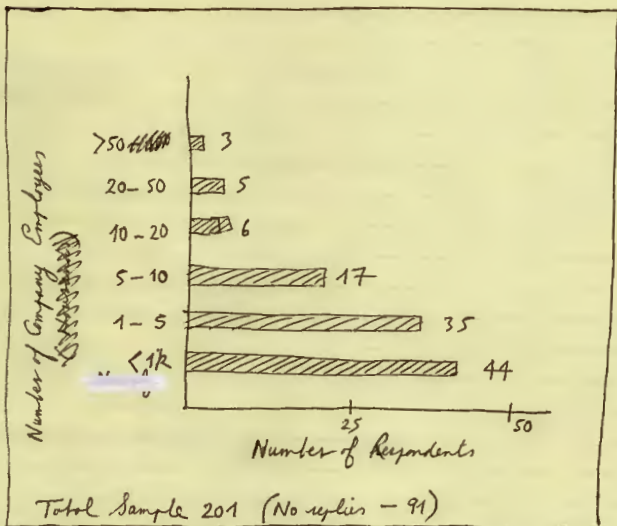Number of Respondents

Total Sample 201 (No replies — 91)

EXHIBIT 1-2

Respondent Distribution by ~~Annual~~ Company
Annual Revenues.

Respondent Annual Revenues

- >5B ▨ 25
- 1B-5B ▨ 72
- 250-1B ▨ 86
- 100-250 ▨ 2
- <$100M ▨ 2
- No-reply ▨ 14

Number of Respondents
(axis marks: 50, 100)

Total Sample 201

p-4
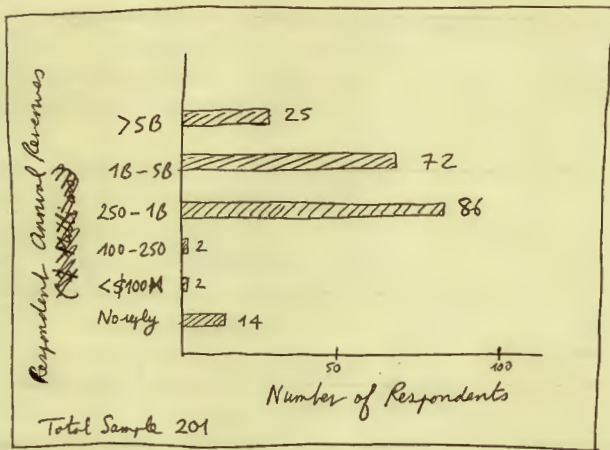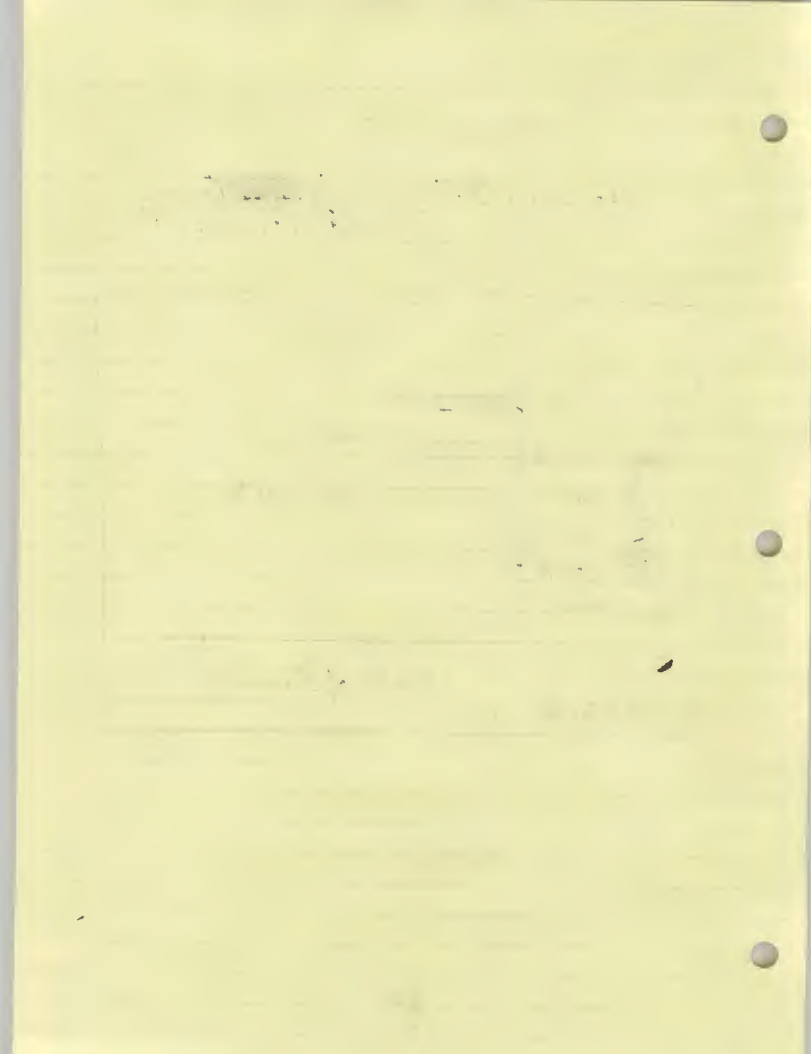
EXHIBIT 11 - 6

PLANS FOR INTERNET COMMERCE IMPLEMENTATION

Completed or in
Process   15%

Implement by   35%
2001

No current plans 50%

% of Sample
20 40 60

p b
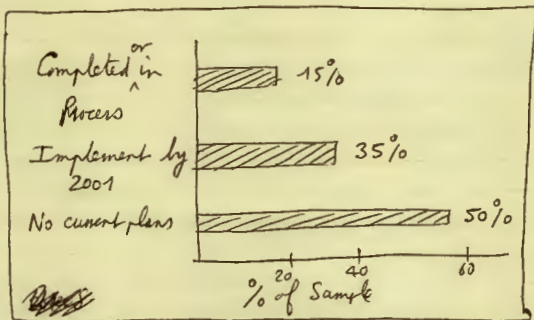
Doing business over the Internet has become critical for the manufacturing sector as it continues to drive out expense from its operations. INPUT has predicted that half the manufacturing companies in the U.S. will be using the Internet for purchase and/or sales transactions by the year 2000. By that time, approximately one third of their transactions by value will be via the Internet.

However, there remain real concerns and practical roadblocks amongst the user community as they attempt to realize this promised nirvana.

This report is based on a survey of the manufacturing community that examined these issues. It concludes that manufacturing firms must:

- Set realistic goals.
- Develop effective Internet Commerce processes.
- Select supportive product and services vendors.

The report examines the planning considerations for Internet Commerce including user objectives, issues users perceive to be inhibitors to progress and levels of planned expenditure.
It discusses Internet Commerce Implementation, discusses migration paths, impacts on organizational processes and internal champions for Internet Commerce.
It also covers the product and service areas required by users, user perceptions of products and services, and the criteria users employ for selecting Internet Commerce vendors.

An appendix contain an analysis of the European data collected as a parallel survey to that conducted in the United States upon which this report is based.

QNUM	REV. ($MIL)	EMP
1001	926	
1002	700	
1003	3000	
1004	3400	
1005	800	
1006	1600	
1007	1000	
1008	NA	
1009	1000	
1010	1000	
1011	592	500
1012	2300	
1013		1100
1014		
1015	1159	5800
1016	1800	33000
1017	500	
1018	759	1569
1019	3098	8200
1020	1403	13400
1021	10291	33375
1022	2833	42500

Analysis of firms interviewed
by _annual revenues_ and

employees.

QNUM	REV. ($MIL)	EMP
1023	1600	

QNUM	REV. ($MIL)	EMP
2001	770	1800
2002	1500	175
2003	1400	
2004		
2005	983	
2006	14000	
2007	712	
2008	4800	
2009		
2010		
2011	503	
2012	1240	
2013		
2014	1000	
2015	1000	5700
2016	2840	792
2017	515	
2018	1041	
2019	533	3900
2020	1000	
2021	2600	
2022	1400	
2023	1500	
2024	901	
2025	3500	
2026	1200	
2027	16000	30

QNUM	REV. ($MIL)	EMP
2028	400	1000
2029	3000	400
2030	1600	800
2031	400	350
2032	730	3500
2033	4500	4000
2034	890	300
2035	300	300
2036	300	1500
2037	2700	350
2038	800	800
2039	500	
2040		
2041	15	150
2042		500
2043	1670	
2044	825	
2045	2000	
2046	2467	
2047	10300	10000
2048	480	5000

QNUM	REV. ($MIL)	EMP
2049	1269	1000
2050	29300	
2051	5000	
2052	20000	53700
2053	548	
2054	1170	
2055	500	360
2056	2080	250
2057	1380	600
2058	3000	
2059	1772	225
2060	12200	
2061	990	700
2062	2000	
2063	2000	
2064	18250	
2065	1800	
2066	830	745
2067	13165	88790
2068	775	1700
2069	903	6439

QNUM	REV. ($MIL)	EMP
2070	733	2300
2071	5104	20100
2072	644	
2073	16600	
2074	520	2,193
2075	1000	
2076	1051	4100
2077	24000	
2078	650	4000
2079	778	10000
2080	715	
2081	910	
2082	731	
2083	522	200
2084	1098	2088
2085	1100	

QNUM	COMPANY	REV. ($MIL)	EMP
3001	Jim Walter Corp.	600	
3002	ADC Telecomm.	585	
3003	Alcon Smelter & Chem. Ltd.	8800	
3004	Huntaman Chemical Co.	1400	
3005	Eli Lilly & Co.	6764	8600
3006	Georgia Gulf Corp.	1000	1143
3007	Golden Poultry Co., Inc.	506	4565
3008	APS	600	5
3009	Automotive Controls Div. of Borg Warner	1400	
3010	Allegheny Landlum Corp.	1500	
3011	ADM Milling	1400	
3012	The News Journal Subs Gourmet		
3013	Texaco, Inc.		
3014	Arch Mineral Corp.	737	
3015	A C Humko Corp.	750	
3016	Tennessee Denso Mfg.		
3017	U.S. Can Corp.		
3018	Uniroyal Chemical Co.		
3019	California Almond Growers Exchange	561	
3020	Illinois Tool Works, Inc.	4	
3021	Quadgraphics	700	70
3022	Pabst Brewing	500	1300
3023	National Beef Packing	1200	2800
3024	Marigold Foods	300	50
3025	Flowers Industries	1239	
3026	General Chemical Group Inc.	551	10

QNUM	COMPANY	REV. ($MIL)	EMP
3027	Georgia-Pacific Corp.	14292	4200
3028	Duchossois Industries Inc.	1000	1500
3029	Eaton Corp.	6822	450
3030	Fieldcrest Cannon Inc.	1095	300
3031	Mermon Industrial	2300	80
3032	Alumax Mill Products	730	
3033	The Trane Company	150	2000
3034	International Specialty Products	700	
3035	US Agra Chemical	1000	290
3036	US Sugar Corp.	500	100
3037	Georgia Gulf Corp.	1082	45
3038	McDermott Inc.	2000	450
3039	Martin Marietta Materials	664	130
3040	American National Can Co.	1700	
3041	AVX	1200	
3042	Asarco Inc.	3200	
3043	Big West Oil	1170	
3044	Bayer Corp.	7900	
3045	Gold Kist	1500	14000

QNUM	COMPANY	REV. ($MIL)	EMP
3046	General Battery Corp.	680	50
3047	Excel Industries	596	3797
3048	Gemmar Holdings	553	40
3049	Abbott Labs	10000	
3050	Brown & Williamson Tobacco	1300	
3051	Printpack Inc.	500	2000
3052	Pepsicola Bottling Co. of Tampa	574	200
3053	Magna Lomason Co. (Douglas & Lomason)	581	5900
3054	Ferro Corp.	1323	6914
3055	Great Dane Trailers (Div. of Great Dane Ltd. Partnership)	995	1000
3056	Matthey Johnson Investments	1300	300
3057	Universal Foods Corp.	22624	170600
3058	Dyson - Kissner - Moran	500	4000
3059	E.W. Scripps Co.	1030	8200
3066	Pacesetter Inc.	500	725
3067	Stratus Computer Inc.	588	2441
3068	Delco Remy America	600	2600
3069	Schering-Plough Corp.	5104	20100
3070	Repap USA, Inc.	550	1200
3072	Sony Software Corp.	7600	17000
3073	Schwan's Sales Enterprise, Inc.	2000	9000
3074	Tomkins Corp.	739	15000

QNUM	COMPANY	REV. ($MIL)	EMP
3074	Safety-Kleen Corp.	859	6700
3075	United States Gypsum Co.	1309	6100
3076	Merck & Co., Inc.	16600	1600
3077	NMB (USA) Inc.	500	2800
3078	P.T. Freeport Indonesia PT-FI	1478	15
3079	Outokumpo Copper Inc.	500	4
3080	Norton Co.	1350	2500
3081	Paragon Trade Brands, Inc.	519	1240
3082	Overhead Door Corp.	551	150
3083	RHI Holding, Inc.	545	3600
3084	Denso Manufacturing	500	1240
3085	The Babcock & Wilcox Co.	1573	9000
3086	Dixie Group	671	6900
3087	Philips Holding USA, Inc.	3960	4
3088	Burlington Ind.	2200	
3089	Donna Karan	700	1500
3090	Perdue Farms Inc.	2100	600
3091	Otis Elevator Co.	5287	729
3092	Murphy Oil Corp.	1700	250
3093	Stewart & Stevenson Svcs. Inc.	1233	4511

Annual Revenues

US	US Imple 23	US Planning 85	No Plans 93	TOTAL
No reply	111 3	4444 1 6	4444 5	14
< $100 m		1 1	1 1	2
100 – 250		4444 135	11 2	2
250 – $1B	4444 4444 10	4444 4444 / 4444 4444	4444 4444 4444 4444 41	86
1 – 5	4444 1111 9	4444 4444 4444 4444	4444 4444 4444 4444 32	72
>$5 B	1 1	4444 4444 11 12	4444 4444 11 12	25
	23	85	93	201

Ordertrust. CyberCash announced the first licensee for InstaBuy, credit card issuer First USA a couple of weeks ago. InstaBuy stores web-shoppers' credit card details the first time they make a purchase at an InstaBuy-enabled web site and when they make a purchase at any other merchant in the InstaBuy network the buyer simply verifies that the information is still correct and makes the purchase with one click

+   ORACLE AND LIVE PICTURE PARTNER TO IMPROVE E-COMMERCE

In a bid to improve the appearance and usability of e-commerce web sites, Oracle Corp yesterday announced plans to integrate Live Picture Inc's imaging software in its next generation database, 8i. The Redwood City, California-based database giant said integrating Live Picture's technology would allow companies to include high-resolution images on their web sites, without having to store large image files. Jim Steiner, senior director of product marketing for the data server division said the technology was primarily aimed at e-commerce providers. In the past it's been difficult to present multimedia internet applications in good resolution, he said, but Live Picture overcomes that problem by allowing users to view images in multiple resolutions very quickly. Live Picture's imaging software will be accessible through Oracle's media-integration component, called Intermedia. The latter will be built into the Oracle 8i database and is designed to enable web publishers to develop and manage multimedia content such as audio, video, text and location queries. Citing the example of an online shopping catelogue, he said the new technology would enable shoppers to zoom in on a particular item, for example a skirt or sweater, and take a close-up look at the texture and stitching. "It will enable e-commerce providers to give their customers a much richer shopping experience without making the images slow to download." Stenier said. Intermedia will be available as an option with Oracle 8i when it becomes available at the end of this year. Steiner said prices would be released at the same time. To take advantage of the Live Picture technology users will also need to buy the Live Picture Image Server, he said. He added that Oracle also plans to integrate more image file formats into Intermedia and that announcements would be made through November, starting with its user conference which begins on November 9 in San Francisco.

+   MARIMBA SET TO ANNOUNCE NEW MARKET POSITIONING

Marimba Inc, the company with the software distribution and management - formerly known as 'push' - tools, has overhauled its marking strategy over the past few weeks on the back of the appointment of Jackie Ross as VP marketing (09/23/98). More details on what is apparently a new positioning will be available in a couple of weeks.

+   KOREAN CHIP COMPANIES WRANGLE OVER TERMS

Europe	~~Imple~~ 23	~~Planning~~ 85	No Plans 93	TOTAL
No reply				
< $100 m				
100 – 250				
250 – $1 B				
1 – 5				
>$5 B				

Q7

	A	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
2	1	2	3	3	4	4	3	5	4	1	3	3	3	1	3	1	3	1	3	5	2
3	2	5	3	3	3	3	2	4	3	4	3	4	2	4	3	4	1	2	5	5	4
4	3	5	3	3	4	4	3	2	4	3	3	5	3	4	3	5	3	4	3	4	4
5	4	1	3	5	3	5	3	5	3	4	3	5	3	5	3	2	3	2	3	5	3
6	5	5	4	5	4	1	3	3	3	3	3	5	4	5	4	4	4	2	4	4	4
7	6	3	3	4	4	4	4	1	2	1	2	2	3	3	4	1	1	3	5	4	2
8	7	2	3	2	3	3	3	2	3	1	3	4	3	2	3	1	2	4	3	5	2
9	8	3	3	4	3	3	2	4	3	3	3	3	4	4	2	4	2	3	3	3	3

Company Size.

Revenue:

~~#########~~ is in the range:

500 —————— 3,400 ~~10,291~~

#Employees is in the range:

# Employees:	No Response	Implementing	Planning	No Plans	
		10 111 **13**	122 724 134	41111 **33**	41
100k +				1 1	1
50 – 99			11 2		2
30k – 49		111 3			3
20k – 29			1 1	1 1	2
10k – 19		1 1	11 2	111 3	6
5k – 9.9		11 2	111 3	4444 4444 11 12	17
1k – 4.9		111 3	4444 111 13	4444 1111 4444 4444 19	35
50 – 0.9		1 1	4444 11111 4444 4444 19	4444 1111 4444 4444 4444 24	44
		23	85	93	201

COMMITMENTS FOR PCM27 as @ 12.98

	US	Europe
SUBSCRIPTIONS:		
Andersen Consulting	✓	✓	1
Compaq.	✓	
Computer Apps. Co. Ltd.	✓	
IBM	✓	
Microsoft	✓	
NTT	✓	
NTT DATA	✓	
NTT DATA Inet.	✓	
Sterling Commerce	✓	
Toshiba	✓	
US West	✓	
Sterling Commerce Int		✓
SBS	✓	✓	2
SNI	✓	✓
DIGITAL	—	✓
REPORTS:		
Eurivase	—	✓

Only **2** accounts are expecting Δ reports,
Andersen and SNI.
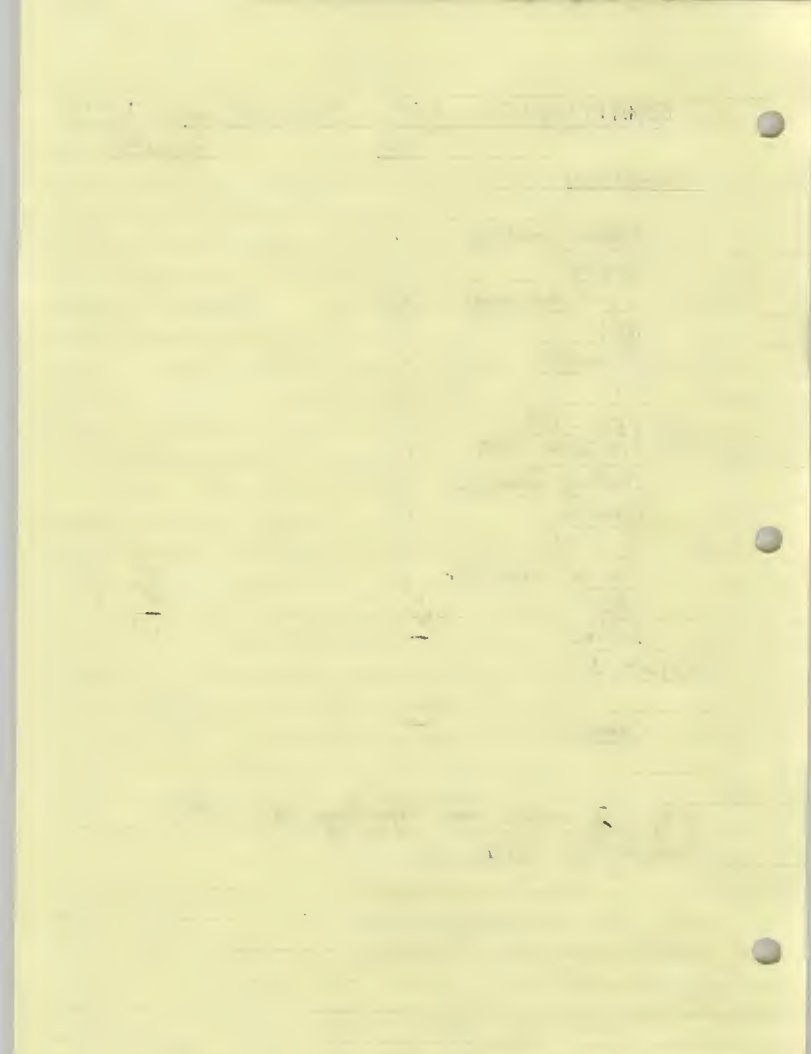
INPUT

Fulfillment List

Order: 3001152	Customer: 3001237	Martha Jameson	BEG: 1/1/97	END: 12/31/97
ANDERSEN CONSULTING		100 South Wacker Drive, 10th Floor, Chicago, IL, 60606 ADD-ON RENEWAL	Phone: (312) 507-6668	Fax: (312) 507-9870
	Ship to: 3001237	Martha Jameson		
ANDERSEN CONSULTING		100 South Wacker Drive, 10th Floor, Chicago, IL, 60606	Phone: (312) 507-6668	Fax: (312) 507-9870
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		
2 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe	*Sub*	

Order: 3001297	Customer: 3001811	Renate Baptiste	BEG: 1/1/97	END: 12/31/97
COMPAQ COMPUTER CORPORATION		50 Nagog Park, MS AK02-2/A9, Acton, MA, 01720-3499 ORDER REALLOCATION PER P. LINES SPREADSHEET 3 SHIP SITE INFO FROM N. BERTHAUT.	Phone: (508) 264-6929	Fax: (508) 264-7089
	Ship to: 3001823	Elise McMullin		
COMPAQ COMPUTER CORPORATION		40 Old Bolton Road, OG01-2/F13, Stow, MA, 01775-1215	Phone: 508 496-9395	Fax: 508 496 9341
1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		
	Ship to: 3002928	Peter March		
COMPAQ COMPUTER CORPORATION		Avenue des Morgines 12, Case Postale 176, 1213, Petit-Lancy 1, ,	Phone:	Fax:
1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA	*Sub*	
	Ship to: 3002929	Ann Sweeny Kallock		
COMPAQ COMPUTER CORPORATION		550 King Street, Corp Library Group, MS LKG1-2/J12, Littleton, MA, 01460-1289	Phone: 508 486 7072	Fax: 508 486 7557

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1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA

Order: 3001231 Customer: 3000019 COMPUTER APPLICATIONS CO., LTD	Ken'ichi Takashima Hitotsubashi-center Bldg., 2-4-6, Hitotsubashi, Chiyoda-ku, Tokyo, ** C/O INPUT KK - JAPAN **, 101	BEG: 4/1/97 Phone: 81 3 3263 7243	END: 3/31/98 Fax: 81 3 3263 7249
Ship to: 3000019 COMPUTER APPLICATIONS CO., LTD	Ken'ichi Takashima Hitotsubashi-center Bldg., 2-4-6, Hitotsubashi, Chiyoda-ku, Tokyo, ** C/O INPUT KK - JAPAN **, 101	Phone: 81 3 3263 7243	Fax: 81 3 3263 7249

2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA	*Sub*

Order: 3001140 Customer: 3000479 IBM CORPORATION	Fred Wong Old Orchard Road, Mail Drop 3C20, Armonk, NY, 10504 Purchased EXCEL FORMAT - FORECASTS ONLY but INPUT will ship hardcopy ea report no charge per W. Haddow	BEG: 1/1/97 Phone: (914) 765-4622	END: 12/31/97 Fax: (914) 765-7309
	WONG replaces MADIA		
Ship to: 3000479 IBM CORPORATION	Fred Wong Old Orchard Road, Mail Drop 3C20, Armonk, NY, 10504	Phone: (914) 765-4622	Fax: (914) 765-7309

1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA	*Sub*

Order: 3001286	Customer: 3002115	Corporate A/P	BEG: 7/1/97	END: 6/30/98
MICROSOFT CORPORATION		Building 8, One Microsoft Way, Redmond, WA, 98052-6399 Phone: (206) 882-8080		Fax: (206) 936-7329
		ORDER SPLIT INTERNALLY FOR "SOLD BY RECORDING" INCLUDES HTML DELIVERY		
	Ship to: 3002760	Deborah Robinson		
MICROSOFT CORPORATION		One Microsoft Way, Library Bldg. 13/1276, Redmond, WA, 98052-6399 Phone: 206 703 6689		Fax: 206 936 7329
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		*Sub*

Order: 3001329	Customer: 3002775	Hiroshi Yonekura	BEG: 9/20/97	END: 9/19/98
NTT		1-1-6, Uchisaiwaicho, Chiyoda-ku, Tokyo, ***C/O INPUT KK - JAPAN ***, 100-19 Phone: 5463 5407		Fax: 5463 8909
		No Buyers Guides		
	Ship to: 3002775	Hiroshi Yonekura		
NTT		1-1-6, Uchisaiwaicho, Chiyoda-ku, Tokyo, ***C/O INPUT KK - JAPAN ***, 100-19 Phone: 5463 5407		Fax: 5463 8909
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		*Sub*

Order: 3001345	Customer: 3002952	Tomoya Tsurumi	BEG: 11/1/97	END: 10/31/98
NTT DATA		9-1, Konan, 1 chome, Minato-ku, Tokyo, , 108-8505 Phone: 81 3 5463 4814		Fax: 81 3 5463 4818
		SITE SUB - NO BUYERS GUIDES		
	Ship to: 3002952	Tomoya Tsurumi		
NTT DATA		9-1, Konan, 1 chome, Minato-ku, Tokyo, , 108-8505 Phone: 81 3 5463 4814		Fax: 81 3 5463 4818

| 1 | PC27-C | Report | Evaluation of Internet Commerce in Mfg - USA | | |

| Order: 3001159 | Customer: 3600072 | Hiroyuki Sakube | BEG: 12/12/96 | END: 12/11/97 |
| NTT DATA COMMUNICATIONS SYSTEM | | 3-3-3, Toyosu, Koto-Ku, Tokyo, ** C/O INPUT KK - JAPAN **, 135 | Phone: 03 5546 8441 | Fax: 03 5546 8442 |

| | Ship to: 3600072 | Hiroyuki Sakube | | |
| NTT DATA COMMUNICATIONS SYSTEM | | 3-3-3, Toyosu, Koto-Ku, Tokyo, ** C/O INPUT KK - JAPAN **, 135 | Phone: 03 5546 8441 | Fax: 03 5546 8442 |

| 2 | PC27-C | Report | Evaluation of Internet Commerce in Mfg - USA | | |

Sub

| Order: 3001340 | Customer: 3002834 | Dong Yu | BEG: 11/1/97 | END: 10/31/98 |
| NTT DATA CORPORATION | | 755 Page Mill Road, A160, Palo Alto, CA, 94304 SITE SUBSCRIPTION | Phone: 650 687 0638 | Fax: 650 687 0645 |

| | Ship to: 3002834 | Dong Yu | | |
| NTT DATA CORPORATION | | 755 Page Mill Road, A160, Palo Alto, CA, 94304 | Phone: 650 687 0638 | Fax: 650 687 0645 |

| 1 | PC27-C | Report | Evaluation of Internet Commerce in Mfg - USA | | |

Sub

| Order: 3001305 | Customer: 3002923 | Norio Tanaka | BEG: 8/1/97 | END: 7/31/98 |
| NTT DATA INSTITUTE OF MGT CONSULTI | | Shibuya Property West Bldg, 32-12, 1-Chome, Higashi, Shibuya-ku, Tokyo, ***C/O INPUT KK - INPUT JAPAN***, 150 NO BUYERS GUIDE | Phone: 81 3 5467 6321 | Fax: 81 3 5467 6322 |

Sub

INPUT

Fulfillment List

	Ship to: 3002923	Norio Tanaka		
NTT DATA INSTITUTE OF MGT CONSULTIN		Shibuya Property West Bldg, 32-12, 1-Chome, Higashi, Shibuya-ku, Tokyo, ***C/O INPUT KK - INPUT JAPAN***, 150	Phone: 81 3 5467 6321	Fax: 81 3 5467 6322
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 3001335	Customer: 2002935	Kevin Sibbring	BEG: 10/1/97	END: 9/30/58
STERLING COMMERCE		4600 Lakehurst Court, , Dublin, OH, 43016-2000	Phone: 614 793 7373	Fax: 614 793 7320
	Ship to: 3002935	Kevin Sibbring		
STERLING COMMERCE		4600 Lakehurst Court, , Dublin, OH, 43016-2000	Phone: 614 793 7373	Fax: 614 793 7320
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 3001264	Customer: 3002509	Shigemi Nagano	BEG: 7/1/97	END: 6/30/98
TOSHIBA		1-1-1 Shibaura, Minato-Ku, Tokyo, ** C/O INPUT KK - JAPAN *, 105-01	Phone: 81 3457 4297	Fax: 81 5444 9420
		NO BUYERS GUIDES INCLUDED WITH SUBSCRIPTION		
	Ship to: 3002509	Shigemi Nagano		
TOSHIBA		1-1-1 Shibaura, Minato-Ku, Tokyo, ** C/O INPUT KK - JAPAN *, 105-01	Phone: 81 3457 4297	Fax: 81 5444 9420
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

INPUT

Fulfillment List

Order: 3001099	Customer: 3002796	Linda L. Wright	BEG 10/1/96	END: 9/30/97
US WEST COMMUNICATIONS		1600 Seventh Avenue, Room 2908, Seattle, WA, 98191	Phone: 206 345 4920	Fax: 206 346 9004
	Ship to: 3002796	Linda L. Wright		
US WEST COMMUNICATIONS		1600 Seventh Avenue, Room 2908, Seattle, WA, 98191	Phone: 206 345 4920	Fax: 206 346 9004
2 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 3001077	Customer: 3002777	Internal Sales/Stock	BEG 1/1/98	END: 12/31/98
Z. INTERNAL - COMMERCIAL		Reports/Buyers Guides - Stock, , , ,	Phone:	Fax:
	Ship to: 3002777	Internal Sales/Stock		
Z. INTERNAL - COMMERCIAL		Reports/Buyers Guides - Stock, , , ,	Phone:	Fax:
25 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 3001018	Customer: 3002742	Jeff Kahsen	BEG: 1/1/98	END: 12/31/98
ZZ. INTERNAL - CALIFORNIA		x, , , ,	Phone:	Fax:
	Ship to: 3002742	Jeff Kahsen		
ZZ. INTERNAL - CALIFORNIA		x, , , ,	Phone:	Fax:
1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 5000276	Customer: 2001396	Norma Detollensere	BEG: 12/29/97	END: 12/29/97
EURIWARE		12-14 rue du Fort de Saint-Cyr, Montigny Le Bretonneux, 78067 Saint-Quentin-en-Yvelines, ,	Phone:	Fax:
		France		
EURIWARE	Ship to: 2001396	Norma Detollensere	Phone:	Fax:
		12-14 rue du Fort de Saint-Cyr, Montigny Le Bretonneux, 78067 Saint-Quentin-en-Yvelines, ,		
		France		
1 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe		38500 FF Rpt Sale

Order: 5000252	Customer: 2001701	Sylvia Evon	BEG: 11/1/97	END: 10/31/98
STERLING COMMERCE INTERNATIONAL		44 avenue de Washington, , 75408 Paris cedex 08, , FRANCE	Phone: 01 53 93 17 00	Fax: 01 53 93 17 17
STERLING COMMERCE INTERNATIONAL S	Ship to: 2001701	Sylvia Evon	Phone: 01 53 93 17 00	Fax: 01 53 93 17 17
		44 avenue de Washington, , 75408 Paris cedex 08, , FRANCE		
1 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe		Sub

INPUT

Fulfillment List

Order: 6000173	Customer: 2001345	Alexander Grueter	BEG: 10/1/97	END: 9/30/98
SIEMENS BUSINESS SERVICES GMBH & C		Otto-Hahn-Ring 6, , 81739 Muenchen, ,	Phone: 089 636-35070	Fax: 089-636-46648
	Ship to: 2001345	Alexander Grueter		
SIEMENS BUSINESS SERVICES GMBH & CO		Otto-Hahn-Ring 6, , 81739 Muenchen, ,	Phone: 089 636-35070	Fax: 089-636-46648
1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 6000182	Customer: 2001323	Dr. Friedrich Froeschl	BEG: 10/1/97	END: 9/30/98
SIEMENS NIXDORF INFORMATIONSSYST		Mitglied der Geschaftsleitung, Otto-Hahn-Ring 6, D-81739, Muenchen, ,	Phone: 089 636 01	Fax: 089 636 2519
	Ship to: 2001323	Dr. Friedrich Froeschl		
SIEMENS NIXDORF INFORMATIONSSYSTE		Mitglied der Geschaftsleitung, Otto-Hahn-Ring 6, D-81739, Muenchen, ,	Phone: 089 636 01	Fax: 089 636 2519
1 PC27-C	Report	Evaluation of Internet Commerce in Mfg - USA		

Order: 6000276   Customer: 6000222   Renate Baptiste   BEG: 1/1/97   END: 12/31/97
DIGITAL EQUIPMENT CORPORATION   50 Nagog Park, MS AK02-2/A9, Acton, MA, 01720-3499   Phone: 508 264 6929   Fax: 508 264 7089

                        Ship to: 6000223   Elise McMullin
DIGITAL EQUIPMENT CORPORATION   40 Old Bolton Road, OG01-2/F13, Stow, MA, 01775-1215   Phone: 508 496 9395   Fax: 508 496 9341

    1   PC27-E   Report   Evaluation of Internet Commerce in Mfg - Europe

                        Ship to: 6000224   Peter March
DIGITAL EQUIPMENT CORP. INT'L EUROPE   Avenue des Morgines 12, Case Postale 176, 1213, Petit-   Phone: Fax:
                        Lancy, ,

    1   PC27-E   Report   Evaluation of Internet Commerce in Mfg - Europe

                        Ship to: 6000225   Ann Sweeny-Kallock
DIGITAL EQUIPMENT CORPORATION   550 King Street, LKG1-2J10, Littleton, MA, 01460-1289   Phone: 508 486 7072   Fax: 508 486 7557

    1   PC27-E   Report   Evaluation of Internet Commerce in Mfg - Europe   _Sub_

Order: 6000273   Customer: 2001345   Alexander Grueter   BEG: 10/1/97   END: 9/30/98
SIEMENS BUSINESS SERVICES GMBH & C   Otto-Hahn-Ring 6, , 81739 Muenchen, ,   Phone: 089 636-35070   Fax: 089-636-46648

                        Ship to: 2001345   Alexander Grueter
SIEMENS BUSINESS SERVICES GMBH & CO.   Otto-Hahn-Ring 6, , 81739 Muenchen, ,   Phone: 089 636-35070   Fax: 089-636-46648

    1   PC27-E   Report   Evaluation of Internet Commerce in Mfg - Europe   _Sub_

Order: 6000282   Customer: 2001323   Dr. Friedrich Froeschl   BEG: 10/1/97   END: 9/30/98
SIEMENS NIXDORF INFORMATIONSSYST   Mitglied der Geschaftsleitung, Otto-Hahn-Ring 6, D-81739,   Phone: 089 636 01   Fax: 089 636 2519
                        Muenchen, ,
                                                                                                          Sub

INPUT

Fulfillment List

	Ship to: 2001323	Dr. Friedrich Froeschl	
SIEMENS NIXDORF INFORMATIONSSYSTE		Mitglied der Geschaftsleitung, Otto-Hahn-Ring 6, D-81739, Muenchen, ,	Phone: 089 636 01 Fax: 089 636 2519
1 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe	

INPUT

Fulfillment List

Order: 2001149	Customer: 2001886	Norma Detollenaere	BEG 1/14/98	END: 1/14/98
EURIWARE		12-14 rue du Fort de Saint-Cyr, Montigny Le Bretonneux, 78067, Saint-Quentin en Yvelines, , France	Phone:	Fax:
	Ship to: 2001886	Norma Detollenaere		
EURIWARE		12-14 rue du Fort de Saint-Cyr, Montigny Le Bretonneux, 78067, Saint-Quentin en Yvelines, , France	Phone:	Fax:
1 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe		

Rpt order from France

Order: 2000966	Customer: 2001757	Akihiro Ishizuka	BEG: 1/1/97	END: 12/31/97
NTT DATA		5th Floor, 30-34 Moorgate, London, , EC2R 6DN	Phone:	Fax:
	Ship to: 2001757	Akihiro Ishizuka		
NTT DATA		5th Floor, 30-34 Moorgate, London, , EC2R 6DN	Phone:	Fax:
1 PC27-E	Report	Evaluation of Internet Commerce in Mfg - Europe		*Sub*

Order: 210355	Customer: 2000654	Library/Stock	BEG: 1/1/98	END: 12/31/98
ZZ - CALIFORNIA		1881 Landings Drive, , Mountain View, CA, 94043 USA	Phone:	Fax:
	Ship to: 2000654	Library/Stock		
ZZ - CALIFORNIA		1881 Landings Drive, , Mountain View, CA, 94043 USA	Phone:	Fax:

INDEPENDENT CONTRACTOR AGREEMENT (U.S.)

EXHIBIT A

I.   CONTRACTOR INFORMATION

Name.   Susan A. Harman

Address: 1055 Hembree Grove Drive, Roswell, GA 30076

Telephone: (770) 663-8889   SS#:   071-44-3999

II.   PROJECT INFORMATION

Project Manager: Michael P. Burwen

Project Name: Impact of Electronic Commerce on Enterprise Applications and Evaluation of Iinternet Commerce on Manufacturing

Code: PC17 and PC27

Agreement Date: From: 3/25/98 To: 5/15/98

Exhibit A Date·   From: 3/25/98 To: 5/15/98

III.   TASK DESCRIPTION

1. Prepare the report "Impact of Electronic Commerce on Enterprise Applications," otherwise known as PC17, covering both the US and European markets in a format compatible with INPUT's standard reports, samples of which are enclosed with this Exhibit and made a part thereof.

2. INPUT will supply the following:

- User interview data from both the US and Europe.

- Assistance of a research assistant for chart preparation, web searches and other background research chores.

- Information from other INPUT reports that may be useful or otherwise relevant to the subject at hand.

1. Consultant will conduct such secondary research and primary vendor research as may be needed to meet the requirements of the project.

2. The nominal table of contents of the report and scope of coverage are detailed on INPUT's web pages which are hereby made a part of this agreement. However, consultant is given latitude to alter the Table of Contents to better suit the topic and the available research.

Independent Contractor Agreement

3. The report length should be between 75 and 100 pages formatted as shown in the enclosed examples.

4. PC17 is to be delivered in electronic form in Word 97 format. Copies should be transmitted to **Error! Bookmark not defined.** and **Error! Bookmark not defined.**.

5. The nominal due date for PC17 is April 10, 1998.

6. Prepare the report "Evaluation of Internet Commerce in Manufacturing," otherwise known as PC27, in European and US versions.

7. Items 2 through 4 above apply to PC27 as well.

8. The length of each of the European and US reports should be between 65 and 85 pages formatted as shown in the enclosed examples.

9. The nominal due date for PC27 is May 1, 1998

IV. REVIEW OF PROGRESS:

Consultant is required to submit a brief progress report each week explaining progress to date and detailing any unforeseen problems that might cause the due dates to be missed. This report should be submitted via email to **Error! Bookmark not defined.** and jwillmott@input.com.

VI. FEE AND PAYMENT SCHEDULE:

The fee for preparation of PC17 and PC27 as stipulated above is $15,000. One-half the fee will be paid upon authorization. The balance, plus expenses, will be paid upon satisfactory completion of the assignment

VII. REIMBURSABLE EXPENSES

No reimbursed expenses are currently envisioned for this assignment.

VIII. AUTHORIZATIONS

Signed: _____   Signed: _____

INPUT _____   Consultant _____
(Print Name)   (Print Name)

Date _____   Date _____

Susan Harman
1055 Hembree Grove Drive
Roswell, Georgia 30076

INVOICE

Mike Burwen, Managing Director, US
John Willmott, UK
INPUT
1881 Landings Drive
Mountain View, CA 94043

RE: PROJECT CODE NUMBER: PC17 and PC27

Invoice Date	Invoice Amount	Invoice Number
May 19, 1998	$7,500	051898

Date of Service	Description of Service
5/19/98	$7,500 (50% of $15,000) to be paid upon completion of project (PC17US, PC27 US & Europe)

Remit Payment To:

Susan Harman (Tax ID# 071-44-3999)
1055 Hembree Grove Drive
Roswell, GA 30076

page 1 of 3

To: Peter Lines

9th June '98

Peter,

Please find attached contact for Susan Harman.

Regards,
John

Count # of pages /wdsetc.

To: "Susan A. Harman" <s-harman@mindspring.com>
From: Peter Lines <plines@input.com>
Subject: Re: status
Cc:
Bcc:
X-Attachments:

Susan, I instructed our accounting people to pass payment on your invoice last night. Please send back the physical material sent, ie the example report(s), I now have the spreadsheets.

No doubt I will be in touch again re points of clarification etc.

Regards

Peter Lines

At 07:47 AM 6/11/98 -0400, you wrote:
>Please advise as to status. Thank you.
>
>Susan
>
>
>

>From <jwillmott@input.com> Wed May 20 14:07:09 1998
Received: from [38.254.212.253] by mail.input.co.uk
  (SMTPD32-960308) id A38417B900B4; Wed May 20 14:07:00 1998
Received: by mail.inputgov.com from localhost
    (router,SLMail V3.0); Wed, 20 May 1998 09:18:26 -0400
Received: by mail.inputgov.com from mail.input.co.uk
    (194.6.110.85::mail daemon; unverified,SLMail V3.0); Wed, 20 May
1998 09:18:22 -0400
Received: from [139.92.16.45] by mail.input.co.uk
  (SMTPD32-960308) id A21E290D00C8; Wed May 20 14:01:02 1998
Reply-To: "John Willmott" <jwillmott@input.com>
From: "John Willmott" <jwillmott@input.com>
To: "Peter Lines" <plines@input.com>
Subject: Contact details for PC27
Date: Wed, 20 May 1998 13:56:38 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook Express 4.71.1712.3
X-MimeOLE: Produced By Microsoft MimeOLE V4.71.1712.3
Message-Id: <19980520091826.0a4df784.in@mail.inputgov.com>

Peter

Here is the email address of the lady who wrote these reports.

Regards
John

-----Original Message-----
From: John Willmott <jwillmott@input.com>
To: Susan A. Harman <s-harman@mindspring.com>
Date: Wednesday, May 20, 1998 8:57 AM
Subject: Re: complete

>Thanks Susan. I've received it, will look through the reports and get
the
>invoice into the system this week.
>
>Regards
>John
>
>-----Original Message-----
>From: Susan A. Harman <s-harman@mindspring.com>

```
>To: jwillmott@input.com <jwillmott@input.com>
>Cc: mburwen@input.com <mburwen@input.com>
>Date: Wednesday, May 20, 1998 3:47 AM
>Subject: complete
>
>
>>John and Mike - I have sent you PC17 and PC27, US & Europe versions.
>>
>>Attached is my invoice for payment. Please confirm receipt. Thanks.
>>
>>Susan
>>
>
>
```

```
>From <jwillmott@input.com> Wed May 20 14:05:04 1998
Received: from [38.254.212.253] by mail.input.co.uk
  (SMTPD32-960308) id A0F81B46014C; Wed May 20 13:56:08 1998
Received: by mail.inputgov.com from localhost
    (router,SLMail V3.0); Wed, 20 May 1998 09:13:17 -0400
Received: by mail.inputgov.com from mail.input.co.uk
    (194.6.110.85::mail daemon; unverified,SLMail V3.0); Wed, 20 May
1998 09:08:55 -0400
Received: from [139.92.16.45] by mail.input.co.uk
  (SMTPD32-960308) id AE38290D00C8; Wed May 20 13:44:24 1998
Reply-To: "John Willmott" <jwillmott@input.com>
From: "John Willmott" <jwillmott@input.com>
To: "Peter Lines" <plines@input.com>
Subject: PC27U
Date: Wed, 20 May 1998 13:51:39 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook Express 4.71.1712.3
X-MimeOLE: Produced By Microsoft MimeOLE V4.71.1712.3
Message-Id: <19980520091317.0a494222.in@mail.inputgov.com>
```

This made need some sorting out. There may be parts of PC17 as well as PC27
in the attachment.

Regards
John

Attachment Converted: c:\eudora\attach\PC27U.zip

```
>From <jwillmott@input.com> Wed May 20 14:17:12 1998
Received: from [38.254.212.253] by mail.input.co.uk
   (SMTPD32-960308) id A4204DC500B0; Wed May 20 14:09:36 1998
Received: by mail.inputgov.com from localhost
    (router,SLMail V3.0); Wed, 20 May 1998 09:25:33 -0400
Received: by mail.inputgov.com from mail.input.co.uk
    (194.6.110.85::mail daemon; unverified,SLMail V3.0); Wed, 20 May
1998 09:18:13 -0400
Received: from [139.92.16.45] by mail.input.co.uk
   (SMTPD32-960308) id AFEC290D00C8; Wed May 20 13:51:40 1998
Reply-To: "John Willmott" <jwillmott@input.com>
From: "John Willmott" <jwillmott@input.com>
To: "Peter Lines" <plines@input.com>
Subject: PC27E
Date: Wed, 20 May 1998 13:53:25 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook Express 4.71.1712.3
X-MimeOLE: Produced By Microsoft MimeOLE V4.71.1712.3
Message-Id: <19980520092533.0a547c38.in@mail.inputgov.com>
```

Regards
John

Attachment Converted: c:\eudora\attach\PC27E.zip

Peter Lines

From:	Kevin Plexico [kplexico@input.com]
Sent:	Monday, December 14, 1998 10:13 PM
To:	Peter Lines
Subject:	Re: Preliminary Findings

Hi Peter,

Here's a link to it.

http://www.input.com/guest/ena_enablers/ea37_brochure.cfm?reference=findings

Alternatively, you can go to the main page and click on Enterprise Application Solutions in the flag map. Then select Market Action Projects and you will see Internet Enabled ERP Solutions in the list of projects.

Regards
Kevin

-----Original Message-----

From:	**Peter Lines <plines@input.com>**
To:	Kevin Plexico (E-mail) <kplexico@input.com>
Date:	Monday, December 14, 1998 2:49 PM
Subject:	Preliminary Findings

Kevin, Excuse me for being boring but I do not seem to be able to get to PAC's prelim findings on The Future of Internet-Enabled ERP Solutions. Can you please guide me?

Thanks in anticipation.

Regards

Peter Lines

INPUT

The Future of Internet-Enabled ERP Solutions

Upload
Draft Docs

Preliminary Findings/Draft Documents

Our objective is to provide you the findings and results of our projects as we produce
them. The documents below are provided for the benefit of our clients in their
draft/preliminary form. They are not final and complete versions of INPUT's research
findings. There may be errors and omissions which will be changed and/or corrected in
the final version once it is published.

Chapter 1 of UK Internet Enabled ERP Solutions   MS Word File

This is the final draft of chapter 1 of the UK report "Intranet Enabled ERP Solutions."

Chapter 1 of French Internet Enabled ERP Solutions   MS Word File

This is the final draft of chapter 1 of the French report "Intranet Enabled ERP
Solutions."

Chapter 1 of German Internet Enabled ERP Solutions   MS Word File

This is the final draft of chapter 1 of the German report "Internet Enabled ERP
Solutions."

Chapter 1 of US Internet Enabled ERP Solutions   MS Word File

This is the final draft of chapter 1 of the US report "Internet Enabled ERP Solutions."

Client/Vendor Survey Results for UK Internet Enabled ERP Project   MS Excel File

Client/Vendor Survey Results for German Internet Enabled ERP Project   MS Excel File

Client/Vendor Survey Results for France Internet Enabled ERP Project   MS Excel File

Client/Vendor Survey Results for Europe Internet Enabled ERP Project   Zip File

Client/Vendor Survey Results for U.S. Internet Enabled ERP Project   MS Excel File

Final Draft of the Internet Enabled ERP Solutions   Zip File

INPUT

The Future of Internet-Enabled ERP Solutions

Upload
Draft Docs

Preliminary Findings/Draft Documents

Our objective is to provide you the findings and results of our projects as we produce them. The documents below are provided for the benefit of our clients in their **draft/preliminary form.** They are not final and complete versions of INPUT's research findings. There may be errors and omissions which will be changed and/or corrected in the final version once it is published.

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This is the final draft of chapter 1 of the German report "Internet Enabled ERP Solutions."

Chapter 1 of US Internet Enabled ERP Solutions   MS Word File

This is the final draft of chapter 1 of the US report "Internet Enabled ERP Solutions."

✖	**Client/Vendor Survey Results for UK Internet Enabled ERP Project**	MS Excel File
✖	**Client/Vendor Survey Results for German Internet Enabled ERP Project**	MS Excel File
✖	**Client/Vendor Survey Results for France Internet Enabled ERP Project**	MS Excel File
📦	**Client/Vendor Survey Results for Europe Internet Enabled ERP Project**	Zip File
✖	**Client/Vendor Survey Results for U.S. Internet Enabled ERP Project**	MS Excel File

Peter Lines

From:	Kevin Plexico [kplexico@input.com]
Sent:	Monday, October 05, 1998 1:52 PM
To:	Peter Lines
Subject:	Re: PAC's WIP Research Project.

Hi Peter,

It is on the project page for Intranet Enabled ERP Solutions. If you go to INPUT's main page and click on "Current Projects" in the Client Quickbar, you will see this project listed under the EAS program. Click on the link to this project then from the project page you will see a link to "Prelim Findings." All of PAC's WIP for this project will be on this page.

Regards
Kevin

-----Original Message-----

From:	**Peter Lines <plines@input.com>**
To:	Kevin Plexico (E-mail) <kplexico@input.com>
Date:	Monday, October 05, 1998 8:45 AM
Subject:	PAC's WIP Research Project.

Kevin. Over the weekend PAC informed me that he had a lot of useful data from the raport he is writing up on the Web as WIP. How do I find it, a cursory look failed to make it materialise.

Thanks in anticipation.

Regards

Peter

INTEGRATED.

Q2. MIGRATION.

Q3. ICOBJECTIVES. / SATISFACTION

Q4. IMPLEMENTATION

Q5. VENDORS (Emerging).

Q6. Criteria for Vendor Selection.

Q7. Product / Service Requirements.

Q8. Impact of IC on Company Processes.

Q9. Experience. — could be ch IIIa I.

Q10. Products Used.

Q11. Services Used.

Q12. Inhibitors to IC

Q13. IC Champion.

PLANNING.

SATISFACTION

Q3. IC / Objectives

Implementation

Q5. Leading Vendors.

Product / Service Requirements.

Q6. Impact of IC on Company Process

Q7. Future Impact

Q8. Inhibitors to IC

Q9. Expenditure on IC

Q10.

CH III.
A Q3 objectives.
B Q12/9.
C Q10 PLANNING / Q2b?

CH IV.
A Q2 C
B Q4
C Q13(I)

Q8 I   Future plans
Q7 P   Q8 P

CH V.
B Q5
C Q6(I)
A Q 7I/Q6P + Q10I./Q11I

INTEGRATED.

Q2. MIGRATION.

Q3. IC OBJECTIVES.

Q4. IMPLEMENTATION.

Q5. VENDORS (Emerging).

Q6. Criteria for Vendor Selection.

Q7. Product / Service Requirements.

Q8. Impact of IC on Company Processes.

Q9. Experience.

Q10. Products Used.

Q11. Services Used.

Q12. Inhibitors to IC.

Q13. IC Champion.

PLANNING.

Q2. Migration.

Q3. IC Objectives.

Q4. Implementation.

Q5. Leading Vendors.

Q6. Product/Service Requirements.

Q7. Impact of IC on Company Processes.
Q8. Future Impact.
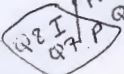
Q9. Inhibitors to **IC**.

Q10. Expenditure on IC.

```
                    ↓

   ┌─────┐
   │ U.S.│              USE
   └─────┘      INTERNET  IN  E-C
   NO                                    YES

┌──────────┐     ┌──────────┐      ┌──────────┐
│ PLANNED  │ ──→ │ NO PLANS │      │  USER    │
│ IN NEXT  │     └──────────┘      │  Main.   │
│ 2-3 YEARS│      TERMINATE        │  QA ice. │
└──────────┘         (93)          │ INTEGRATED│
     YES                           └──────────┘
                                        (23)
 ┌──────────┐
 │ PLANNING │
 └──────────┘
    (85)
```

reveal 1 of these #59.
check   is planning but
data.   did not complete whimm
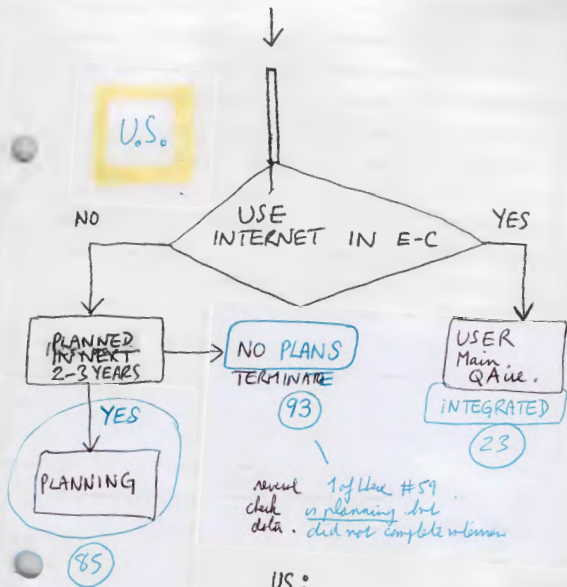
US: 1. INTEGRATED.
      2. NO PLANS.
      5. PLANNING.

Europe: 8. INTEGRATED.
         9. NO PLANS.   0
        10. PLANNING.

Europe.

PLANNING	NO PLANS	INTEGRATED
43.	0.	7.

Combined

	PLANNING	NO PLANS	INTEGRATED
U.S.	85	93	23
E.	43	0	7
251	128	93	30

INTEGRATED

US INTEGRATED

EVALUATION OF INTERNET COMMERCE IN MANUFACTURING

User Questionnaire

Note: this survey uses the following definitions and abbreviations:
- Electronic Commerce (EC): the purchase and sale of goods and services where the transactions flow between the buyer and seller via a computer network.
- Internet Commerce (IC): electronic commerce that uses the Internet.
- EDI (electronic document interchange): a set of formatted, standardized messages that enable computer-to-computer business transactions between trading partners. Examples of transactions include processing sales orders and invoices electronically.

1. a. *M* Do you use electronic commerce in your organization?

22 | Yes (go to 1b) | No (go to 1c) | *1*   */23*

   b. *N* How long have you been using electronic commerce? *(see attached).*

   c. *O* Are you currently using EDI? *P* Will you incorporate EDI into Internet Commerce? | *13 YES 1NO* *9 NO RESPONSE*
      22/23

   d. *Q* Who manages EC in your company/organization? *(see attached).*

   e. *R* Do you use the Internet in your electronic commerce?

   21 | Yes (go to 1f) | No (go to 1i) | *1 + 1 minimal / 23*

   f. *S* How long has your organization been doing Internet Commerce? *(see attached)*

   g. *T* Who manages IC in your company/organization. *(see attached)*

   h. *U* Who will manage IC for your company/organization? *(see attached)*

   (Go to Q2)

      6/23!

   i. *V* Is Internet Commerce planned in the next 2-3 years? Y/N_____
      If "Yes", go to **Part II - Prospect Questionnaire**.

Comments

j. *W* **If no, why not?**

(Terminate)

2. a. ☒ What is the status of your migration to Internet Commerce?

___1___ Currently underway/this year **1 2**
___2___ By end-1998 **2**
___3___ 1999-2000 **2**

___4___ Done **4**
___5___ Adding more functions **3(4)**

2.c. Please describe your migration:

FROM	TO		
	Private VAN	Public Internet	Extranet/VPN
Paper-based	1	8	1	**10**
Proprietary VAN	2	9	1	**12**
Public Internet	0	10	1	**11**
Extranet (VPN)	1	3	1	**5**

Y, Z, AA, AB (left margin labels for rows)

3. How important is each of the following objectives in your planning for Internet Commerce? (5=very important)

b. And how satisfied are you with the achievement of these objectives so far? (5=very satisfied)

Objective	Importance Rating (1-5)	Satisfaction Rating (1-5)	Comments
Reduce Costs of Operation	AC 3.9	AD 3.6	AE /
Reduce Order-to-Delivery Time	AF 4.2	AG 3.8	AH /
Extend Reach to Additional Trading Partners	AI 4.1	AJ 3.4	AK /
Improve Customer Service	AL 4.0	AM 3.6	AN /
Increase Ability to Manage Business	AO 3.8	AP 3.6	AQ /
Increase Speed of Introduction of New Products & Services	AR 3.6	AS 3.7	AT /
Offer Longer Hours When "Open for Business"	AU 3.0	AV 3.4	AN /
Other1	AX /	AY /	AZ /
Other2	BA /	BB /	BC /

4. Please describe your approach to implementation. For example, which of the following would apply to the implementation approach?

Enterprise-wide (all applications at once)	1	5
Department/function by Department/function	2	8
Process by Process	3	11

Details/Description

BE   *(see spreadsheet)*

5. a. In your opinion, who are the leading vendors in Internet Commerce? Please name 1-3 of each type.

Type of Vendor	Leading Vendor
Software Product Vendors	
	BF
	BG
	BH
Services Vendors	
	BI
	BJ
	BK
Hardware Vendors	
	BL
	BM
	BN

5. b. In your opinion, who are the emerging vendors in Internet Commerce?

Emerging Vendor	Area of Specialty
BO	BP
BQ	BR

BS (Comments.) — see spreadsheet.

(US)

6. a. Please rate on a scale of 1 to 5 (1 = unimportant, 5 = important criterion) the criteria your organization uses to select an implementation vendor.

Europe

		US	Europe
BT	**4.4** Experience in electronic commerce/EDI		4.4 ✓
BU	**4.4** Experience in Internet technology		4.7 ✓
BV	**3.9** Cost		3.3
BW	**4.1** Speed		2.7
BX	**4.0** Promised business impact		3.1 ✓
BY	**3.8** Existing and satisfactory relationship with vendor		2.7
BZ	_____ Other (Please describe) (2 comments in spreadsheet).		

6. b. Please rate on a scale of 1 to 5 (1 = unimportant, 5 = important criterion) the criteria your organization uses to select an operations vendor.

Europe

		US	Europe
CA	**4.3** Experience in electronic commerce/EDI		4.3 ✓
CB	**4.4** Experience in Internet technology		4.4 ✓
CC	**3.9** Experience in outsourcing/operations management services		3.4 ✓
CD	**3.9** Cost		3.7 ✓
CE	**3.9** Promised business impact		3.4 ✓
CF	**3.9** Existing and satisfactory relationship with vendor		3.6
CG	_____ Other (Please describe) (1 comment — see spreadsheet).		

7.a. What software products, hardware products and services have been/will be required for the implementation of Internet Commerce in your organization?

US   *Europe*

Software Product	Required? (Y/N)	New Purchase? (Y/N)	Product (if known)		
Development Tools	CH 19	CI	CJ	6	86%
Security	CK 21	CL	CM	5	71
Messaging	CN 19	CO	CP	3	43
Communications	CQ 20	CR	CS	4	57
Full Application Package, e.g. billing, ordering	CT 16	CU	CV	4	57
EDI-related, e.g. mapping, translator	CW 17	CX	CY	1	14
Catalog	CZ 9	DA —	DB	3	43
Other 1	DC —	DD —	DE —		
Other 2	DF —	DG —	DH —		

7

7.b.

Hardware Product	Required? (Y/N)	New Purchase? (Y/N)	Product/Vendor
Servers: Enterprise	DI 18	DJ	DK
Servers: Departmental	DL 13	DM	DN
Network Hardware	DO 17	DP	DQ
Desktop Hardware	DR 17	DS	DT
Network Computers	DU 15	DV	DW
Other 1	DX —	DY —	DZ —
Other 2	EA —	EB —	EC —

7.c.

Services	Required? (Y/N)	Plan to Use In-house (I), External Vendor (E) or Both (B)	Possible Vendor
Consulting/Planning	ED 17	EE	EF
Application Development	EG 20	EH	EI
Integration With Existing Applications	EJ 20	EK	EL
EDI-related Services	EM 18	EN	EO
Education/Training	EP 22	EQ	ER
Conversion of Existing EC Applications	ES 17	ET	EU
Other 1	EV —	EW —	EX —
Other 2	EY —	EZ —	FA —

US

Europe

8. How important is Internet Commerce to the following processes/functions of your organization? (5=very important)

Process/function	Importance Rating (1-5)		
Marketing and Advertising	FB	3.9 ·	3.0
Sales	FC	3.5 ,	3.2
Purchasing	FD	3.6 ·	3.6
Customer Service	FE	4.2 ·	2.8
Production:	FF	3.3	
Raw Material Scheduling	FG	2.8 ·	2.2
Inbound Material Tracking	FH	3.3 ,	2.0
Scheduling	FI	2.9	3.4
Inventory Management	FJ	3.0 ·	4.0
Distribution	FK	3.0 ·	3.8
Routing/Scheduling	FL	3.0 ✓	3.0
Sales Forecasting	FM	2.9 ·	2.2
Channel Management	FN	3.1 ·	2.2
Manufacturing Production Operations	FO	2.5 ,	1.8
Production Planning	FP	2.5 ·	3.0
Other 1	FQ		
Other 2	FR		

9. Regarding your organization's experience with the implementation and operation of Internet Commerce, please answer the following:

a. What was good/effective?   FS

(see spreadsheets).

b. What was bad/ineffective?   FT

c. What are some of the "lessons learned"?

FU

d. What advice do you have for others?

FV

10. What products are you currently using for Internet Commerce? Please rate your satisfaction with these products on a scale of 1-5 (5=very satisfied)

IC Software Product Type	Product Name	Satisfaction Rating (5=high)	Comments for Rating of 1 or 2
Translation	FN	FX 4.4	FY
Mapping tool	FZ	GA 4.2	GB
Scheduling tool	GC	GD 4.2	GE
Communications	GF	GG 4.2	GH
Payments processing	GI	GJ 3.9	GK
Messaging	GL	GM 3.7	GN
Security	GO	GP 4.1	GQ

11. What services are you currently using for Internet Commerce? Please rate your satisfaction with these services on a scale of 1-5 (5=very satisfied)

Type of Service	Satisfaction Rating (5=high)	Vendor
GR	GS 4.2	GT
GU	GV 4.3	GW

12. Please rate on a scale of 1-5 (1=low, 5=high) the criticality of each of the following potential inhibitors to planning and implementing Internet Commerce.   US   7 Europe   43

Inhibitor/Concern	Criticality (1-5)	Comments	I	P	
Security	GX 4.1	GY —	4.8 ✓	4.5 ✓	4.5
Cost of Implementation	GZ 3.8	HA —	3.0	2.5	2.6
Cost of Operations	HB 3.6	HC —	1.8	2.7	2.6
Acceptance by Large percentage of Trading Partners	HD 4.1	HE —	3.7 ✓	4.0 ✓	4.0
Availability of Internet Access	HF 4.1	HG —	3.3 .	3.2	3.2
Ability to Manage Change	HH 4.0	HI —	1.8	2.7	2.6
Speed/Bandwidth (Network Unable to Handle Increased Traffic)	HJ 4.0	HK —	4.7 ✓	4.0 ✓	4.1
Key Decision Makers Not Familiar with Internet Technology	HL 3.8	HM —	1.0	2.0	1.9
Lack of Appropriate Development Skills	HN 3.8	HO —	1.0	1.7	1.6
Lack of Development Tools	HP 3.4	HQ —	1.2	1.5	1.4
System Not Continuously Available	HR 3.7	HS —	2.2	3.1	2.8
Lack of Internet Application Packages	HT 3.1	HU —	1.5	1.9	1.8
Key Decision Makers Not Convinced of Internet Benefits	HV 3.9	HW —	1.2	2.1	2.0
Other 1	HX —	HY —			
Other 2	HZ —	IA —			

13. Who is the Internet Commerce champion in your company? Who is the IC decision maker?

Position	IC Champion	IC Decision Maker	Comments
CEO/CFO	I A 0	I C 2 1	I D 0
CIO/IS Manager	I E 9	I F 123	I G 1
Network Manager	I H 3 1	I I 1	I J
Business Function Personnel Function: Position:	I K 2	I L 1	I M 0
Other 1	I N 3	I O	I P
Other 2	I Q	I R	I S

(see s/sheet).

15   16   1

14.   Do you have any other comments that you would like to make on the implementation and requirement for Internet Commerce?

I T

(see s/sheet).

QNUM	COMPANY	ADDRESS	CITYSTZIP	NAME	TITLE
1001	CH Robinson Co.	8100 Mitchell Rd. Ste. 200	Eden Prarie, MN 55344	Dave Ethier	Mgr. Client Server
1002	Reichold Chemical	PO Box 13582 RTP	Raleigh, NC 27709	Mr. Carol Watts	EC Consultant
1003	Harris Corp.	PO Box 883 Mailstop 62-032	Melbourne, FL 32902	Terri Kroboth	Principal Sys. Analyst
1004	Hallmark Cards, Inc.	2501 McGee St.	Kansas City, MO 64141	Keith Tate	IT Mgr, EDI/Admin.
1005	Avex Elec.	4807 Bradford Blvd. NW	Huntsville, AL 35805	Mike Gordon	Sr. EC Mgr.
1006	Amoco Canada	240-4 Ave.	Calgary, T2P 2H8 Alberta, Canada	Den Hiscot	EC Coordinator
1007	Banta Corp.	225 Main St.	Menasha, WI 54952	Mark Fleming	Dir. of Corp. Comm.
1008	John Deere	John Deere Rd.	Moline, IL 82165	Steve Darling	Product Mgr.
1009	A. Schuman Inc.	3550 W. Market St.	Akron, OH 44333	Larry Schmidt	Dir. of IS for N. Amer.
1010	Haworth, Inc.	1 Haworth Center	Holland, MI 49423	Brian Davis	Prog. Ana.
1011	Dairyman's Coop Creamery Assn.	400 S. M St.	Tulare, CA 93274	Don Hutchison	Hardware Admin.
1012	N Y Times Syndication Svcs	122 E. 42nd St.	New York, NY 10168	Don Donaghy	Gen Mgr.
1013	MacMillen Publishing	201 W. 103rd St.	Indianapolis, IN	Brad Seifert	Tech. Support Spec.
1014	TPN Register	5515 Security Ln. Ste. 500	Rockville, MD 20852	Richard Waugh	Business Mgr.
1015	Data General Corp.	4400 Computer Dr.	Westborough, MA 01580	Janat Smith	Mgr./ Systems Dev. Mgr. EDI
1016	Union Underwear Co.	1 Fruit of the Loom Dr.	Bowling Green, KY 42103	Glen Benfield	Dir. Internet Commerce
1017	Imperial Oil Limited	5115 W. Pickard Rd.	Mt. Pleasant, MI 48858-9831	Jim Halhoway	Comptroller
1018	Phillips Petroleum Co.	119 N. Spur	Borger, TX 79007	Tom Zani	Finance Mgr.
1019	Readers Digest Assoc. Inc.	Readers Digest Rd.	Pleasantville, NY 10570	Milan Kofol	VP / Treas.
1020	S. C. Johnson & Son, Inc.	1525 Howe St.	Racine, WI 53403	Dave Spurlock	CIO
1021	Deer & Company	John Deere Rd.	Moline, IL 82165	Carlo Panayi	Internet Tech. Proj. Mgr.
1022	GTE Corp.	1 Stamford Forum	Stamford, CT 06904	Clifford Wolf	Dir. Consolidated Reporting & Analysis

QNUM	COMPANY	ADDRESS	CITYSTZIP	NAME	TITLE
1023	BOC Group	575 Mountain Ave.	New Providence, NJ 07974	Fulton Wilcox	Dir. of IM

QNUM	Q1 - A	Q1 - B	Q1 - C/1	Q1-C/2	Q1-D	Q1-E	Q1 - F	Q1-G
1023		1,5 yrs.	1,		1 Self	1	Just started.	self

$\dfrac{22}{23}$

QNUM	Q1-H	Q1-I
1001	Mgr. Client server dev.	1
1002	EC consultants	1
1003	same	1
1004		0
1005	self	1
1006	DK	
1007	Refused	
1008	Mgr. Internet	
1009	I am one of the people.	
1010	DK yet	0
1011	Richard Walter	
1012	MIS	
1013		
1014		
1015		
1016	Dir. EC	
1017	MIS Dir.	1
1018	DK	
1019		
1020	Supply chain VP	
1021		1
1022	DK	

QNUM	Q1-H	Q1- I
1023	DK	

US INTEGRATED

Q1b.

10 yrs	1	1
8 yrs	111	3
7 yrs	11	2
5-6 yrs	11	2
~~5~~ 5 yrs	11	2
4 yrs	11	2
2 yrs	111	3
18-24 mths	1	1
1 yr	111	3
6 months	11	2
Just started	1	1
		22
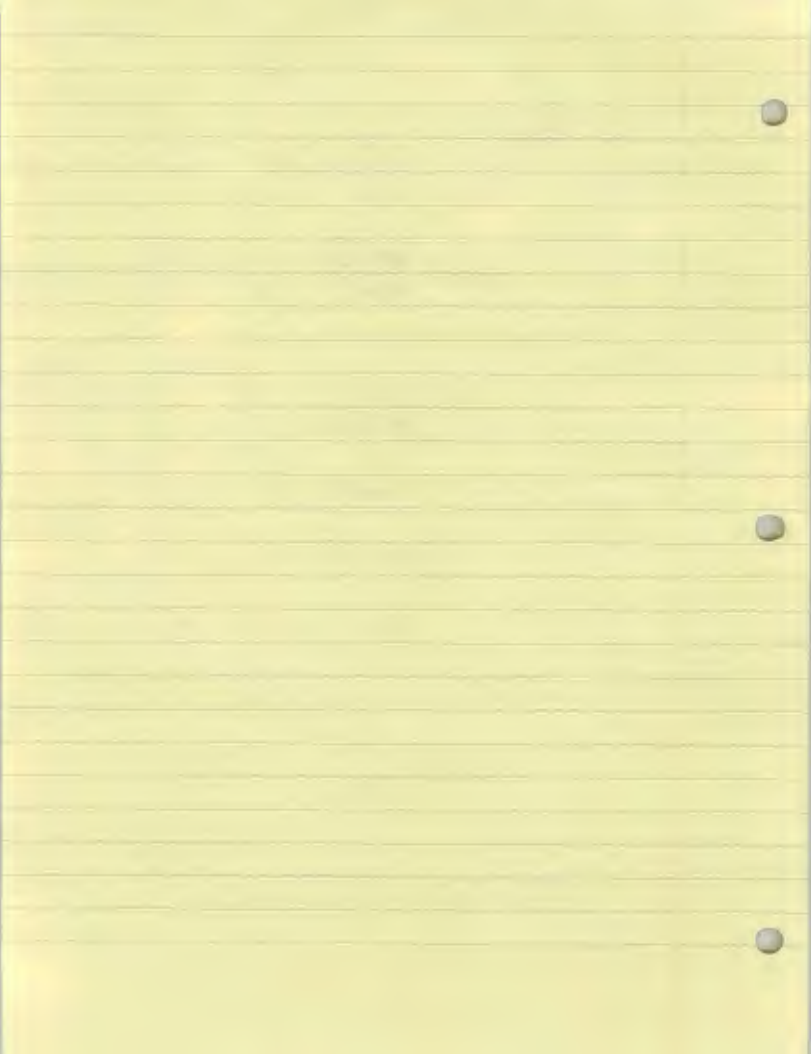
1d. Who manages EDI (Q).

Manager of EDI	111	3
Manager Internet	1	1
EC Consultant	11	2
Director EC	1	1
Principal systems analyst	11	2
MIS/IT Manager	~~1111~~	5
self	11	2
Product Development	1	1
Individual divisions	111	3
Supply Chain VP	1	1
		21

+ 2 non interpretable

1f.

2-3 yrs	1	1
2 yrs	~~4444~~ 1	6
1.5 yrs	11	2
1 yr	~~4444~~	5
6-8 mths	11	2
6 months	1	1

Just started	1111	4

No response	1	1
Not sure	1	1

23

Q1 g.

Separate org. to unit	1	1
Manager, C/S Devpt	1	1
Senior EC Manager	11	2
EC Consultants	1	1
EC Coordinator	1	1
Mktg & Systems Analyst	11	2
Internet manager	1	1
IS Director	1111	4
Net Mgrs.	1	1
Outsourced GEIS	1	1
Supply chain VP	1	1
Δ Depts	1	1
Don't know	111	3
Refused	1	1
Name	1	1

22

BQ BR BS

QNUM	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
2001	Bytex/NSC		
2002	KPMG		
2003			
2004	AT&T	Sprint	IBM
2005			
2006	Microsoft	Netscape	
2007			
2008	Sterling		
2009	AT&T		
2010			
2011	DK		
2012	Geis		
2013			
2014	DK		
2015	Same		
2016	Geis	Sterling	Harbinger
2017	DK		
2018			
2019			
2020	Entex	Excel Connect	ICON
2021	DK		
2022	DK		
2023	DK		
2024	NA		
2025	DK		
2026	Sterling	GTE	
2027	Andersen	CSC	
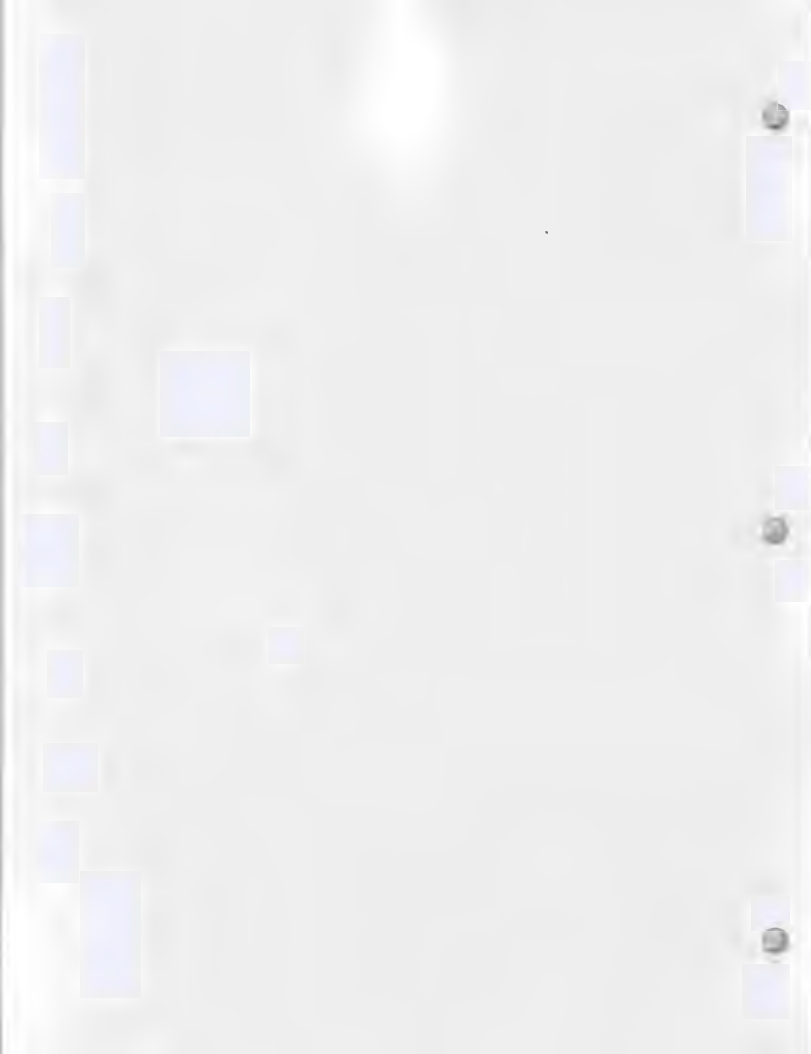
BQ   BR   BS

QNUM	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
2028	Gartner Group		
2029	HP	Icon	
2030	Harbinger		
2031	Andersen		
2032	Andersen		
2033	Andersen		
2034	Geis		
2035	KPMG	Anderson	
2036	U U Net	PSI Net	
2037	MCI	Systemhouse	
2038	Anderson	Deloitte	Price Waterhouse
2039	Net Tron	ISTAR	
2040	Anderson		
2041	ATT	South Wind (local)	
2042	Sterling	Geis	
2043	DK		
2044	AT&T		
2045	Sterling	Advantis	AT&T
2046	Geis	Premenos	
2047	Ernst & Young		
2048	Netscape	IBM	Microsoft
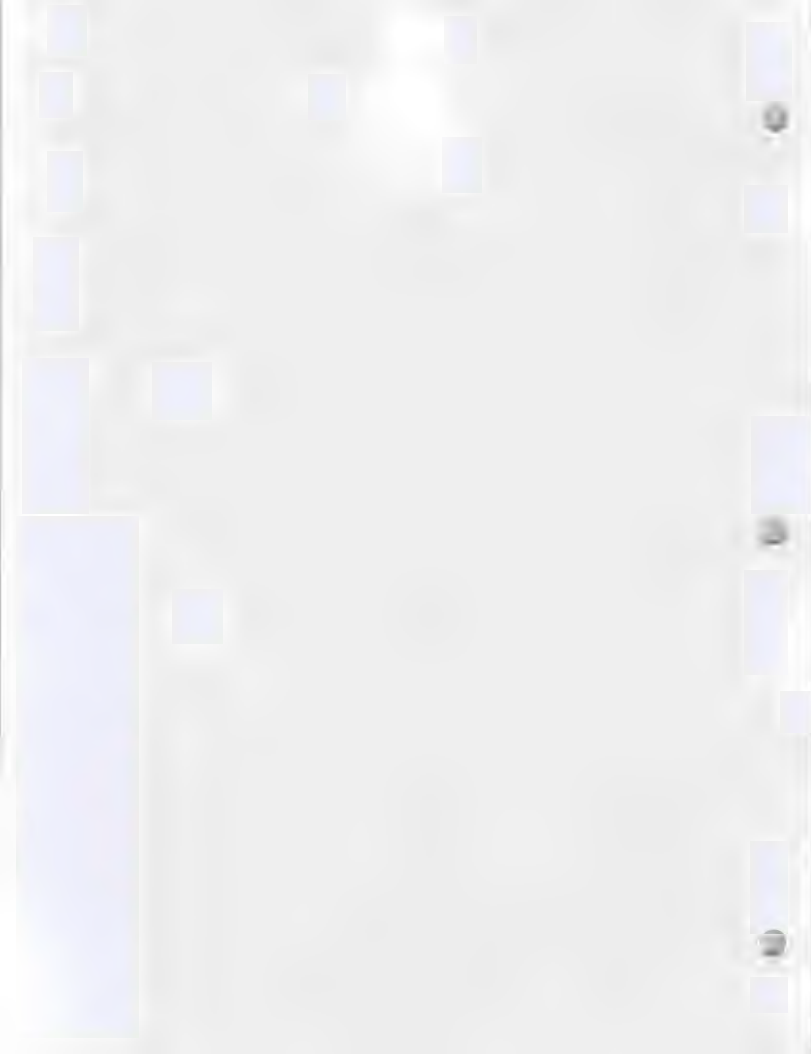
BQ BR BS

QNUM	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
2049	EDS (outsourcing)		
2050	DK		
2051			
2052	Not really		
2053	Harbinger	Advantis	
2054	GEIS		
2055			
2056			
2057	SAP		
2058	GEIS	Bell w/CGI partnership	IBM
2059			
2060	IBM		
2061	Andersen		
2062			
2063	AT&T	MCI	
2064	Harbinger	GE	
2065	refused		
2066	IBM		
2067	IBM	AT&T	GE
2068	unknown		
2069	Research still in progress.		

BQ   BR   BS

QNUM	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
2070	Not sure		
2071	Sterling Commerce	Harbinger	Geis
2072	DK		
2073	DK		
2074	KPMG/ IH Maintenance		
2075	NA		
2076			
2077	Sterling		
2078			
2079			
2080	Sterling		
2081	DK		
2082	Sterling	GEIS	
2083			
2084	IBM		
2085	GE	Sterling	
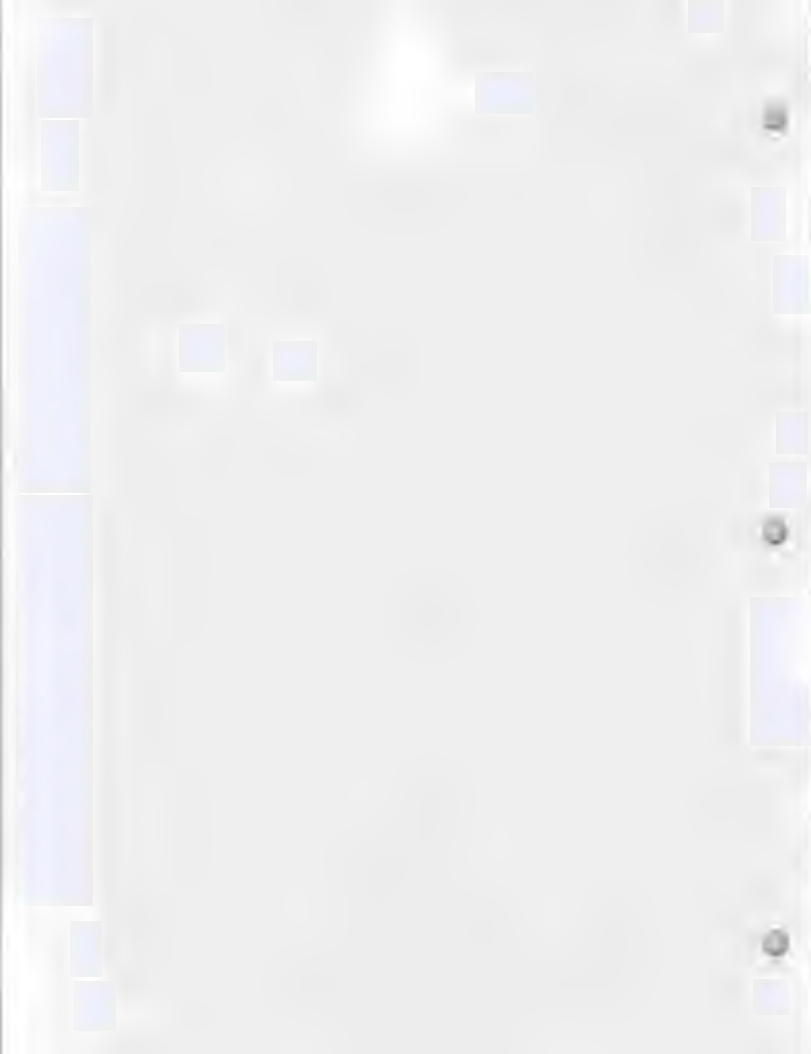
HARDWARE VENDORS

Q5a   PLANNERS

22   IBM   ~~1111~~ ~~1111~~ ~~1111~~ ~~1111~~1

     HP   ~~1111~~ 1

     Compaq/Digital ~~1111~~ 1

     AVNET   1

     Gateway   1

     DELL   11

     Sun
     Microsystems   1111

     Cisco   1

     Pyramid   1

BT   BU   BV

QNUM	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.
2001	IBM	Digital	
2002	HP	IBM	
2003			
2004	IBM	HP	Sun
2005			
2006	Digital	Compaq	
2007	UNIX	Sun	SO1
2008	DK		
2009	HP		
2010			
2011	IBM		
2012	Dec		
2013			
2014	Compaq	Sun	
2015	AS400 IBM w/ PC mapping		
2016	IBM	Unix	Compaq NT
2017	DK		
2018			
2019			
2020	AVNET		
2021	DK		
2022	DK		
2023	DK		
2024	NA		
2025	DK		
2026	doesn't matter		
2027	IBM		

QNUM	BT Q5-A HW - LEAD. VEND.	BU Q5-A HW - LEAD. VEND.	BV Q5-A HW - LEAD. VEND.
2028	UNIX		
2029	Compeq	HP	
2030	IBM		
2031	Harbinger		
2032	HP		
2033	UNIX		
2034	IBM	Dell	
2035	Gateway		
2036	DEC	Hewlett Packard	IBM
2037	Dell		
2038	HP	Sun	
2039	IBM	Dell	
2040	Sun		
2041	Sisco	Bay Networks	
2042	UNIX	HP	
2043	DK		
2044	IBM		
2045	IBM	UNIX	
2046	DK		
2047	Sun	HP	
2048	IBM	Compeq	

BT BU BV

QNUM	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.
2049	Sun		
2050	DK		
2051	IBM	Microsoft	
2052	Not really		
2053	Compaq	Micron	
2054	DK		
2055			
2056	IBM		
2057	IBM	HP	
2058	HP	Compaq	IBM
2059			
2060	IBM		
2061	HP		
2062			
2063	IBM	Compaq	
2064	DK		
2065	Sun		
2066	IBM		
2067	IBM	AT&T	GE
2068	unknown		
2069	Dell		

BT   BU   BV
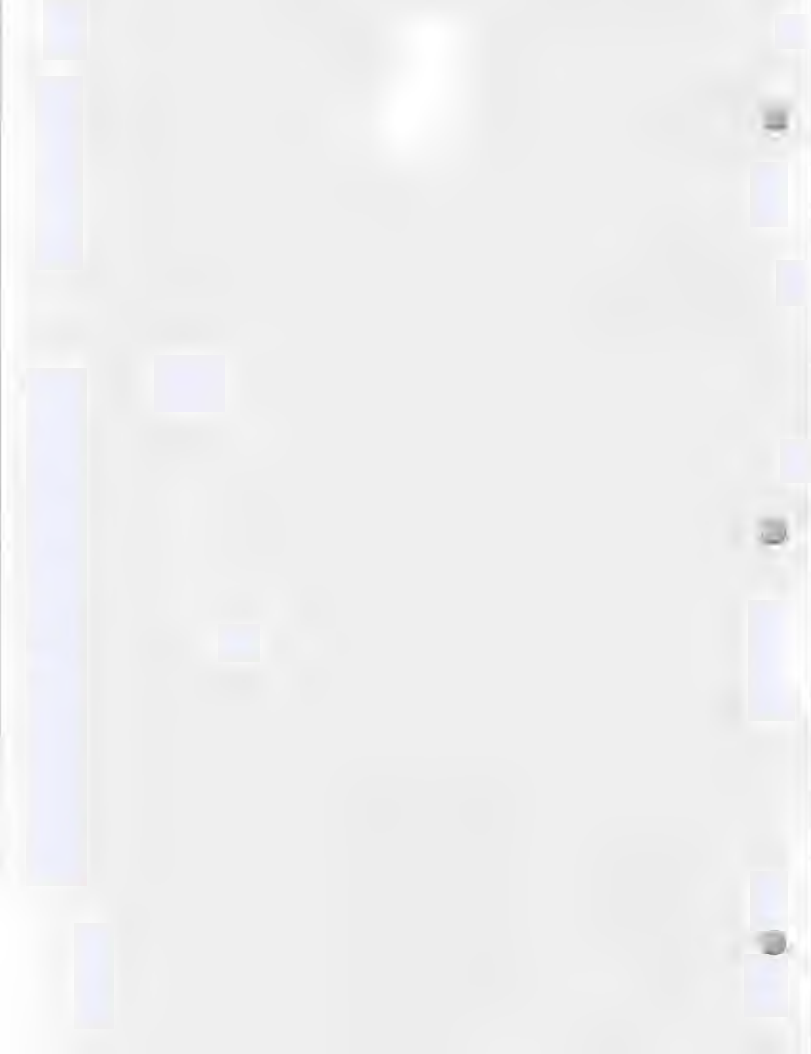
QNUM	Q6-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.
2070	IBM		
2071	IBM	Dell	HP
2072	DK		
2073	DK		
2074	Pyramid	Windows NT	Microsoft
2075	NA		
2076			
2077	DK	Compaq	IBM
2078			
2079			
2080	DK		
2081	DK		
2082	DK		
2083			
2084	IBM		
2085	DK		

BW   BX   BY   BZ

QNUM	Q5-B EMERG. VEND.	Q5-B SPECIALTY	Q5-B EMERG. VEND.	Q5-B SPECIALTY
2001	Digital	Hardware		
2002	Microsoft	Software		
2003	DK			
2004	Microsoft		Netscape	
2005	DK			
2006	DK			
2007	None I know of.			
2008	No answer			
2009	DK			
2010				
2011	DK. don't see anyone yet.			
2012	NA			
2013				
2014	DK			
2015	Premenos		Sterling	
2016	None jump out at me really. There are those who have been in commerce for a while that are players.			
2017	DK			
2018	NA			
2019	Passed on this question.			
2020	DK any			
2021	Refused			
2022	DK			
2023	None			
2024	N			
2025	DK			
2026	None			
2027				

Planning

BW   BX   BY   BZ

QNUM	Q5-B EMERG. VEND.	Q5-B SPECIALTY	Q5-B EMERG. VEND.	Q5-B SPECIALTY
2028	Just starting research.			
2029	DK			
2030	Verisign (Anyone w/ a standard SET)	Transactions		
2031	DK			
2032	Microsoft		ComCast	Internet
2033	IBM	Lotus Notes/ Lotus Go.		
2034	DK			
2035	DK			
2036	Microsoft	Internet servers		
2037	Sterling	Mass implementations; EDI over Internet		
2038	Aspect	Maintenance & repair		
2039	DK			
2040	Oracle	The Web		
2041	DK			
2042	Premenos	The Web		
2043	DK			
2044				
2045	DK			
2046	DK			
2047	DK			
2048	DK			

BW   BX   BY   BZ

QNUM	Q5-B EMERG. VEND.	Q5-B SPECIALTY	Q5-B EMERG. VEND.	Q5-B SPECIALTY
2049	DK			
2050	None.			
2051	Can not name any now.			
2052				
2053	None.			
2054	DK			
2055	DK			
2056	DK			
2057	SAP			
2058				
2059				
2060	NA			
2061	Too far ahead to name.			
2062				
2063	No Opinion			
2064				
2065				
2066	IBM	All he was sure of is that they use IBM and would probably stay with them.		
2067	IBM	They cover everything from development to finished product.		
2068				
2069	Not sure			

BW   BX   BY   BZ

QNUM	Q5-B EMERG. VEND.	Q5-B SPECIALTY	Q5-B EMERG. VEND.	Q5-B SPECIALTY
2070				
2071	Netscape	Software Product Vendor		
2072	DK			
2073	DK			
2074	Veriphone	ATM systems	Digicash	Virtual Money
2075	NA			
2076	No idea.			
2077				
2078				
2079	DK			
2080				
2081				
2082				
2083	DK			
2084	Not sure			
2085	DK			

FW

Question 8.

QNUM	Q8
2001	We use a third party VAN to get to dealers. We will attempt to access them through the Internet.
2002	Moving from existing VAN. EDI would go over Internet instead of VAN.
2003	Don't know - too soon!
2004	Looking to add by end of year all of the rest of the business functions.
2005	Not adding new functions. Improving on what we have to offer our customers.
2006	Company will move over Internet. Marketing efforts main push. Security issues to be resolved first.
2007	Add inbound commerce to outbound commerce.
2008	We are taking a wait & see attitude.
2009	Yes.
2010	Yes, will be adding more & more as they see how each new function works.
2011	Probably keep adding functions.
2012	Probably will add other functions.
2013	All functions will be added.
2014	Perhaps will be expanded in the future.
2015	Add purchasing/accts payable.
2016	As we come to understand how to use we will start to employ it. You'll find visionary lunatics changing business. We will do a lot around it.
2017	Nothing further.
2018	Unknown.
2019	Open-ended right now, everything is still "kinda" in the air.
2020	Adding & simplifying to customers functions on 24 hr. basis.
2021	Yes, this would be a communications vehicle in purchasing & marketing.
2022	That is a possibility.
2023	We will add additional functions & services.
2024	Needed in sales & marketing & email also of value but not as critical.
2025	Long-term: 1) linking w/ customers; 2) share forecast & needs; 3) place orders & trade orders.
2026	The company doesn't have much sales area, we sell to the gov't. Production & purchasing the focus of our efforts.
2027	The world is not completely connected so until other large companies connect we will stick to the basics.

QNUM	Q8
2028	We would keep building & adding more functionality.
2029	Customer relations would be added & improved. The Internet would give us a lot more leeway w/ our customers.
2030	Purchasing, sales etc. will be added. Customer orders will be modified & easier to complete.
2031	We would make it suit all departments.
2032	We would add additional business functions only if it was practical & demonstrated to be secure.
2033	We would address both ends of our business. (Buying & selling) Easier to pick up vendors.
2034	Most of our advertising & marketing will be put on line in addition to other functions.
2035	Most definitely adding other functions. We have already been doing over 20 documents on EDI & I expect the same for Internet.
2036	If it is feasible, we will add functions. Anything that could be secured on the Internet, we will then use.
2037	Yes, we would put in orders to our partners & add invoice collecting.
2038	We would consider purchasing as our main addition.
2039	All end users must be able to gain access to information through the Internet.
2040	Designs functions to keep inventory & stocks for vendors.
2041	Definitely we would add as many as possible business functions as we could. It would run smoother over the Internet.
2042	A better infrastructure would permit us to do those things, such as add new business functions.
2043	We will start to see direct items which we can
2044	None I know of yet - too soon.
2045	Electronic drop boxes to suppliers for payment.
2046	DK yet.
2047	We would add more functionality to our Intranet setup. Too early to tell which business functions will be added.
2048	Catalogs, stock availability, order status, and order entry will be added.

QNUM	Q8
2049	We would expand customer service and sales and marketing and customer oriented stuff.
2050	With our largest vendors will do EDI using VAN, as security is established will go to Internet with small customers will use home page for tracking & orders.
2051	Probably will use something but too soon to really say what new area of business will apply. We have all our business functions being converted to Internet. Security major issue.
2052	Investigating
2053	Adding other business functions & will promote our products on Internet.
2054	Probably expanding & adding customer service.
2055	Expanding customers through Web page.
2056	Don't know what direction the company will go in after the implementation. It is too premature.
2057	SAP is going to be our driving system. We will have interfaces inbetween them.
2058	We just started our pilot project. First transaction should be done in first quarter of 1998.
2059	Yes continue to expand.
2060	We will do what makes sense on customer side first. Eventually it will be more important to purchasing.
2061	Purchasing, sales. We would take it as far as we could go and keep adding functions.
2062	To get marketing going & then add customer services pieces to that & then tracking analysis of data will follow.
2063	Don't really think any new functions will be added in the future
2064	DK yet.
2065	We are new at this. We will use internet as a tool to enhance relationships, streamline transactions and intertwine processes using market segment approach. We be used a lot for customer service.
2066	NA
2067	He has heard through the grapevine that most of the business functions will migrate to IC eventually, but he's on the sales side. Dealing only with the finished product, he was only going on heresay, when talking about the production side.
2068	He sees more and more of the subsidiaries moving towards the internet. Interestingly, they have both large and small subs. with the smaller ones leading the charge.
2069	DK yet.

QNUM	Q8
2070	Probably other functions will be added.
2071	Keeps business running & better.
2072	Will be expanding it in the future.
2073	Will be expanded in the long term.
2074	Expertise technical experts. Instead of bandwidth, will be going straight to computer = on line training or service & technical support.
2075	Nothing in particular - growing a bit.
2076	No idea.
2077	Not sure yet.
2078	They are already fully networked within their company, now they need to integrate internal systems with external, customer accessible programs.
2079	Nothing drastic.
2080	We will be adding more functions to be able to do more electronically.
2081	We will do all of business via Internet eventually. All transactions will be done electronically.
2082	We will be getting into it, driven by customer demand.
2083	More web pages, make Internet for business purposes.
2084	EDI expanding purchasing function.
2085	We will use it as a driving factor for our business long term.

HC   HD   HE

Q10at,
+
Q11.

QNUM	Q10-A	Q10-B	Q11	REV. ($MIL)
2001	R3	R2	None.	770
2002	DK (refused)	DK (refused)	None.	1500
2003	Refused	Refused	No.	1400
2004	Doesn't know yet.	Doesn't know yet.	None.	
2005	DK yet	DK yet	None.	983
2006	R5	R4	None.	14000
2007	R2	R2	None.	712
2008	R2	R1	None.	4800
2009	R2	R2	None.	
2010	R2	R1	None.	
2011	R3		0.125	Need vendor experienced with industrial clients & want to transfer knowledge to internal people. Had talked to a co. which then went bankrupt & need someone experienced in our type of business.	503
2012	R4	R3	None.	1240
2013		0.5	No idea.	Get rid of last question.	
2014	R3	R2	None.	1000
2015	R2	R2	For us the issue is to consolidate everything under one group. This is why we form this group.	1000
2016		2.5	No idea.	I think that it is so new, what sort of business processes should we use & how to support it. How to use the change of it to grow into a business processes.	2840
2017		0.08	R1	None.	515
2018	DK	Unknown	None.	1041
2019	Not able to tell.	R5	None.	533
2020	R5	R4	None.	1000
2021	R3		0.15	There is a lot of skepticism of what can & should be done but can't sit & wait.	2600
2022	R2		0.015	None.	1400
2023	R5	R4	None.	1500
2024	R2	R2	None.	901
2025	R4	R3	None.	3500
2026		1	75	None.	1200
2027	R4	R2	None.	16000

HC   HD   hE

QNUM	Q10-A	Q10-B	Q11	REV. ($MIL)
2028	R4	R2	None.	400
2029	R3	R2	None.	3000
2030	R4	R2	We want someont to have some sort of clearing house so that the SET standard would apply. We want 3 things: (1) industry standards, (2) standard clearing house format in compliance w/ the SET standard, (3) no need to change system constanity.	1600
2031	R3	R2	None.	400
2032	R3	R1	None.	730
2033	R4	R3	None.	4500
2034	R3	R2	None.	893
2035	R2	R1	None.	360
2036	R3	R2	None.	300
2037	R4	R2	The overall performance of the internet is questionable. It is a large step for our company to make & may or may not be a premature decision.	2700
2038	Refused	Refused	None.	860
2039	R2	R2	None.	500
2040	R5	R4	None.	
2041	R1	R1	None.	15
2042	R3	R1	For our implementation process, we would proceed on a pilot basis & it would be driven by our customer's needs.	
2043	R4	R3	None.	1870
2044	Refused - co. policy	Refused - co. policy	None.	625
2045	NA: Couldn't possible give an accurate amt. Didn't refuse, just honest	NA	None.	2000
2046	R2	R2	None.	2467
2047	R3	R1	None.	10300
2048	R3	R2	None.	480

HC   HD   HE

QNUM	Q10-A	Q10-B	Q11	REV. ($MIL)
2049	R4	R1	None.	1268
2050	R3	R3	Security & reliability important before venturing out too far.	28300
2051	DK yet.	DK yet	Ever changing with Internet. Every process new & exciting. Educating our people each step of the way so it will be successful.	5000
2052	NA	NA	No comment.	20000
2053	R3	R2	None.	548
2054	0.02	0.02	None.	1170
2055	R5	DK	No other comments.	500
2056	R2	R1	Very pleased with the Internet's performance. The catalog has been received well.	2060
2057	R3	R1	None.	1380
2058	R3	R2	Nothing in particular.	3000
2059	NA	NA	None.	1772
2060	R1	R1	Adequate access via Internet is the main issue.	12200
2061	R5	R3	None.	590
2062	R2	R2	None.	2000
2063	R4	R3	None.	2000
2064	R4	DK	None.	16250
2065	0.05	R2	None.	1800
2066	Not sure-too faiRin the f	Not sure-too faf	None.	830
2067	10	R5	His company is now heavily into EDI, they even have an EC support line. They now just have to wait for the technology to be released. The executive support is there, the money is there, now all they are waiting on is development.	13165
2068	DK-no way to compute.	DK	For some of the subs, all that is needed is a dedicated	775
2069	R4	R3	None.	803

HC   HD   HE

Q/no4	Q/no5	Q11		REV. (SML)
2073 R4	Not sure yet			733
2071 R4	R2	No Comment		3,3he
2072 R2	R2	no comment		344
2073 Refused	Refused	no comment		14600
2074 R5	A5	Necessary to stop ahead of user needs - Long term pr.		531
2075 D4	D4	None		1000
2976 No Ans		No		1081
2077	3,43	3.32	None	24000
2078 R4	R4	No		197
2979 R2	R3	None		176
2980 D4	D4	None		719
2981 R1	R1	None		810
2982 R3	R3	None		731
2983 A5	D4	None		3,61
2984 R2	R2	No comment		1000
2986 R2	D4	None		1100
Average	3.78125	3.2353		
count	4	14		
Yes	34	23		
No	30	9		
No/A	34	0		
	8	3		
	56	13		

LINE#	Q1-H	Q1-I	Q1-J	Q2-A	Q2-C PARENT RADIO	Q2-C PROP WAN	Q2-C PUBLIC INTERNET	Q2-C EXTRANET VPN	Q1-B MR COST
1001 Mgr. Client service lev	1			1	3	0	3	3	1
1003 I/C consultants	-1			1	2	0	2	2	
1002 Some...	1			3	1	1	2 DK		
1004	2	3, 4		1	1	1	1		
1005 we	3			1	1	1			
1006 DK				4		1			
1007 Natural				4	2				
1008 Mgr. resolve				1	2	2	3		4
1009 I am one of the people				1		2			
1010 DK yes	1			1	2	2	3		
1011 Roblood Roster				1					
1011 MIS				1			1		
1012				1	2				
1009				4	2	3	2	2	
1010				1					
1010 Mr. AC	1		3 DK			2			
1011 Mult Da				3 DA	DK	DK	DK		
1010 DK				1	2		1		
1010				4		3			
1000 Supply Chain VP				Varies w/ customers					1
1001	1	3 - expanding							1
1002 DK				1			1		

U V W X Y Z AA AB AC

QNUM	Q1-H	Q1-I	Q1-J	Q2-A	Q2-C PAPER-BASED	Q2-C PROP. VAN	Q2-C PUBLIC INTERNET	Q2-C EXTRANET (VPN)	Q3-B IMP COST
1023	DK			1		2			3
average									3.9
count		6							2.3
%4									0
%5									7
%4/5									70%

U

Q1h.

Manager client server dev.	1	1
EC Consultants	1	1
Mktg & systems analyst	1	1
Senior EC Manager.	11	2
Internet Manager	1	1
IS Director	111	3
Supply Chain VP	1	1
Don't know	~~4444~~	5
No response	~~4444~~ 11	7
Refused	1	1
		23

Q 2a. (x)

1	~~IIII~~ ~~IIII~~ II	12
2	II	2
3	II	.2
4	IIII	4
5	III(I)	~~3~~ 4
		23

4   said   3 + 5

#~~or 1~~   said   5 + expanding.

Didn't answer.
↓

Q2c. Y D/K 0

	Y D/K 0	1. Private VAN.	2. Public Internet.	3. Extranet/VPN.
	1 12	1	8	1
Y	1 卌卌 卌卌 1	1	1 1 1 卌卌	1

#20 Varies with customers

	Y D/K 0	1. Private VAN.	2. Public Internet.	3. Extranet/VPN.
Z	1 卌卌 卌卌	11	卌卌卌 卌卌	1
	1 10	2	9	1
AA	1 卌卌 卌卌 1		卌卌 卌卌	1
	1 11	0	10	1
AB	11 1 卌卌 卌卌 卌卌	1	111	1
	2 16	1	3	1

Handwritten column markers: AG   AH   AI   AJ   AK   A_   A

ENUM	Q3-B SAL COST	Q3-B COMM COST	Q3-D IMPL ORDERING	Q3-B SAT ORDER/DE L	Q3-E COMM ORDER/DEL	Q3-D PART 1 SERS	Q3-B SAT PART SERS	Q3-B COMM PART SERS	Q3-D IMPL CUST SVC	Q3-B SAT CUST SVC
1061	1		5	6		4	3		5	3
1062			4			4			5	
1063	1		4	4		5	3		3	4
1064 1065			3 5	Not pertinent involves use do factor		3 2			3 3	
1066	3		5	3		3	3		3	3
1067			3	4		1	4		3	2
1068	3		4	4		3	4		5	4
1069 (NA)			5 NA			3 NA	—		1 NA	
1070 NA			4 NA			3 NA	—		5 NA	
1071	4		4	5		4	4		4	4
1072	5		4	5		5	5		4	4
1073	4		3	4		3	3		4	4
1074	3		5	5		4	4		5	4
1075	4		5	4		5	3		5	4
1076 1077	4 5		5 5	3 5	—	3 3	3 3		5 5	3 5
1078	5		5	3		3	3		5	
1079	4		5	5		4	3		4	4
1080	3		3	4		3	3		3	4
1081	2		4	4		4	3	—	4	3
1082	5		5	4		3	3		5	4

AD AE AF AG AH AI AJ AK AL AM

QNUM	Q3-B SAT. COST	Q3-B COMM. COST	Q3 - B IMP ORDER/DEL	Q3-B SAT ORDER/DE L	Q3-B COMM. ORDER/DEL	Q3 - B PART-NERS	Q3-B SAT PART-NERS	Q3-B COMM PART-NERS	Q3 - B IMP CUST. SVC.	Q3-B SAT CUST. SVC.
1023	4		3	4		5	3		4	3
average	3.5	#DIV/0!	4.2	3.8	#DIV/0!	4.1	3.4	#DIV/0!	4.0	3.8
count	18	0	23	18	0	23	18	0	23	18
%4	8	0	9	10	0	7	8	0	8	7
%5	2	0	10	2	0	9	1	0	11	3
%4/5	56%	#DIV/0!	83%	67%	#DIV/0!	70%	39%	#DIV/0!	74%	56%

Q3 a/b.

	0	1	2	3	4	5	
AC	1	1	1	1111	4444 1111	4444 11	
3.9	1	1	1	4	9	7	23

AD

(YEAR)	Q3-B COMM CUST. SVC.	Q3-B MP BUS.	Q3-B SAT BUS.	Q3-B COMM BUS.	Q3-B IMP SPEED	Q3-B SAT SPEED	Q3-B COMM SPEED	Q3-B IMP HOURS	Q3-B SAT HOURS	Q3-B COMM HOURS

Integrated

QNUM	Q3-B COMM. CUST. SVC.	Q3- B IMP BUS.	Q3-B SAT BUS.	Q3-B COMM. BUS.	Q3 - B IMP SPEED	Q3-B SAT SPEED	Q3-B COMM. SPEED	Q3-B IMP HOURS	Q3 - B SAT HOURS	Q3-B COMM. HOURS
1023		NA				4	4		4	4	
average	#DIV/0!		3.8	3.6	#DIV/0!	3.8	3.7	#DIV/0!	3.0	3.4	#DIV/0!
count	0		22	16	0	22	15	0	22	14	0
%4	0		11	9	0	12	7	0	8	7	0
%5	0		5	1	0	3	2	0	2	0	0
%4/5	#DIV/0!		73%	63%	#DIV/0!	68%	60%	#DIV/0!	56%	50%	#DIV/0!

AX AY AZ BA BB BC BD BE BF

QNUM	Q3-B IMP OTHER 1	Q3-B SAT OTHER 1	Q3-B COMM. OTHER 1	Q3-B IMP OTHER 2	Q3-B SAT OTHER 2	Q3-B COMM. OTHER 2	Q4 IMPLE. APPROACH	Q4 DETAILS / DESCRIPTION	Q5 - A SW VNDR
1001							3	particular business process & then onto the next.	Microsoft
1002							2	Will probably focus on function to function by business line - then onto enterprise wide.	Microsoft Suite
1003							3		D/C
1004							3		Premenos
1005							1		Premenos
1006							3	Pilot program in use.	GEIS
1007							1		Microsoft
1008							3		Microsoft
1009							1	All part of internet & intranet plan; a part of large corporate plan.	GTE
1010							3		Premenos
1011							2	We just have doing it like this.	
1012							2		Netscape
1013							1	We put our product on line all at once.	Microsoft
1014							3	Our solution to focus on procurement process. Supplier selection requisition may include multiple functions.	Actrabusiness system (joint venture w/ Netscape)
1015							3	Focus in taking customer orders. We ID cutomers that would be beneficial to bring on electronically.	St. Paul Software
1016							2	We hit sales and marketing first.	Connect Inc. (the best)
1017							3		No opinion
1018	all new						2	DK	DK
1019							2		Netscape
1020							3	Supply chain process & order to cash process: look at & decide what next.	IBM
1021							2	Again, we are getting acquainted.	IBM
1022							2 & 3	Dept. are based by process. Combo of the two. The ideal is that they all work together to get it out.	Ourselves GTE

AX   AY   AZ   BA   BB   BC   BD   BE   BF

QNUM	Q3 -B IMP OTHER 1	Q3 - B SAT OTHER 1	Q3-B COMM. OTHER 1	Q3-B IMP OTHER 2	Q3-B SAT OTHER 2	Q3-B COMM. OTHER 2	Q4 IMPLE. APPROACH	Q4 DETAILS / DESCRIPTION	Q5 - A SW VNDR
1023							1	Pilot program.	DK
average							5		
count							8		
%4							10		
%5							23		
%4/5							22%		
							35%		
							43%		

BD
Q 4

1. <u>Enterprise Wide.</u>   ~~4444~~   5

2. <u>Department.</u>   ~~4444~~ 111   8

3. <u>Process by Process.</u>   ~~4444~~ ~~4444~~ 1   11
                                                                    ____
                                                                    24 +

22   2 & 3.

Software Product Vendors:

INPUT

Q 5a.   BF

	BF	BG	BH
✓ Microsoft	~~4444~~	11	
✓ Premenos	111	1	
Harbinger		1	
✓ GEIS	1	1	
McCaffy			
✓ GTE	11		
✓ Netscape	11	1	1
✓ Actra	1		
✓ St Paul	1		
✓ Connect Inc.	1		
✓ IBM	11		
Habt S/W		1	1
D/C	1		
No opinion	1		
D/K	11		
	22		

Q 5ai   Services Vendors.

	BI	BJ	BK
✓ GEIS	11		1
✓ JDE Assoc.	1		
Lotus	1		
✓ ATT	11		
✓ CSC	1		
TPN	1		
✓ ADVANTIS	1		
✓ Sterling	1	11	
✓ MSN	1		
Harbinger		1	
Mackenzie		1	
Netsure		1	
MCI		1	
NA	1		
DK	~~1111~~ 1		
	18		

Q 5a.   Hardware Vendors.

	BL	BM	BN
Sun	111		
Cisco	11		
L&B	1		
Gateway	1		
IBM	1	1	
Compaq	1		
HD& Son	1		
Sprint		1	
Adrian		1	
Entec		1	
Dell		1	
MCI			1
Token Ring	1		
NA	11		
No response	11 ~~1111~~		
DK	1111		

Q5b

BO	BP
BQ	BR

Emerging Vendors :

Microsoft	111	1
Cisco	1	
Oracle	11	
SAP	1	
Gateway	1	
IBM	1	1
Dell		1
ATT/MCI		1

BG BH BI BJ BK BL BM BN BO BP BQ

QNUM	Q5 - A SW VEND	Q5 - A SW VNDR	Q5 - A SVC. VNDR	Q5 - A SVC. VNDR	Q5 - A SVC. VNDR	Q5 - A HARD. VNDR	Q5 - A HARD. VNDR	Q5 - A HARD. VNDR	Q5 - B EMERG VNDR	Q5 - B AREA SPEC.	Q5 - B EMERG VNDR
1001			DK			DK			NA		
1002	Premenos	Haht sw							DK		
1003			GE	Sterling					DK		
1004			JDE Assoc.	Sterling Commerce					DK		
1005			DK			DK			DK		
1006	Harbinger		GEIS	Harbinger		Sun			Microsoft NT	WP	
1007									None		
1008			NA			NA					
1009			Lotus Dev. corp.			Token Ring	Sprint	MCI	None.		
1010									DK		
1011			ATT			Cisco	Adrian		Cisco		
1012	Microsoft		CSC	MacKenzie		Sun	IBM		Don't know		
1013	McCaffy	Netscape				L & B	Entex		DK		
1014			TPN - have gotten a bit of response						ERP - Oracle/ SAP Baon	Business software	
1015			Advantis			NA			NA		
1016	Netscape		Sterling			Sun			Oracle	Database	IBM
1017			No opinion			No opinion			No opinion		
1018			DK			Gateway	Dell		Gateway		Dell
1019			DK			IBM Compaq					
1020			No opinion			No opinion			Microsoft	software / networking	ATT / MCI
1021	Microsoft (Enterprise)					HD & Son			IBM		Microsoft
1022			MSN	Netscape		Sisco			Microsoft		
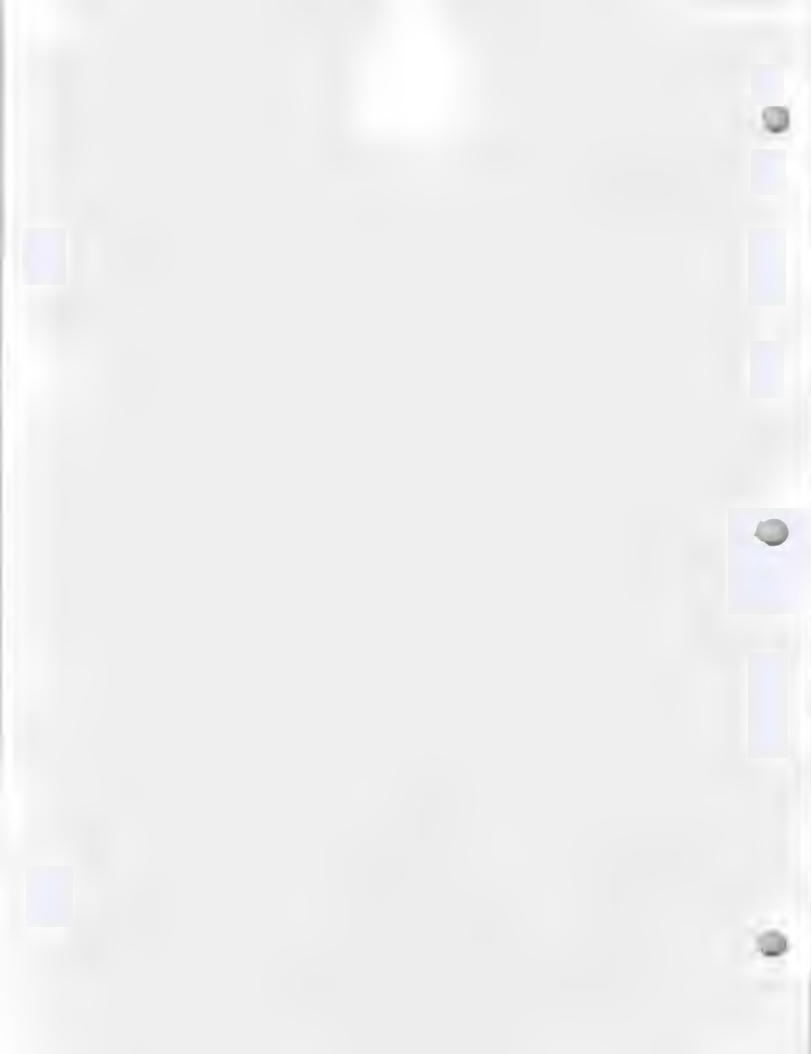
| | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP | BQ |
QNUM	Q5 - A SW VEND	Q5 - A SW VNDR	Q5 - A SVC. VNDR	Q5 - A SVC. VNDR	Q5 - A SVC. VNDR	Q5 - A HARD. VNDR	Q5 - A HARD. VNDR	Q5 - A HARD. VNDR	Q5 - B EMERG VNDR	Q5 - B AREA SPEC.	Q5 - B EMERG VNDR
1023			AT & T	MCI	GEIS	DK			Supply tech	Software	
average											
count											
%4											
%5											
%4/5											

BR   BS

QNUM	Q6 - B AREA SPEC.	COMMENTS
1001		
1002		
1003		
1004		
1005		
1006		
1007		
1008		
1009		
1010		
1011		
1012		
1013		
1014		
1015		
1016		In business to business environment, Microsoft does not suit our needs.
1017		
1018		
1019		He said the questions were too specific for his dept. I told him that we had the computer people's view & we needed his. He then agreed to continue but wasn't clear on any brand names.
1020	Network	
1021		
1022		

BR   BS

QNUM	Q5 - B AREA SPEC.	COMMENTS
1023		
average		
count		
%4		
%5		
%4/5		

5 b

None 11'
NA   11
DK ~~1111~~ 11
No response 11

Area of Specialty

Microsoft	≡	WP Software / networking
Cisco	—	—
Oracle / SAP Bond	—	Business software.
Oracle	—	Database
Gateway	—	—
IBM	=	
Supply Tech	—	S/W.
Dell	—	
ATT/MCI	—	Network

Q6a.

BT BU W BZ

DRUM	Q9 - A IMP INPUT VNDR EOR33	Q8A IMP Q8-A IMP IT COST	Q8-A IMP SPEED	Q8 - A IMP INJ'L	Q5 - A IMP VNDR	Q5 - A IMP OTHER
1001	5	4	4	4	5	4
1002	4	4	4	4	4	3
1003	4	5	4	4	5	5
1004	5	5	4	4	5	4
1005	5	4	3	4	4	4
1006	4	5	4	4	5	4
1007	5	5	5	4	5	5
1008						Mostly different in-house (doesn't really apply)
1009	5	5	4	5	4	5
1010	5	5	4	3	4	3
1011	4	4	5	5	4	5
1012	5	5	5	4	4	4
1013	4	4	4	3	3	4
1014	5	5	5	4	4	5
1015	5			4		
1016	5	5	5	4	5	5
1017	4	5	5	4	5	5
1018	5	5	4	5	5	4
1019	5	4	5	4	4	4
1020	4	4	5	4	4	24 - issues there
1021	4	4	5	4	5	5
1022	5	4	4	5	4	4

BT BU BV BW BX BY BZ

Integrated

QNUM	Q6 - A IMP IMPLE VNDR EC/EDI	Q6 A IMP IT	Q6A IMP COST	Q6 - A IMP SPEED	Q6 - A IMP BUS.	Q6 - A IMP VNDR	Q6 - A IMP OTHER
1023	5	5	3	4	NA	4	
average	4.4	4.4	3.9	4.1	4.0	3.8	
count	22	21	21	22	20	21	
%4	8	7	10	15	10	8	
%5	12	12	4	5	6	4	
%4/5	91%	90%	67%	91%	80%	62%	

CA CB CC CD CE CF CG

QNUM	Q6 - B IMP OP VNDR EC/EDI	Q6 - B IMP OP VNDR IT	Q6 - B IMP OP VNDR OS SVC.	Q6 - B IMP OP VNDR COST	Q6 - B IMP OP VNDR BUS-IMP	Q6 - B IMP OP VNDR REL. VNDR	Q6 - B IMP OP VNDR OTHER
1001	4	4	4	4	5	4	
1002	5	5	4	4	4	3	
1003	4	5	4	4	5	5	
1004	5	5	4	4	5	4	
1005	5	4	3	3	4	4	
1006	5	5	3	4	1	4	
1007	5	5	2	3	3	5	
1008							Mostly all done in-house (doesn't really apply)
1009	5	5	2	4	4	5	
1010	5	5	4	4	4	3	
1011	4	4	4	5	5	5	
1012	5	5	5	5	4	4	
1013	4	4	4	3	5	4	
1014	4	4	4	3	3	3	
1015							
1016	2	2	3	4	2	3	
1017	4	5	5	4	5	3	
1018	3	3	4	5	5	3	
1019	4	5	4	4	5	4	
1020	4	3	5	3	3	4	
1021	4	5	4	4	3	3	
1022	5	5	4	4	3	4	

Integrated

	CA	CB	CC	CD	CE	CF	CG	
QNUM	Q6 - B IMP OP VNDR EC/EDI	Q6 - B IMP OP VNDR IT	Q6 - B IMP OP VNDR OS SVC.	Q6 - B IMP OP VNDR COST	Q6 - B IMP OP VNDR BUS-IMP	Q6 - B IMP OP VNDR REL. VNDR	Q6 - B IMP OP VNDR OTHER	
1023	5	5	5	3	NA	4		
average	4.3	4.4	3.9	3.9	3.9	3.9	#DIV/0!	
count	21	21	21	21	20	21		0
%4	9	5	12	11	6	10		0
%5	10	13	4	4	7	4		0
%4/5	90%	86%	76%	71%	65%	67%	#DIV/0!	

Q7a.

CH CI CJ CK CL CM CN CO CP

ONUM	Q7 - A TOOLS REQ.	Q7 - A TOOLS NP	Q7 - A PROD. USED	Q7 - SECURITY REQ.	Q7-A SEC. NP	Q7 - A PROD.USED	Q7-A MESS. REQ.	Q7-A MESS. NP	Q7-A MESS. PROD. USED
1001	1	0		1	1		1	0	
1002	1	0		1	0		1	0	
1003	1	1		1	1		1	0	
1004	1	0		1	0		1	1	
1005	1	0		1	1 Netscape		1	0	
1006	0			0			0		
1007	1			1	1		1		
1008	1	1		1	1		1	1	
1009	0			1	1 Ref.		0		
1010	1	1 Oracle		1	1		1	0	
1011	1	1		0			0		
1012				1	1		1	1	
1013	1	1		1	1		1	1	
1014		1 DK		1			1		
1015		1 Looking		1	1		1	1	
1016	1	1		1	1		1	1	
1017	1		1 DK yet	1		1 DK yet	1		1 DK yet
1018	NA			1		1 DK	1		1 DK
1019	1	1		1	1		1	1	
1020	1		0 Microsoft explorer	1	0		1		0 Software AG
1021	1			1			1		
1022	1	Might be		1	0		1		

CH   CI   CJ   CK   CL   CM   CN   CO   CP

QNUM	Q7 - A TOOLS REQ.	Q7 - A TOOLS NP	Q7 - A PROD. USED	Q7 - SECURITY REQ.	Q7 -A SEC. NP	Q7 - A PROD.USE D	Q7-A MESS. REQ.	Q7-A MESS. NP	Q7-A MESS. PROD. USED
1023	1	1	Netscape	1	1	Kerberos	0	0	

YES 19   10   21   19

NO 2   5

NA 1

No response 1

—————

23

CQ CR CS CT CU CV CW CX CY

QNUM	Q7-A COMM. REQ.	Q7-A COMM. NP	Q7-A COMM. PROD. USED	Q7-A FULL APP. REQ.	Q7-A FULL APP. NP	Q7-A FULL APP. PROD. USED	Q7-A EDI REQ.	Q7-A EDI NP	Q7-A EDI PROD. USED
1001	1	0		0	0		1	0	
1002	1	0		1	0		1	0	
1003	1	0		1	1	Probably IH	1	0	
1004	1	0		1	0		1	0	
1005	1	0		1	0		1	0	
1006	0			1	1	GEIS, Harbinger	0		
1007	1	1	DK				1	1	
1008	1	1		1	0		1	0	
1009	1	1	Ref	1	1	Ref	1	1	Ref
1010	1	0		1	1		1	1	
1011	0			0			Not sure		
1012	1	1		0			0		
1013	1	1		1	1		1	0	
1014	1			1			1		
1015	1			1	1	Oracle	1	0	We have it
1016	1	1		0	0		0	0	
1017	1	1	DK yet	1	1	DK yet	DK	DK	DK yet
1018	1	1	DK	0	DK	DK	0	0	
1019	1	1		1	1		1	1	
1020	1	0	Concert	0	0		1	0	Claim Schmidt
1021	1			1		Some type of enteprise solution.	1		
1022	0			1	1		1	0	

CQ CR CS CT CU CV CW CX CY

QNUM	Q7-A COMM. REQ.	Q7-A COMM. NP	Q7-A COMM. PROD. USED	Q7-A FULL APP. REQ.	Q7-A FULL APP. NP	Q7-A FULL APP. PROD. USED	Q7-A EDI REQ.	Q7-A EDI NP	Q7-A EDI PROD. USED
1023	1		1, FTP - Internet		1	1 IBM Custom		1	1, Supply tech

20   16   17

CZ DA DB DC DD DE DF DG DH

QNUM	Q7-A CATAL. REQ.	Q7-A CATAL. NP	Q7-A CATAL. PROD. USED	Q7-A OTHER 1 REQ.	Q7-A OTHER 1 NP	Q7-A OTHER 1 PROD. USED	Q7-A OTHER 2 REQ.	Q7-A OTHER 2 NP	Q7-A OTHER 2 PROD. USED
1001	0	0							
1002	1	1	In-house						
1003	1	1							
1004	1	1							
1005	0								
1006									
1007	0								
1008	1	0							
1009	0								
1010	0	0							
1011	0								
1012									
1013									
1014	1								
1015	1								
1016	1	1							
1017									
1018	0	0							
1019	NA	NA							
1020	0	0							
1021	1 - extremely								
1022	1	0							

CZ DA DB   DC   DD DE   DF   DG   DH

QNUM	Q7-A CATAL. REQ.	Q7-A CATAL. NP	Q7-A CATAL. PROD. USED	Q7-A OTHER 1 REQ.	Q7-A OTHER 1 NP	Q7-A OTHER 1 PROD. USED	Q7-A OTHER 2 REQ.	Q7-A OTHER 2 NP	Q7-A OTHER 2 PROD. USED
1023	1	1	Custom						

9

Q7 b.

DI DT DK DL DM DN DO DP DQ

QNUM	Q7-B SERV. ENTER. REQ	Q7-B SERV. ENTER. NP	Q7-B SERV. ENTER. PROD.	Q7-B SERV. DEPART. REQ.	Q7-B SERV. DEPART. NP	Q7-B SERV. DEPART. PROD.	Q7-B NET. HARD. REQ.	Q7-B NET. HARD. NP	Q7-B NET. HARD. PROD.
1001	1	0		1	0		1	0	
1002	1	0		0	0		1	0	
1003	1	0		1	0		1	0	
1004	1	1		1	0		1	1	
1005	0			0			0		
1006	0			0			0		
1007	1	1		1	1		1	1	
1008	1	1		1	1		1	1	
1009	1	1		1	1		1	1	
1010	1	1		1	1		1	1	
1011	0			0			Possibly		
1012	1	1		1	1		1	1	
1013	1	1		1	1		1	1	
1014	1		DK				1		
1015	1		Data General	0		NT Avion	1		Sisco
1016	1	1		0	0		1	0	
1017	1	1	DK	1	1	DK	1	1	DK
1018	0	1		0	1		0	1	
1019	1	1		1	1		1	1	
1020	0	0		0	0		0	0	
1021	1			0			1		
1022	1			1	1	Need to get more.	1	1	

DI DJ DK DL DM DN DO DP DQ

QNUM	Q7-B SERV. ENTER. REQ.	Q7-B SERV. ENTER. NP	Q7-B SERV. ENTER. PROD.	Q7-B SERV. DEPART. REQ.	Q7-B SERV. DEPART. NP	Q7-B SERV. DEPART. PROD.	Q7-B NET. HARD. REQ.	Q7-B NET. HARD. NP	Q7-B NET. HARD. PROD.
1023	1		IBM		1	IBM	0		

18   13   17
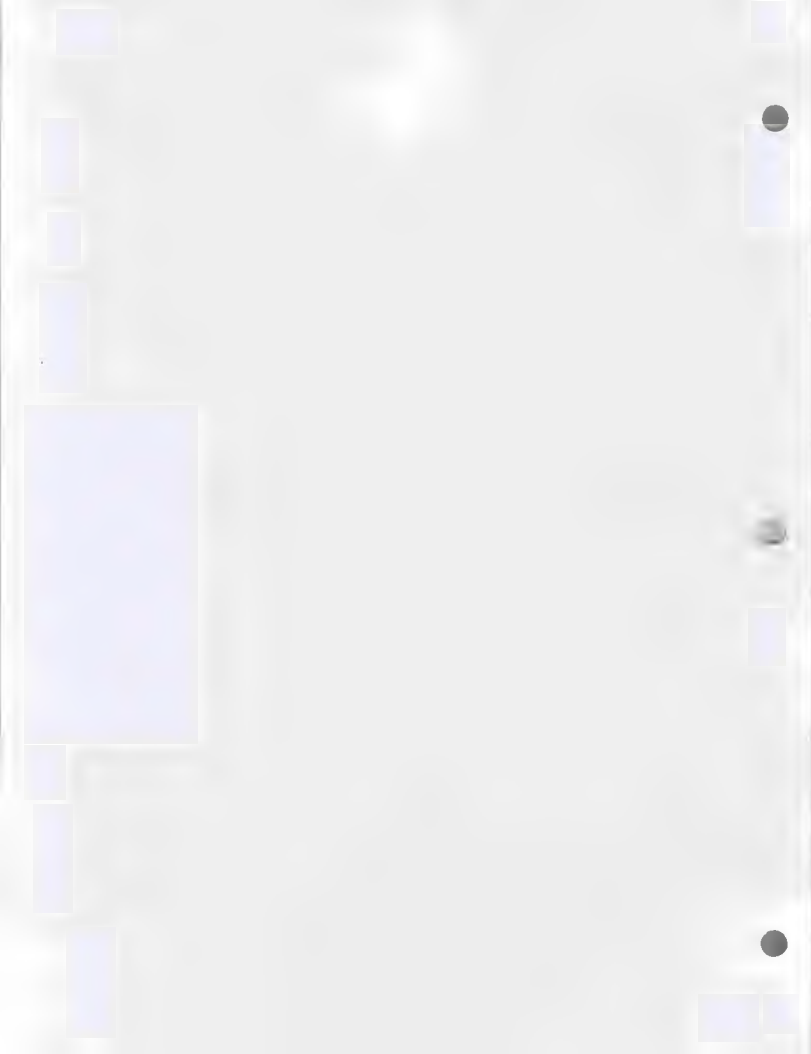
DR   DS   DT   DV   DV   DW

QNUM	Q7-B DESK. HARD. REQ.	Q7-B DESK. HARD. NP	Q7-B DESK. HARD. PROD.	Q7-B NET. COMP. REQ.	Q7-B NET. COMP. NP	Q7-B NET. COMP. PROG.
1001	1	0		0	0	
1002	1	0		1	0	
1003	1	0		1	1	
1004	1	0		1	0	
1005	0			0		
1006	0			0		
1007	1	1		1	1	
1008	1	0				
1009	1	1		1	1	
1010	1	1		1	1	
1011	0			1	1	
1012	1	1		1	1	
1013	1	0		1	0	
1014	1			1		
1015	1		NT & Windows			We have our own.
1016	1	0		0	0	
1017	1	1	DK	1	1	DK
1018	1	1		1	1	In the process of updating
1019	1	1		1	1	
1020	0	0		0	0	
1021	0			1		
1022	1	0		1	0	
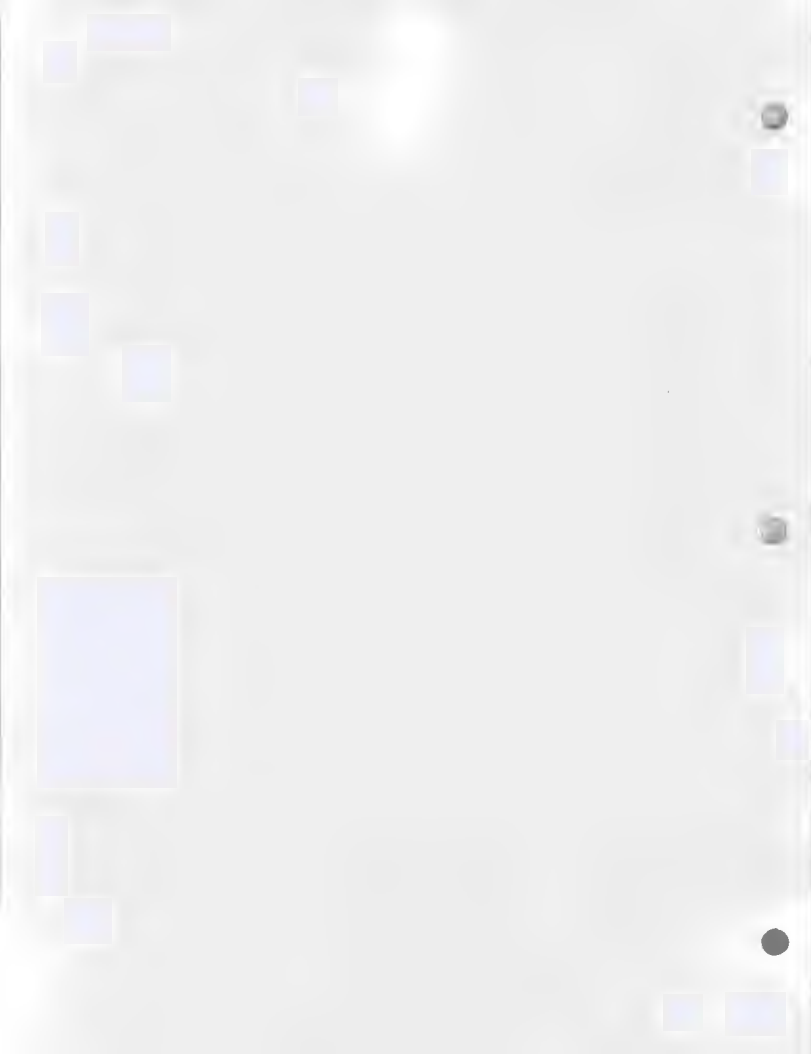
DR DS DT DU DV DW

ONUM	Q7-B DESK. HARD. REQ.	Q7-B DESK. HARD. NP	Q7-B DESK. HARD.PROD.	Q7-B NET. COMP. REQ.	Q7-B NET. COMP. NP	Q7-B NET. COMP. PROD.
1023.	0			0		

17   15

ED EE EF EG EH EI EJ EK EL

QNUM	Q7-C CONS./PLAN. REQ.	Q7-C CONS./PLAN. (I), (E), (B)	Q7-C CONS./PLAN. VEND.	Q7-C APP. DEV. REQ.	Q7-C APP. DEV. (I), (E), (B)	Q7-C APP. DEV. VEND.	Q7-C INTEG. REQ.	Q7-C INTEG. (I), (E), (B)	Q7-C INTEG. VEND.
1001	0			1	I		1	I	
1002	1	B		1	B		1	B	
1003	1	B		1	I		1	B	
1004	0	B		1	B		1	I	
1005	0			0			0		
1006	1	E	GEIS, Harbinger	1	E	GEIS Harbinger	1	E	GEIS Harbinger
1007	1	B		1	B		1	B	
1008	1	I		1	I		1	I	
1009	1	B	Refused	1	B	Refused	1	B	Refused
1010	1	B		1	B		1	B	
1011	0			0			Possibly		
1012	1	B		1	B		1	B	
1013	1	B		1	I		1	E	
1014	0			1	B		1	I	
1015	1	B		1	B		1	B	
1016	1	B		1	B		1	I	
1017	1	B		1	B		1	B	
1018	0	I	DK	0	I	DK	DK		
1019	1	B		1	B		1	B	
1020	1	B	IBM	1	I		1	I	
1021	1	B		1	B		1	B	
1022	1	B		1	B		1	B	

ED EE EF EG EH EI EJ EK EL

QNUM	Q7-C CONS./PLAN. REQ.	Q7-C CONS./PLAN. (I), (E), (B)	Q7-C CONS./PLAN. VEND.	Q7-C APP. DEV. REQ.	Q7-C APP. DEV. (I), (E), (B)	Q7-C APP. DEV. VEND.	Q7-C INTEG. REQ.	Q7-C INTEG. (I), (E), (B)	Q7-C INTEG. VEND.
1023	1	B	IBM	1	B	IBM	1	B	IBM

17   20   20
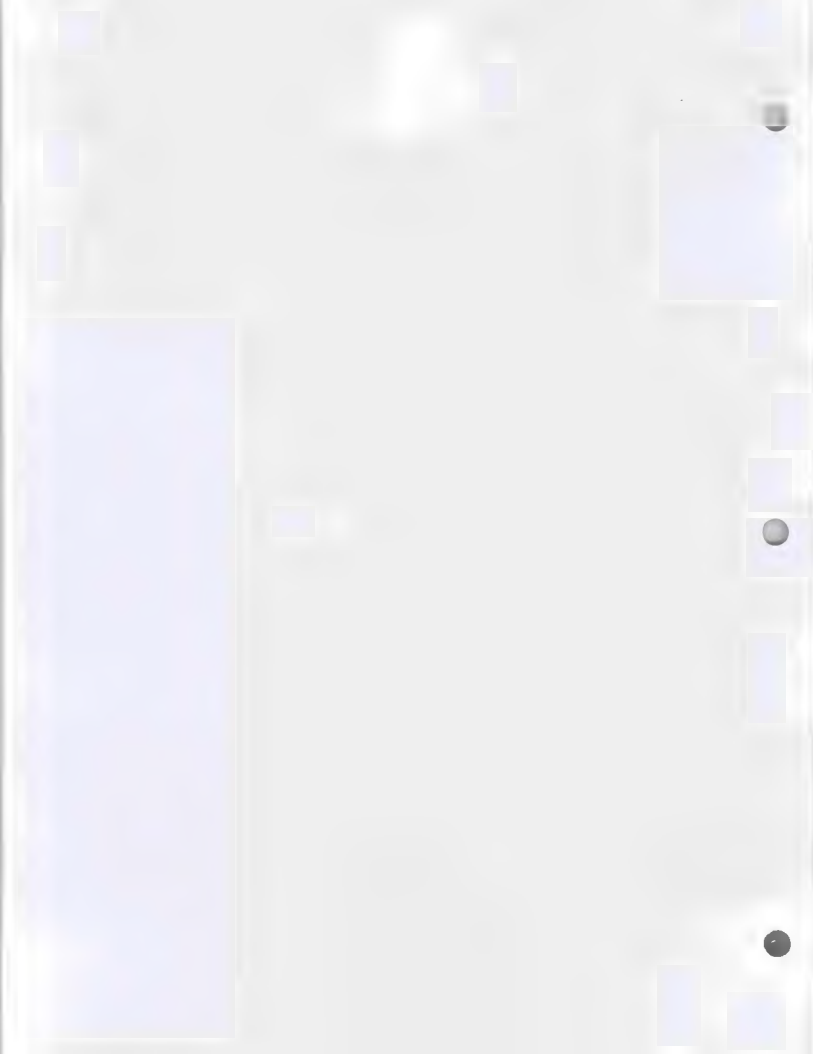
EM EN EO EP EQ ER ES ET EU

QNUM	Q7-C EDI-REL. REQ.	Q7-C EDI-REL. (I), (E), (B)	Q7-C EDI-REL. VEND.	Q7-C EDUC./TR. REQ.	Q7-C EDUC./TR. (I), (E), (B)	Q7-C EDUC./TR. VEND.	Q7-C CONV. REQ.	Q7-C CONV. (I), (E), (B)	Q7-C CONV. VEND.
1001	1	I		1	I		1	I	
1002	1	B		1	I		0		
1003	1	B		1	B		1	B	
1004	1	I		1	I		1	I	
1005	0			0			0		
1006	1	E	GEIS Harbinger	1	E	GEIS Harbinger	1	E	GEIS Harbinger
1007	1	B		1	B		1	B	
1008	1	I		1	I		1	I	
1009	0		Refused	1	B	Refused	1	B	Refused
1010	1	B		1	I		1	I	
1011	1	I		1	E		1	I	
1012	0			1	B		0		
1013	1	E		1	I		1	E	
1014	1	I		1	I		0		
1015	1	I		1	E		1	I	
1016	0			1	E		0		
1017	1	B		1	B		1	B	
1018	1	I	DK	1	I	DK	0		DK
1019	1	E		1	B		1	B	
1020	1	B	IBM	1	B		1	I	
1021	1	B		1	B		1	B	
1022	1	B		1	I		1	B	

EM EN EO EP EQ ER ES ET EU

QNUM	Q7-C EDI-REL. REQ.	Q7-C EDI-REL. (I), (E), (B)	Q7-C EDI-REL. VEND.	Q7-C EDUC./TR. REQ.	Q7-C EDUC./TR. (I), (E), (B)	Q7-C EDUC./TR. VEND.	Q7-C CONV. REQ.	Q7-C CONV. (I), (E), (B)	Q7-C CONV. VEND.
1023	1	B	IBM	1	B	IBM	1	B	IBM

18   22   15/17

FB FC   FD   FE   FF   FG   FH   FI   FJ

Integrated

QNUM	Q8 MARK./ADV.	Q8 SALES	Q8 PURCH.	Q8 CUST. SERV.	Q8 PROD.	Q8 RAW MAT. SCHED.	Q8 IN. MAT. TRACK.	Q8 SCHED.	Q8 INVEN. MGMT.
1023	4	3	3	4		3	3	3	3
average	3.9	3.5	3.6	4.2	3.3	2.8	3.3	2.9	3.0
count	22	22	22	22	12	22	22	22	22
%4	11	6	7	10	1	7	7	7	6
%5	8	5	8	9	3	2	3	1	3
%4/5	77%	50%	59%	86%	33%	41%	45%	36%	41%

FK FL FM FN FO FP FQ FR

QNUM	Q8 DISTR.	Q8 ROUT./SCHED.	Q8 SALES FORE.	Q8 CHAN. MGMT.	Q8 MAN. PROD. OP.	Q8 PROD. PLAN.	Q8 OTHER 1	Q8 OTHER 2
1001	1	1	1	1	1	1		
1002	3	4	3	2	1	2		
1003	4	4	4	4	3	4		
1004	1	1	1	5	2	1		
1005	4	5	5	5	3	3		
1006	1	1	1	1	2	1		
1007	4	4	2	3	2	2		
1008	4	4	4	4	4	4		
1009	1	1	1	1	1	1		
1010	1	1	1	1	4	3		
1011	5	4	5	5	4	4		
1012	4	5	4	5	5	5		
1013	2	3	3	3	2	2		
1014	3	3	3	5	2	2		
1015	5	4	4		4	4		
1016								
1017	1	4	5	4	1	1		
1018	3	1	1	1	1	1		
1019	5	4	4	4	4	4		
1020	4	2	2	2	1	1		
1021	4	3	3	4	2	3		
1022	4	4	3	3	4	4		

FK FL FM FN FO FP FQ FR

QNUM	Q8 DISTR.	Q8 ROUT./SCHED.	Q8 SALES FORE.	Q8 CHAN. MGMT.	Q8 MAN. PROD. OP.	Q8 PROD. PLAN.	Q8 OTHER 1	Q8 OTHER 2
1023	3	3	3	3	3	3		
average	3.0	3.0	2.9	3.1	2.5	2.5	#DIV/0!	#DIV/0!
count	22	22	22	21	22	22	0	0
%4	8	9	5	5	6	8	0	0
%5	3	2	3	5	1	1	0	0
%4/5	50%	50%	36%	48%	32%	32%	#DIV/0!	#DIV/0!

QNUM	Q9-A	Q9-B	Q9-C	Q9-D
1001				None.
1002	Techniques for rapid prototyping; requires a lot of thinking.	Resource constraints; time consuming.	Choose projects carefully; don't get disbursed over-being focused on big paybacks, not getting confused; stay focused.	
1003	Adding functions such as purchasing of supplies, tracking order status, responses to quotes (customers).	NA	None	None
1004	Not far into this to give a good answer; Infant stages.		Challenges for overcoming fear of launching onto the unkonwn. Approach cautiously.	
1005	All working well.		None.	None.
1006		Technology not fully proven. It is fairly new & emerging.	Getting in too soon. Vendor promises the world & takes a long time to deliver.	Get in.
1007	No comment.	No comment.	No comment.	None.
1008	NA	NA	NA	NA
1009	It's good so far.	Nothing.	Lead time is very important.	Plan ahead & overall strategy needed.
1010	Too soon.	NA	NA	NA
1011	Wasn't involved with it. Implemented before he got there.			
1012	It expanded our business greatly.	Nothing really.	Our implementation ran smoothly.	Other companies may approach the process differently.
1013	Very effective.	Nothing.	Our company is spontaneous w/implementation; more pre-planning.	Make sure all bases are covered.
1014	Ease of use.	EC capability or lack of system user is not EC capable.	Not everyone uses internet yet. Security needs to be better before users participate. EC applications need to go back to Legacy System.	Not to attack but have an EC strategy.
1015	Customer satisfaction; reducing order time.	Testing, communications takes too long.	Realistic scheduling of project.	Involve all areas of the business up front.
1016	External help	Back office connections & too much time was put into building interfaces.	Amount of money spent doubled in the first year.	None.
1017	NA	NA	NA	
1018	Speed.	Not enough people doing it.	Being patient	Be patient.
1019	Expanded outreach to customers.	Haven't realized a return on their investment.	Plan well. Map out what you want & find people who can do what you need to be done.	Again, planning is the key for successful internet use.
1020	Less errors		How to improve process & to take cost out.	Start small & simple & grow gradually & leave.
1021	It forces the processes to realize the electronic process.	Lack of education by most people.	It takes thorough planning to ensure success.	Patience.
1022	Speed.	Speed to get speed time to developed	NA	NA

QNUM	Q9-A	Q9-B	Q9-C	Q9-D
1023	We had new business from it & link to legacy systems.	New & training needed. Have to acquaint customers with it.	Communication. Must explain impact to customers.	Work with customers, but not in rote manner.
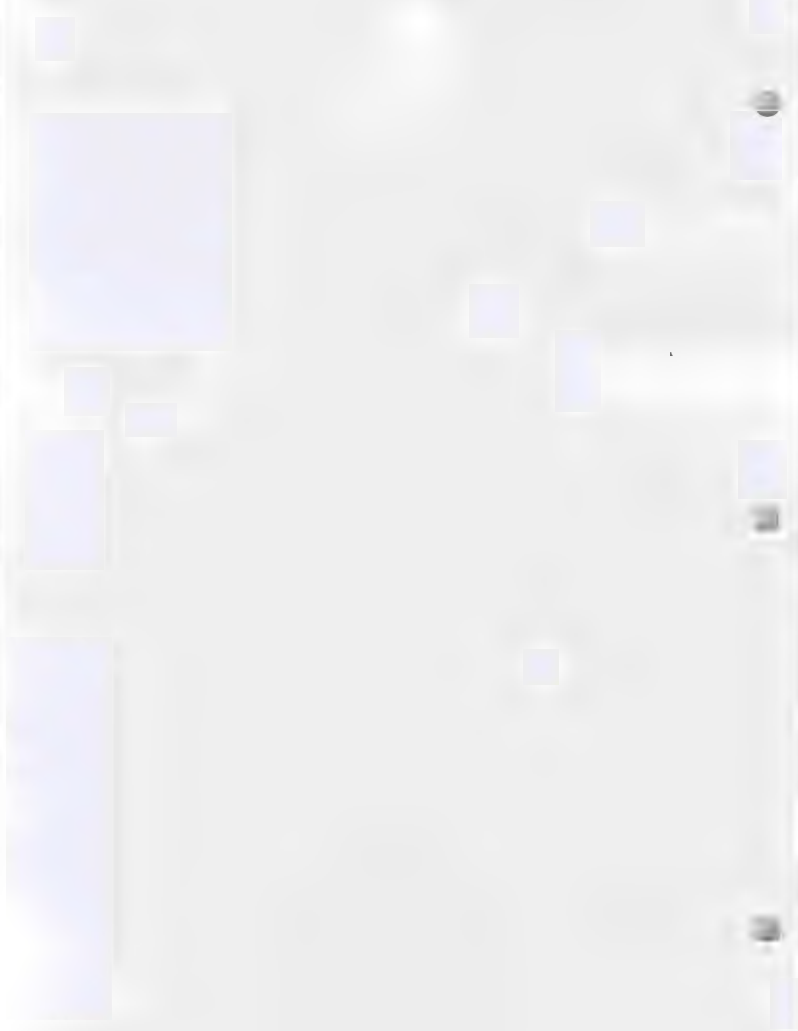
Integrated

FW FX FY FZ GA GB GC GD GE

QNUM	Q10 TRANS- PROD. NAME	Q10 TRANS- SAT. RAT.	Q10 TRANS- COMM.	Q10 MAP. PROD. NAME	Q10 MAP. TOOL- SAT. RAT.	Q10 MAP. TOOL- COMM.	Q10 SCHED. TOOL- PROD. NAME	Q10 SCHED. TOOL- SAT. RAT.	Q10 SCHED. TOOL- COMM.
1001	DK	5		DK	5		NT / scheduling tools	5	
1002	EDI open Premenos	4		EDI open Premenos	4		EDI open Premenos	4	VAN MCI
1003	DK	4		DK	4		DK	3	
1004	Sterling Gentran	3		Sterling Gentran	3		DK	DK	
1005	Premenos	5		Forsyth	5				
1006	Mentor	NA	These relate to EDI, not really to EC	Mentor			UNIX		
1007									
1008	Refused								
1009	Refused								
1010									
1011	DSU	5	Pretty satisfied						
1012									
1013				HP product	4		Meeting Maker	4	
1014	GEIS	5		GEIS	5				
1015	St. Pauls Software	5		St. Pauls Software	5		St. Pauls Software	5	
1016									
1017	DK								
1018	DK								
1019	Too specific for his position.			Too specific for his position.			Too specific for his position.		
1020	Claimschmidt	4		Claimschmidt	4		ASI	4	
1021	EDI	4			3				
1022	NA				0			0	

FW   FX   FY   FZ   GA   GB   GC   GD   GE

QNUM	Q10 TRANS- PROD. NAME	Q10 TRANS- SAT. RAT.	Q10 TRANS- COMM.	Q10 MAP. TOOL- PROD. NAME	Q10 MAP. TOOL- SAT. RAT.	Q10 MAP. TOOL- COMM.	Q10 SCHED. TOOL- PROD. NAME	Q10 SCHED. TOOL- SAT. RAT.	Q10 SCHED. TOOL- COMM.
1023	Supply tech	4		Supply tech	4		NA		
average		4.4			4.2			4.2	
count		11			11			6	
%4		6			6			3	
%5		5			4			2	
%4/5		91%			92%			83%	

GF GG GH GI GJ GK GL GM GN

QNUM	Q10 COMM.-PROD. NAME	Q10 COMM.-SAT. RAT.	Q10 COMM.-COMM.	Q10 PAY. PROC.- PROD. NAME	Q10 PAY. PROC.-SAT. RAT.	Q10 PAY. PROC.-COMM.	Q10 MESS.-PROD. NAME	Q10 MESS.-SAT. RAT.	Q10 MESS.- COMM.
1001	TCPIP	5		IH	5		Microsoft exchange	5	
1002		4		DK	DK		Microsoft exchange	4	
1003	DK	3		DK	4		DK	4	
1004	Sterling Super trax	4		DK	DK		AT&T Softswitch	1	Not flexible/ doesn't integrate well/ restrictive.
1005	UU net	5							
1006	Cisco			TD Bank			ANS, AT&T		
1007									
1008									
1009									
1010									
1011	Modems	5	No problem						
1012					4				
1013					3	Handled on mainframe	CC Mail	4	
1014	GEIS	5					GEIS	5	
1015	Advantis	4	Customer service is bad.				Proprietary		
1016	Netscape	4					Netscape	3	
1017									
1018									
1019	Too specific for his position.			Too specific for his position.			Too specific for his position.		
1020				Dun & Bradstreet	4		Software AG	4	
1021		2	Real key to us.		2	We can do better.		3	
1022									

GF GG GH GI GJ GK GL GM GN

QNUM	Q10 COMM.- PROD. NAME	Q10 COMM.- SAT. RAT.	Q10 COMM.- COMM.	Q10 PAY. PROC.- PROD. NAME	Q10 PAY. PROC.- SAT. RAT.	Q10 PAY. PROC.- COMM.	Q10 MESS.- PROD. NAME	Q10 MESS.- SAT. RAT.	Q10 MESS.- COMM.
1023	FTP , AT&T	5		Amer. Express	5		NA		
average		4.2			3.9			3.7	
count		10			7			9	
%4		3			3			4	
%5		5			2			2	
%4/5		80%			71%			67%	

Q 11 (I).

INPUT

EDI	4.0	5.0				4.8
Communications	5.0	5.0	4.0	5.0		4.8
VAN	4.0	4.0				4.0
✗ Internet Advertising Provider	3.0					3.0
Internet service	4.0 4.0	4.0 3.0	3.0	4.0		3.7
✗ Web site hosting	5.0					5.0
✗ Payment service	5.0					5.0

QNUM	Q10 SEC.- PROD. NAME	Q10 SEC.- SAT. RAT.	Q10 SEC.- COMM.	Q11 TYPE OF SRVC.	Q11 SAT. RAT.	Q11 VEND.	Q11 TYPE OF SRVC.	Q11 SAT. RAT.	Q11 VEND.
1001	NT		5	NA					
1002	firewall - Raptor	3		EDI	4		ISP	4	
1003	DK		5	DK					
1004	DK	4		T-1 line/ Internet		5 IH	Web sight		5 IH & vendor
1005	SSL	5		None					
1006	None			VAN		4 Harbinger, GEIS			
1007				All in house.					
1008									
1009				Advertising Internet provider		3 refused	Access provider		3 Refused
1010				E-mail/ Comm.	5				
1011				EDI	5 AT&T				
1012			5	DK					
1013	Firewall	4		Internet Svc. Provider		4 We do our own dev.			
1014	GEIS/ Netacape	4		GEIS/ TCPIP Protocol	4				
1015				No					
1016	Connect One Server	4		Internet Service Provider		4 Netscape			
1017				DK					
1018				Internet Service Provider		3 Netscape			
1019	Too specific for his position.			Internet Service Provider		4 Netscape			
1020	Aerabrougs	4							
1021			2	None					
1022				Telephone Prod. & Ser.	5 Internal				

GO GP GQ GR GS GT GU GV GW

QNUM	Q10 SEC.-PROD. NAME	Q10 SEC.-SAT. RAT.	Q10 SEC.-COMM.	Q11 TYPE OF SRVC.	Q11 SAT. RAT.	Q11 VEND.	Q11 TYPE OF SRVC.	Q11 SAT. RAT.	Q11 VEND.
1023	Kerberos, SSL	4		Every trans.	4	Verisign	Payments	5	Amer. Express
average		4.1			4.2			4.3	
count		12			13			4	
%4		6			7			1	
%5		4			4			2	
%4/5		83%			85%			75%	

GX GY GZ HA HB HC HD HE HF HG

QNUM	Q12 SEC. CRITIC.	Q12 SEC. COMM.	Q12 COST OF IMP. CRITIC.	Q12 COST OF IMP. COMM.	Q12 COST OF OP. CRITIC.	Q12 COST OF OP. COMM.	Q12 ACCEPT. CRITIC.	Q12 ACCEPT. COMM.	Q12 AVAIL. CRITIC.	Q12 AVAIL. COMM.
1001	refused									
1002	3		3		2		2		3	
1003	3		4		3		4		3	
1004	5		4		4		2		4	
1005	3		3		3		4		2	
1006	3		3		3		4		3	
1007	2		1		1		5		4	
1008	NA									
1009	5		4		4		5		5	
1010	5		3		4		3		5	
1011	4		5		5		5		5	
1012	5		5		5		5		5	
1013	5		5		5		5		5	
1014	5		4		3		4		4	
1015	5		4		4		4		5	
1016	5		5		5		4		5	
1017	4		4		3		4		4	
1018	5		5		5		4		5	
1019	4		4		4		5		4	
1020	3		4		3		3		2	
1021	5		3		3		5		5	
1022	5		4		4		5		5	

GX GY GZ HA HB HC HD HE HF HG

QNUM	Q12 SEC. CRITIC.	Q12 SEC. COMM.	Q12 COST OF IMP. CRITIC.	Q12 COST OF IMP. COMM.	Q12 COST OF OP. CRITIC.	Q12 COST OF OP. COMM.	Q12 ACCEPT. CRITIC.	Q12 ACCEPT. COMM.	Q12 AVAIL. CRITIC.	Q12 AVAIL. COMM.
1023	3		2		2		5		4	
average	4.1		3.8		3.6		4.1		4.1	
count	21		21		21		21		21	
%4	3		9		6		8		6	
%5	11		5		5		9		10	
%4/5	67%		67%		52%		81%		76%	

HH HI HJ HK HL HM HN HO HP HQ

QNUM	Q12 ABILITY CRITIC.	Q12 ABILITY COMM.	Q12 SPEED CRITIC.	Q12 SPEED COMM.	Q12 DEC. MAKERS CRITIC.	Q12 DEC. MAKERS COMM.	Q12 APP. DEV. SKILLS CRITIC.	Q12 APP. DEV. SKILLS COMM.	Q12 DEV. TOOLS CRITIC.	Q12 DEV. TOOLS COMM.
1001										
1002	3		4		2		4		3	
1003	3		3		4		4		3	
1004	5		4		5		1		1	
1005	2		2		1		1		1	
1006	3		2		3		3		3	
1007	3		4		2		4		4	
1008										
1009	5		4		4		4		4	
1010	5		4		2		5		4	
1011	4		5		4		4		4	
1012	4		5		5		4		4	
1013	5		5		5		5		5	
1014	3		3		4		4		3	
1015	5		5		5		5		5	
1016	4		5		5		4		3	
1017	4		4		5		4		4	
1018	5		5		5		5		3	
1019	4		5		5		5		4	
1020	4		3		2		3		3	
1021	4		5		4		4		4	
1022	5		5		3		4		4	

HH HI HF HK HL HM HN HO HP IQ

QNUM	Q12 ABILITY CRITIC.	Q12 ABILITY COMM.	Q12 SPEED CRITIC.	Q12 SPEED COMM.	Q12 DEC. MAKERS CRITIC.	Q12 DEC. MAKERS COMM.	Q12 APP. DEV. SKILLS CRITIC.	Q12 APP. DEV. SKILLS COMM.	Q12 DEV. TOOLS CRITIC.	Q12 DEV. TOOLS COMM.
1025	5		3		5		3		3	
average	4.0		4.0		3.8		3.8		3.4	
count	21		21		21		21		21	
%4	7		8		5		11		9	
%5	8		9		9		5		2	
%4/5	71%		71%		67%		76%		52%	

QNUM	Q12 NOT CONT. AVAIL. CRITIC.	Q12 NOT CONT. AVAIL. COMM.	Q12 INT. APP. PACK. CRITIC.	Q12 INT. APP. PACK. COMM.	Q12 INT. BENEFITS CRITIC.	Q12 INT. BENEFITS COMM.	Q12 OTHER 1 CRITIC.	Q12 OTHER 1 COMM.	Q12 OTHER 2 CRITIC.	Q12 OTHER 2 COMM.
1001										
1002	2		2		2					
1003	3		4		4					
1004	3		3		5					
1005	1		1		1					
1006	1		2		3					
1007	3		1		2					
1008								Cut me off here for a meeting- had me on the clock.		
1009	NA		NA		4					
1010	5		4		4					
1011	5		4		4					
1012	5		4		5					
1013	5		5		5					
1014	3		3		4					
1015	4		2		5					
1016	5		4		4					
1017	4		3		4					
1018	5		2		4					
1019	5		4		5					
1020	3		2		3					
1021	5		4		4					
1022	5		4		4					

HR HS HT HU HV HW HX HY HZ IA

QNUM	Q12 NOT CONT. AVAIL. CRITIC.	Q12 NOT CONT. AVAIL. COMM.	Q12 INT. APP. PACK. CRITIC.	Q12 INT. APP. PACK. COMM.	Q12 INT. BENEFITS CRITIC.	Q12 INT. BENEFITS COMM.	Q12 OTHER 1 CRITIC.	Q12 OTHER 1 COMM.	Q12 OTHER 2 CRITIC.	Q12 OTHER 2 COMM
1023	2		3		5					
average	3.7		3.1		3.9		#DIV/0!			
count	20		20		21		0			
%4	2		8		10		0			
%5	9		1		8		0			
%4/5	55%		45%		76%		#DIV/0!			

Integrated

IB IC ID IE IF IG IH II IJ

QNUM	Q13 CEO/CFO IC CHAMP.	Q13 CEO/CFO IC DEC. MAKER	Q13 CEO/CFO COMM.	Q13 CIO/IS MGR. IC CHAMP.	Q13 CIO/IS MGR. IC DEC. MAKER	Q13 CIO/IS MGR. COMM.	Q13 NET MGR. IC CHAMP.	Q13 NET MGR. IC DEC. MAKER	Q13 NET MGR. COMM.
1001				1	1				
1002				1	1				
1003				1	1				
1004				1	1				
1005					1				
1006									
1007		1							
1008									
1009				1	1				
1010				1	1				
1011									
1012				1	1				
1013					1				
1014				1		1 Gary Reiner			
1015									
1016				1	1				
1017		1							
1018			division different.						
1019		They have no centralized champion as far as he knows.							
1020									
1021									
1022					1			1	1

IB IC ID IE IF IG IH II IJ

QNUM	Q13 CEO/CFO IC CHAMP.	Q13 CEO/CFO IC DEC. MAKER	Q13 CEO/CFO COMM.	Q13 CIO/IS MGR. IC CHAMP.	Q13 CIO/IS MGR. IC DEC. MAKER	Q13 CIO/IS MGR. COMM.	Q13 NET MGR. IC CHAMP.	Q13 NET MGR. IC DEC. MAKER	Q13 NET MGR. COMM.
1023									

IK IL IM IN IO IP IQ IR IS

QNUM	Q13 BUS. FUNC. PERS. IC CHAMP.	Q13 BUS. FUNC. PERS. IC DEC. MAKER	Q13 BUS. FUNC. PERS. COMM.	Q13 OTHER 1 IC CHAMP.	Q13 OTHER 1 IC DEC. MAKER	Q13 OTHER 1 COMM.	Q13 OTHER 2 IC CHAMP.	Q13 OTHER 2 IC DEC. MAKER	Q13 OTHER 2 COMM.
1001									
1002									
1003									
1004									
1005				Sr. Mgr. EC					
1006	1 (Mktg)				1 (Project team)				
1007	1 (Mktg)								
1008									
1009									
1010									
1011									
1012									
1013				1 (Net. Sys. Engineer)					
1014									
1015				VP IS	VP IS	Staff recommendation			
1016									
1017				MIS Dir.					
1018									
1019									
1020					1 VP Supply chain				
1021		1 Me							
1022									

IK IL IM IN Io IP IQ IR IS

Integrated

QNUM	Q13 BUS. FUNC. PERS. IC CHAMP.	Q13 BUS. FUNC. PERS. IC DEC. MAKER	Q13 BUS. FUNC. PERS. COMM.	Q13 OTHER 1 IC CHAMP.	Q13 OTHER 1 IC DEC. MAKER	Q13 OTHER 1 COMM.	Q13 OTHER 2 IC CHAMP.	Q13 OTHER 2 IC DEC. MAKER	Q13 OTHER 2 COMM.
1023		1 Mktg. Mgr.			1 Customer driven.				

	IT

QNUM	Q14
1001	None.
1002	None.
1003	None.
1004	None.
1005	None.
1006	None.
1007	None.
1008	
1009	None. This is customer driven.
1010	No-wants a copy of summary.
1011	None.
1012	None.
1013	None.
1014	The value of it is to establish intra-vendor transactions.
1015	None.
1016	We have 25 sites active at this point. The Internet Commerce we do is business to business only. We are adding 6 more sites.
1017	None.
1018	None.
1019	None.
1020	None.
1021	Strategic planning.
1022	No, I wish I knew about it.

IT

CNUM	D14	
	1031 None	
average		
count		
%4		
%6		
%46		

US
NO PLANS

EVALUATION OF INTERNET COMMERCE IN MANUFACTURING

User Questionnaire

Note: this survey uses the following definitions and abbreviations:
- Electronic Commerce (EC): the purchase and sale of goods and services where the transactions flow between the buyer and seller via a computer network.
- Internet Commerce (IC): electronic commerce that uses the Internet.
- EDI (electronic document interchange): a set of formatted, standardized messages that enable computer-to-computer business transactions between trading partners. Examples of transactions include processing sales orders and invoices electronically.

1.   a. *M* Do you use electronic commerce in your organization?

Yes	No
(go to 1b)	(go to 1c)

bad QA design

   b. *N* How long have you been using electronic commerce?

   c. *O* Are you currently using EDI? *P* Will you incorporate EDI into Internet Commerce?

   d. *Q* Who manages EC in your company/organization?

   e. *R* Do you use the Internet in your electronic commerce?

Yes	No
(go to 1f)	(go to 1i)

   f. *S* How long has your organization been doing Internet Commerce?

   g. *T* Who manages IC in your company/organization.

   h. *U* Who will manage IC for your company/organization?

   (Go to Q2)

   i. *V* Is Internet Commerce planned in the next 2-3 years? Y/N___ *W*
         If "Yes", go to **Part II - Prospect Questionnaire**.

Comments

j. *X* **If no,** why not?

(Terminate)

M N O

QNUM	COMPANY	Q1-A	Q1-B	Q1-C/1
3001	Jim Walter Corp.	0		1
3002	ADC Telecomm.	1	8 yrs.	1
3003	Alcon Smelter & Chem. Ltd.	1	2 yrs.	1
3004	Huntsman Chemical Co.	0		
3005	Eli Lilly & Co.	1	10 yrs.	1
3006	Georgia Gulf Corp.	1	2 yrs.	1
3007	Golden Poultry Co., Inc.	1	2 yrs.	1
3008	APS	0		0
3009	Automotive Controls Div. of Borg Warner	1	8 yrs.	1
3010	Allegheny Landium Corp.	1	10 yrs.	1
3011	ADM Milling	0		1
3012	The News Journal Subs Gourmet	0		0
3013	Texaco, Inc.	0		1
3014	Arch Mineral Corp.	1	4 yrs.	1
3015	A C Humko Corp.	0		1
3016	Tennessee Denso Mfg.	1	7 yrs.	1
3017	U.S. Can Corp.	0		0
3018	Uniroyal Chemical Co.	1	8 yrs.	1
3019	California Almond Growers Exchange	0		0
3020	Illinois Tool Works, Inc.	1	5-6 yrs.	1
3021	Quadgraphics	0		1
3022	Pabst Brewing	0		0
3023	National Beef Packing	1	3 yrs.	1
3024	Marigold Foods	1	6 yrs.	1
3025	Flowers Industries	0		1
3026	General Chemical Group Inc.	0		Very limited use

		M	N	O
QNUM	COMPANY	Q1-A	Q1-B	Q1-C/1
3027	Georgia-Pacific Corp.	1	10 yrs.	1
3028	Duchossois Industries Inc.	1	5 yrs.	1
3029	Eaton Corp.	1	7 yrs.	1
3030	Fieldcrest Cannon Inc.	1	1965	1
3031	Mermon Industrial	1	3 yrs.	1
3032	Alumax Mill Products	1	Couple of years	1
3033	The Trane Company	1	3 yrs.	1
3034	International Specialty Products	1	6 yrs.	1
3035	US Agra Chemical	0		0
3036	US Sugar Corp.	0		0
3037	Georgia Gulf Corp.	0	1 (just moving to it)	
3038	McDermott Inc.	0		1
3039	Martin Marietta Materials	0		1
3040	American National Can Co.	1	6 yrs.	1
3041	AVX	1	10 yrs.	1
3042	Asarco Inc.	0		0
3043	Big West Oil	1	10 yrs.	1
3044	Bayer Corp.	1	10 yrs.	1
3045	Gold Kist	0		1

M N O

QNUM	COMPANY	Q1-A	Q1-B	Q1-C/1
3046	General Battery Corp.	1	10 yrs.	1
3047	Excel Industries	0		1 - past 15 yrs.
3048	Gemmar Holdings	0 - we don't need it.		0
3049	Abbott Labs	0		1
3050	Brown & Williamson Tobacco	1	10 yrs.	1
3051	Printpack Inc.	0	Few customers	1
3052	Pepsicola Bottling Co. of Tampa	0	Never	0
3053	Magna Lomason Co. (Douglas & Lomason)	1	20 some odd yrs.	1
3054	Ferro Corp.	0		1, through bank
3055	Great Dane Trailers (Div. of Great Dane Ltd. Partnership)	0, not doing it right now.		0
3056	Matthey Johnson Investments	1	2-3 yrs.	1
3057	Universal Foods Corp.	0		0
3058	Dyson - Kissner - Moran	0		0
3059	E.W. Scripps Co.	1	18 mths.	
3066	Pacesetter Inc.	0		0
3067	Stratus Computer Inc.	0		0
3068	Delco Remy America	1	Dec. '95	1
3069	Schering-Plough Corp.	0		0
3070	Repap USA, Inc.	0	Limited	Doesn't know
3072	Sony Software Corp.	1	June '97	0
3073	Schwan's Sales Enterprise, Inc.	1	A few yrs.	0
3074	Tomkins Corp.	1	3-4 yrs.	1

QNUM	COMPANY	Q1-A	Q1-B	Q1-C/1
3074	Safety-Kleen Corp.	1	2 yrs.	1
3075	United States Gypsum Co.	0		0
3076	Merck & Co., Inc.	1	Many yrs.	1
3077	NMB (USA) Inc.	0		1 - only use 1 terminal for
3078	P.T. Freeport Indonesia PT-FI	0		1
3079	Outokumpo Copper Inc.	0		1
3080	Norton Co.	0		1
3081	Paragon Trade Brands, Inc.	1	Since 1990	1
3082	Overhead Door Corp.	0		1 - only in 1 division
3083	RHI Holding, Inc.	0		1
3084	Denso Manufacturing	0		1 - little bit here & there
3085	The Babcock & Wilcox Co.	0		0
3086	Dixie Group	0		It is on our system but we don't really use it at all. It was used in our mainframe but now that is gone.
3087	Philips Holding USA, Inc.	0		0
3088	Burlington Ind.	0		1
3089	Donna Karan	1	3 yrs.	1
3090	Perdue Farms Inc.	0	DK	1 - limited usage through sales dept
3091	Otis Elevator Co.	0		0 - not capable (flat files used, write programs self)
3092	Murphy Oil Corp.	0		1 - in some areas
3093	Stewart & Stevenson Svcs. Inc.	1	since '86	0
COUNT 1/1		39	0	51

M   N   O

QNUM	COMPANY	Q1-A	Q1-B	Q1-C/1
COUNT 2/0		46	0	22
		48	48	46

QNUM	COMPANY	Q1-C/2	Q1-D	Q1-E
3001	Jim Walter Corp.		0 Data Center Mgr.	0
3002	ADC Telecomm.		0 NA	0
3003	Alcon Smelter & Chem. Ltd.		0 self	0
3004	Huntsman Chemical Co.			
3005	Eli Lilly & Co.		0 Don't know	0
3006	Georgia Gulf Corp.		MIS	0
3007	Golden Poultry Co., Inc.		EDI	0
3008	APS			0
3009	Automotive Controls Div. of Borg Warner	DK	Self	0
3010	Allegheny Landium Corp.		0 Dave Shibonde	0
3011	ADM Milling	0		0
3012	The News Journal Subs Gourmet	0		0
3013	Texaco, Inc.		1 Info/Tech. Dept.	0
3014	Arch Mineral Corp.		Self	0
3015	A C Humko Corp.		0 NA	0
3016	Tennessee Denso Mfg.		0 Jeff Chesney	0
3017	U.S. Can Corp.	0		0
3018	Uniroyal Chemical Co.		0 Not centrally managed.	0
3019	California Almond Growers Exchange		0 NA	0
3020	Illinois Tool Works, Inc.		0 Sys. Support Mgr.	0
3021	Quadgraphics		0 NA	0
3022	Pabst Brewing		0 NA	0
3023	National Beef Packing	Undecided	IS Dept.	0
3024	Marigold Foods		0 Sr. Sys. Analyst	0
3025	Flowers Industries		0 No one because we don't use it.	0
3026	General Chemical Group Inc.		0 Don't use it.	0

P   Q   R

QNUM	COMPANY	Q1-C/2	Q1-D	Q1-E
3027	Georgia-Pacific Corp.	Not sure	One of several	0
3028	Duchossois Industries Inc.	0	Sandy Kiska	0
3029	Eaton Corp.	DK	Kathy Grubar & # of different business units.	0
3030	Fieldcrest Cannon Inc.	If we use Internet, yes	Bob Hatu	0
3031	Mermon Industrial	0	IS Mgr.	0
3032	Alumax Mill Products	0	Self	0
3033	The Trane Company	0	MIS	0
3034	International Specialty Products	DK	VP's	0
3035	US Agra Chemical	0	NA	0
3036	US Sugar Corp.	0	NA	0
3037	Georgia Gulf Corp.	Probably incorporate it if we ever find a use for it.		0
3038	McDermott Inc.	0	A little bit of EDI is done in McDermott	0
3039	Martin Marietta Materials	0	Mktg. dept. manages all EDI work.	0
3040	American National Can Co.	0	Self	0
3041	AVX	0	Self	0
3042	Asarco Inc.			0
3043	Big West Oil	0	Have none.	0
3044	Bayer Corp.	DK	self	0
3045	Gold Kist	0	IS	0

P Q R

QNUM	COMPANY	Q1-C/2	Q1-D	Q1-E
3046	General Battery Corp.	Possibly	self, report to IS Mgr.	0
3047	Excel Industries	Not planning on it.	don't use EC	0
3048	Gemmar Holdings	0, cause we don't use EDI		0
3049	Abbott Labs		0 Nobody	0
3050	Brown & Williamson Tobacco		0 Self	0
3051	Printpack Inc.	DK, depends on customers.	MIS - processes invoices	0
3052	Pepsicola Bottling Co. of Tampa		0 Divisional / don't know name.	0
3053	Magna Lomason Co. (Douglas & Lomason)	Probably , no plans right now.	Me & Bob Nitzkorzi (founder AIAG)	0
3054	Ferro Corp.		0.	0
3055	Great Dane Trailers (Div. of Great Dane Ltd. Partnership)			0
3056	Matthey Johnson Investments		0 IT Dept.	0
3057	Universal Foods Corp.			1, but not for direct buying & selling - they just monitor the industry.
3058	Dyson - Kissner - Moran			0
3059	E.W. Scripps Co.		Scattered throughout the company.	1
3066	Pacesetter Inc.		0	0
3067	Stratus Computer Inc.			0
3068	Delco Remy America		0 MIS	0
3069	Schering-Plough Corp.			0
3070	Repap USA, Inc.			0
3072	Sony Software Corp.		Dir. of Retail Operation, MIS	1
3073	Schwan's Sales Enterprise, Inc.			0
3074	Tomkins Corp.	Doesn't know	Each division handles its own.	0

P Q R

QNUM	COMPANY	Q1-C/2	Q1-D	Q1-E
3074	Safety-Kleen Corp.	Not sure.	CIO	0
3075	United States Gypsum Co.		Don't know	0
3076	Merck & Co., Inc.	0	Corporate Computer Resources (IS)	0
3077	NMB (USA) Inc.			0
3078	P.T. Freeport Indonesia PT-FI	0		0
3079	Outokumpo Copper Inc.	DK		0
3080	Norton Co.	0	No one presently.	0
3081	Paragon Trade Brands, Inc.	0	EC Dir.	0
3082	Overhead Door Corp.	0		0
3083	RHI Holding, Inc.	0		0
3084	Denso Manufacturing	DK	We don't use it.	0
3085	The Babcock & Wilcox Co.			0
3086	Dixie Group	Not really.		0
3087	Philips Holding USA, Inc.	0	Parent co.	0
3088	Burlington Ind.	0		0
3089	Donna Karan	1	MIS	0
3090	Perdue Farms Inc.	0		0
3091	Otis Elevator Co.		No one to her knowledge.	0
3092	Murphy Oil Corp.	0		0
3093	Stewart & Stevenson Svcs. Inc.	0	Pat O'Rourke	0
COUNT 1/1		2	0	2

No Plans

P   Q   R

QNUM	COMPANY	Q1-C/2	Q1-D	Q1-E
COUNT 2/0		48	0	82
		48	48	48

No Plans

V   W

QNUM	COMPANY	Q1-I	Q1-I COMM.
3001	Jim Walter Corp.	0	
3002	ADC Telecomm.	0	
3003	Alcon Smelter & Chem. Ltd.	0	
3004	Huntsman Chemical Co.	1	Looking into process now-don't know when or how long it will take.
3005	Eli Lilly & Co.	0	
3006	Georgia Gulf Corp.	0	
3007	Golden Poultry Co., Inc.	0	
3008	APS	0	
3009	Automotive Controls Div. of Borg Warner	0	
3010	Allegheny Landium Corp.	0	
3011	ADM Milling	0	
3012	The News Journal Subs Gourmet	0	
3013	Texaco, Inc.	0	
3014	Arch Mineral Corp.	0	
3015	A C Humko Corp.	0	
3016	Tennessee Denso Mfg.	0	
3017	U.S. Can Corp.	0	
3018	Uniroyal Chemical Co.	0	
3019	California Almond Growers Exchange	0	
3020	Illinois Tool Works, Inc.	0	
3021	Quadgraphics	0	
3022	Pabst Brewing	0	
3023	National Beef Packing	0	
3024	Marigold Foods	0	
3025	Flowers Industries	0	
3026	General Chemical Group Inc.	0	

CNUM	COMPANY	Q1-I	Q1-I COMM
3027	Georgia-Pacific Corp.	0	
3028	Duplication Industries Inc	0	
3029	Eaton Corp.	0	
3030	Fieldcrest Cannon Inc	0	
3031	Merrion Industries	0	
3032	Alumax Mill Products	0	
3033	The Trane Company	0	
3034	International Specialty Products	2K	
3035	US Agro Chemical	0	
3036	US Sugar Corp	0	
3037	Georgia Gulf Corp.	0	
3038	McDermott Inc	0	
3039	Martin Marietta Materials	0	
3040	American National Can Inc	2	
3041	AVX	2	
3042	Avance Inc.	0	
3043	Big West Oil	0	
3044	Bayer Corp.	0	
3045	Onid Knit	0	

✓ W

QNUM	COMPANY	Q1-I	Q1-I COMM.
3046	General Battery Corp.	0	
3047	Excel Industries	0	
3048	Gemmar Holdings	0	
3049	Abbott Labs	0	
3050	Brown & Williamson Tobacco	0	
3051	Printpack Inc.	0	
3052	Pepsicola Bottling Co. of Tampa	0	
3053	Magna Lomason Co. (Douglas & Lomason)	0	
3054	Ferro Corp.	0	
3055	Great Dane Trailers (Div. of Great Dane Ltd. Partnership)	0	To be determined by study they are doing.
3056	Matthey Johnson Investments	0	
3057	Universal Foods Corp.	0	
3058	Dyson - Kissner - Moran	0	
3059	E.W. Scripps Co.	1	But Mr. Routt declined to answer any further questions citing time constraints.
3066	Pacesetter Inc.	0	
3067	Stratus Computer Inc.	0	
3068	Delco Remy America	0	
3069	Schering-Plough Corp.	0	
3070	Repap USA, Inc.	0	
3072	Sony Software Corp.	1	
3073	Schwan's Sales Enterprise, Inc.	0	
3074	Tomkins Corp.	1	

√ W

QNUM	COMPANY	Q1-I	Q1-I COMM.
3074	Safety-Kleen Corp.	0	
3075	United States Gypsum Co.	0	
3076	Merck & Co., Inc.	0	
3077	NMB (USA) Inc.	0	
3078	P.T. Freeport Indonesia PT-FI	0	
3079	Outokumpo Copper Inc.	0	
3080	Norton Co.	0	
3081	Paragon Trade Brands, Inc.	0 - Possibly, but not sure exactly when.	
3082	Overhead Door Corp.	0	
3083	RHI Holding, Inc.	0	
3084	Denso Manufacturing	0	
3085	The Babcock & Wilcox Co.	0	
3086	Dixie Group	0	
3087	Philips Holding USA, Inc.	0	
3088	Burlington Ind.	0	
3069	Donna Karan	0	
3090	Perdue Farms Inc.	0	
3091	Otis Elevator Co.	0	
3092	Murphy Oil Corp.	0	
3093	Stewart & Stevenson Svcs. Inc.	0	

No Plans

QNUM	COMPANY	Q1-J
3001	Jim Walter Corp.	No plans for future. Co. hasn't authorized him to get started yet. When they do, it will be implemented.
3002	ADC Telecomm.	We're changing systems * have too much else planned.
3003	Alcon Smelter & Chem. Ltd.	We are a primary smelter & do not deal in consumer goods.
3004	Huntsman Chemical Co.	Resources not there. Money there-not people!
3005	Eli Lilly & Co.	No idea, our industry is strange. We don't deal w/ customers, only wholesale suppliers.
3006	Georgia Gulf Corp.	Haven't started thinking of it yet, not in the plan.
3007	Golden Poultry Co., Inc.	We haven't got it that together yet where we have it planned. It may happen though.
3008	APS	We run & write our own programs & we are connected right to distributors & that is all we need.
3009	Automotive Controls Div. of Borg Warner	There is too much going on now so it would not be in that timeframe.
3010	Allegheny Landlum Corp.	Security is that main concern.
3011	ADM Milling	Our current computer system is mainframe based.
3012	The News Journal Subs Gourmet	Not needed for their functions.
3013	Texaco, Inc.	They are looking into, but not near planning.
3014	Arch Mineral Corp.	Internet EDI not viable in that timeframe.
3015	A C Humko Corp.	Have seen no need for it.
3016	Tennessee Denso Mfg.	Security concerns no plans for near future.
3017	U.S. Can Corp.	On ADS system.
3018	Uniroyal Chemical Co.	Security concerns.
3019	California Almond Growers Exchange	We have a product to sell, but do not have a problem selling it & no need for further selling systems.
3020	Illinois Tool Works, Inc.	Company trying to stay away from Internet issues. Confidentiality is their #1 concern.
3021	Quadgraphics	We do not sell anything. Not much purchasing is done. We have our own website & we use the web if a customer has a site. We use email over the Internet. Not much talk about future Internet commerce.
3022	Pabst Brewing	Pabst Brewing has been around a long time & work w/o Internet. We have no need for electronic commerce. Our company has no use for the Internet. The plant is run on the computers we've had.
3023	National Beef Packing	Our company is not convinced it is reliable & secure. We are using an AS400 & our priorities are in different areas. We are researching some applications. Internet is secondary.
3024	Marigold Foods	We have direct connections to our trading partners. Most of EC goes through a network. Security & recoverability is not so stable.
3025	Flowers Industries	We just don't have any plans for it right now.
3026	General Chemical Group Inc.	Still a small company, not really using it yet.

QNUM	COMPANY	Q1-J
3027	Georgia-Pacific Corp.	We are assessing the issues.
3028	Duchossois Industries Inc.	We are not really interested in it. It is a mind set that we have to get passed. The security is also an issue to some people.
3029	Eaton Corp.	It is customer driven. We have EDI connections with companies. We don't deal with consumer products.
3030	Fieldcrest Cannon Inc.	There are a lot of unanswered questions. Security is the biggest issue, also volume.
3031	Mennon Industrial	Our company uses the Internet for information. We have a website that can give our customers plenty of info on our corp. and the other locations. Our company is too widespread and broken up to use the Internet for commerce.
3032	Alumax Mill Products	It is not the way we do business. Our business does not operate that way.
3033	The Trane Company	The nature of our company. We feel there is a security risk. Our commerce is contracted through sales officers. No real sales advantage from the Internet.
3034	International Specialty Products	Company discussing but no final plans have been made or date set. Nothing final or set to date.
3035	US Agra Chemical	Everything we sell goes to our home company in China. Fertilizer is the main product we move. We have no need for access to other places with the Internet.
3036	US Sugar Corp.	Upper management is very distrustful of technology. They believe it is dangerous and evil. It is against the bible. Extreme distrust of Internet and no benefit is seen from using it.
3037	Georgia Gulf Corp.	We can't find any use for it. It serves no purpose for our company.
3038	McDermott Inc.	We have 2 Web pages set up currently. They are not for business. The information is for the public or shareholders or whoever desires info on the company.
3039	Martin Marietta Materials	We don't feel our business is suitable for advertising on the Internet. We couldn't benefit from the Internet. We use it to provide info to stockholders.
3040	American National Can Co.	Security & safety issues. It is cost effective, but not useable for EDI due to security & lack of support of Internet. No one owns it or supports it as is done in a VAN.
3041	AVX	We are a mainframe operation & send through batches of EDI transmissions & it is not feasible for what we do.
3042	Aaarco Inc.	Management of company afraid of security problems.
3043	Big West Oil	We are not familiar with Internet Technology. We see no need for it right now, but will be using an Intranet in the future.
3044	Bayer Corp.	Other companies not clammering for it, & Internet not mature enough yet.
3045	Gold Kist	Our customers (sell in bulk) don't use it. We are not a consumer base service so we have no use for it really.

QNUM	COMPANY	Q1-J
3046	General Battery Corp.	None of our trading partners use it. Security is an issue also.
3047	Excel Industries	We don't see the application for our company.
3048	Gemmar Holdings	We don't use Internet for commerce, we just use it basically.
3049	Abbott Labs	We are heavily in transaction volume & Vans are just fine.
3050	Brown & Williamson Tobacco	We have an anti Internet policy. The risks outweigh the benefits.
3051	Printpack Inc.	Few customers have it.
3052	Pepsicola Bottling Co. of Tampa	Only telephone communications used.
3053	Magna Lomason Co. (Douglas & Lomason)	It depends on our customers. We will do it according to what they want.
3054	Ferro Corp.	No one has even looked at Internet.
3055	Great Dane Trailers (Div. of Great Dane Ltd. Partnership)	We are doing a study right now to see if we are going to use it in the future. Priority.
3056	Matthey Johnson Investments	Our business is the selling of precious metals to industries. Some business is done through stockbrokers. 99% of our business is related to industrial and we have a very small customer base.
3057	Universal Foods Corp.	They prepare foods that are then used to prepare other food products. Being one step removed from the consumer, they have no need for direct communication with the public. They only use the Internet to "monitor" the industry.
3058	Dyson - Kissner - Moran	As a manufacturer, they have no use for the Internet.
3059	E.W. Scripps Co.	
3066	Pacesetter Inc.	We don't tell on behalf of our company.
3067	Stratus Computer Inc.	Sell big ticketed items. No need for either electronic or internet commerce.
3068	Delco Remy America	Right now we are just doing all we can do to run facilities through VAN
3069	Schering-Plough Corp.	They do use the Internet, but for information gathering only. There are currently no plans that he knows of to buy and sell over the Internet.
3070	Repap USA, Inc.	Repap is being bought out by a larger company. All plans are on hold during the transition period. All plans for technological advancement would come from the new owners.
3072	Sony Software Corp.	They are online, but they deal with customers in retail, not business to business.
3073	Schwan's Sales Enterprise, Inc.	They don't feel the need as of now. They manufacture frozen foods, not an industry in need of the Internet until the majority of business is done on-line.
3074	Tomkins Corp.	Tomkins is a highly segmented company, with some segments planning on migrating to the Internet & some not. Since each division is making the choices even as director of corporate MIS, he has no knowledge of what each segment has planned.

QNUM	COMPANY	Q1-J
3074	Safety-Kleen Corp.	Priorities in different areas. Not at this time.
3075	United States Gypsum Co.	He isn't really familiar with the plans, but is fairly sure that even if they do go to the Internet, it won't be for awhile. As a manufacturer of gypsum products, they don't feel a big need to go online.
3076	Merck & Co., Inc.	We have a website that provides information on our company & other similar companies. The desk references we publish can also be accessed. Consumers cannot purchase goods over the Internet from us.
3077	NMB (USA) Inc.	Use Internet, the Web for information purposes only. Use database for sales. Company owned by Japanese firm who has yet to direct usage of Internet commerce.
3078	P.T. Freeport Indonesia PT-FI	No reason to need it thus far.
3079	Outokumpo Copper Inc.	Corporate headquarters won't allow it due to security issues.
3080	Norton Co.	It is in discussion presently, but have no information to give at this point.
3081	Paragon Trade Brands, Inc.	Structure in place doesn't accommodate that. In process of updating computer systems presently.
3082	Overhead Door Corp.	We're a manufacturing company. We only sell directly to distributers.
3083	RHI Holding, Inc.	Corporate office. Doesn't have much need. Wires, ACH's, taxes.
3084	Denso Manufacturing	Mfg. don't have a need for it right now. Maybe in the future we will have a use for it.
3085	The Babcock & Wilcox Co.	They advertise on the Internet, but don't need it for commerce because they are a manufacturer.
3086	Dixie Group	Security is probably the only issue that spooks us. We may open a Web-site in the future but Internet commerce is not really being planned.
3087	Philips Holding USA, Inc.	Telerate system through Dow Jones works better for them.
3088	Burlington Ind.	That's not the way we sell. We sell business to business. Our products don't lend themselves to Internet sales.
3089	Donna Karan	We will be doing all IC through outsourcing. We will sell the goods to companies that specialize in on-line selling. We do not have the capital or resources to develop on-line Internet commerce in-house.
3090	Perdue Farms Inc.	Need to determine benefits. Cost effective, have not done so thus far.
3091	Otis Elevator Co.	Collecting money does not require electronic commerce. Uses Internet only for information purposes.
3092	Murphy Oil Corp.	Our company has a small customer list. All purchases are large volume purchases. We would only implement IC if we were pressured by customers or competition.
3093	Stewart & Stevenson Svcs. Inc.	Just use bank, balance reporting automatic clearing house payments & receipts, wire transfers.

US PLANNING

EVALUATION OF INTERNET COMMERCE IN MANUFACTURING

User Questionnaire

Note: this survey uses the following definitions and abbreviations:
- Electronic Commerce (EC): the purchase and sale of goods and services where the transactions flow between the buyer and seller via a computer network.
- Internet Commerce (IC): electronic commerce that uses the Internet.
- EDI (electronic document interchange): a set of formatted, standardized messages that enable computer-to-computer business transactions between trading partners. Examples of transactions include processing sales orders and invoices electronically.

1. a. **M** Do you use electronic commerce in your organization?

Yes	No
(go to 1b)	(go to 1c)

   b. **N** How long have you been using electronic commerce?

   c. **O** Are you currently using EDI? **P** Will you incorporate EDI into Internet Commerce?

   d. **Q** Who manages EC in your company/organization?

   e. **R** Do you use the Internet in your electronic commerce?

Yes	No
(go to 1f)	(go to 1i)

   f. **S** How long has your organization been doing Internet Commerce?

   g. **T** Who manages IC in your company/organization.

   h. **U** Who will manage IC for your company/organization?

   (Go to Q2)

   i. **W** Is Internet Commerce planned in the next 2-3 years? Y/N __W__
       If "Yes", go to **Part II - Prospect Questionnaire**.
Comments

X **W** If no, why not?

(Terminate)

US PLANNING:

Part II Prospect Questionnaire

2.a. Are you planning to migrate existing processes to Internet Commerce? (Y/N) _____

b. What is the timeframe of the migration to IC?
  _1_ This year
  _2_ By end-1998
  _3_ 1999-2000

c. Please describe the migration:

FROM	TO					
	Private VAN		Public Internet		Extranet/VPN	
Paper-based	1	7	2	13	3	3
Proprietary VAN		6		31		8
Public Internet		7		16		5
Extranet (VPN)		4		8		3

3. How important is each of the following objectives in using Internet Commerce (5=very important)?

b. And how satisfied are you with the achievement of these objectives so far? (5=very satisfied)

Objective	Importance Rating (1-5)		Satisfaction Rating (1-5)		Comments
Reduce Costs of Operation	AE	4.1	AF	3.6	AG
Reduce Order-to-Delivery Time	AH	3.9	AI	3.6	AJ
Extend Reach to Additional Trading Partners	AK	3.8	AL	3.6	AM
Improve Customer Service	AN	4.5	AO	3.5	AP
Increase Ability to Manage Business	AQ	3.8	AR	3.6	AS
Increase Speed of Introduction of New Products & Services	AT	3.4	AU	3.3	AV
Offer Longer Hours When "Open for Business"	AW	3.2	AX	3.2	AY
Other1	AZ	—	BA	—	BB —
Other2	BC	—	BD	—	BE —

BF

4. a. Please describe your approach to implementation. For example, which of the following would apply to the implementation approach?

Enterprise-wide (all applications at once)   1   15
Department/function by Department/function   2 ___   26
Process by Process   3   40

b. Details/Description BG   81

c. What resources will you require to accomplish your IC implementation??

Implementation Resource	Required (Y/N)		Possible Vendor
In-house	BH	50	BT
External Vendor	BJ	38	BK
Both	BL	60	BM

5. a. In your opinion, who are the leading software products vendors in Internet Commerce? Services vendors? Please name 1- 3 of each.

Type of Vendor	Leading Vendor
Software Product Vendors	
	BN
	BO
	BP
Services Vendors	
	BQ
	BR
	BS
Hardware Vendors	
	BT
	BU
	BV

5.b. In your opinion, who are the emerging vendors in these areas of Internet Commerce?

Emerging Vendor	Area of Specialty
BN	BX
BY	BZ
CA —	CB —
CC	CD —

6.a. What software products, hardware products and services do you believe will be required for the implementation of IC in your organization? Will any of these be a new purchase?

Column Eunge (CC)

Software Product	Required? (Y/N)	New Purchase? (Y/N)	Product (if known)	/43
Development Tools	CE 67	CF 46	CG 28	65%
Security	CH 78	CI 52	CJ 32	74%
Messaging	CK 62	CL 34	CM 20	47%
Communications	CN 61	CO 33	CP 23	53%
Full Application Package, e.g. billing, ordering	CQ 56	CR 37	CS 17	40%
EDI-related, e.g. mapping, translator	CT 60	CU 30	CV 14	33%
Catalog	CW 33	CX 23	CY 12	28%
Other 1	CZ —	DA —	DB —	
Other 2	DC —	DD —	DE —	

6.b.

Hardware Product	Required? (Y/N)	New Purchase? (Y/N)	Product/Vendor (if known)
Servers: Enterprise	DF 64	DG 40	DH
Servers: Departmental	DI 47	DJ 26	DK
Network Hardware	DL 58	DM 29	DN
Desktop Hardware	DO 51	DP 25	DQ
Network Computers	DR 47	DS 23	DT
Other 1	DU —	DV —	DW —
Other 2	DX —	DY —	DZ —

6.c.

Services	Required?(Y/N)	Plan to Use In-house (I), External Vendor (E) or Both (B)			Possible Vendor
Consulting/Planning	EA 73	EB 10I	13E	50B	EC
Application Development.	ED 78	EE 23	12	41	EF
Integration With Existing Applications	EG 75	EH 30	8	36	EI
EDI-related Services	EJ 72	EK 29	9	34	EL
Education/Training	EM 74	EN 19	24	31	EO
Conversion of Existing EC Applications	EP 64	EQ 30	7	27	ER
Other 1	ES —	ET —			EU —
Other 2	EV —	EW —			EX —

6.d. How important are each of the following Internet access requirements to your organization?

Access Requirements		Rating (5=very important)
Bandwidth	EY	4.2
Security.	EZ	4.8
Guaranty of Access	FA	4.6
Other 1	FB	—
Other 2	FC	—
Other 3	FD	—

V S

7. How important will Internet Commerce be to the following processes/functions of your organization? (5=very important)

Process/function		Importance Rating (1-5)	
Marketing and Advertising	FE	3.8 ,	4.2
Sales	FF	3.9 .	4.2
Purchasing	FG	3.7 .	3.9
Customer Service	FH	4.0 .	3.3
Production:	FI	3.0 •	1.8
Raw Material Scheduling	FJ	2.9 .	2.1
Inbound Material Tracking	FK	3.1 •	2.3
Scheduling	FL	2.9	2.7
Inventory Management	FM	3.1 •	3.9
Distribution	FN	3.3 •	4.2
Routing/Scheduling	FO	3.1 •	2.6
Sales Forecasting	FP	3.1 •	3.2
Channel Management	FQ	3.1 •	2.3
Manufacturing Production Operations	FR	3.0 •	1.5
Production Planning	FS	3.0 •	2.0
Other 1	FT	—	
Other 2	FU	—	

FV Comments

8. What do you see your organization doing over the longer-term in the area of Internet Commerce? For example, will you be adding other business functions, such as purchasing, etc.

FW

FX BLANK

9. Please rate on a scale of 1-5 (1=low, 5=high) the importance of each of the following potential inhibitors to planning and implementing Internet Commerce.

Inhibitor/Concern	Importance (1-5)		Comments	
Security	FY	4.6	FZ	—
Cost of Implementation	GA	3.7	GB	Not a concern
Cost of Operations	GC	3.8	GD	—
Acceptance by Large percentage of Trading Partners	GE	4.1	GF	Don't need lots, just key players.
Availability of Internet Access	GG	3.9	GH	—
Ability to Manage Change	GI	3.8	GJ	To take change & embrace it.
Speed/Bandwidth (Network Unable to Handle Increased Traffic)	GK	3.8	GL	—
Key Decision Makers Not Familiar with Internet Technology	GM	3.8	GN	Not a problem
Lack of Appropriate Development Skills	GO	3.3	GP	Lack of # of people who know it.
Lack of Development Tools	GQ	3.2	GR	We will buy these skills. We will buy them
System Not Continuously Available	GS	3.7	GT	
Lack of Internet Application Packages	GU	3.2	GV	dipping as time goes on
Key Decision Makers Not Convinced of Internet Benefits	GW	3.5	GX	—
Other 1	GY	—	GZ	—
Other 2	HA	—	HB	—

10.a. What is your estimate of the total amount your company will spend on the implementation of IC?

Absolute $_____   HC

or

Range:

```
<$25K        1
$26-$100K    2
$101K-$250K  3
$250K - $1M  4
> $1M        5
```

10.b. What is your estimate of the total amount your company will spend on annual IC operations?

Absolute $_____

or

HD

Range:

<$25K ___1___

$26-$100K ___2___

$101K-$250K ___3___

$250K - $1M) ___4___

> $1M ___5___

11. Do you have any other comments that you'd like to make on the implementation or requirement for Internet Commerce?

H E

M   N   O   P   Q   R   S   T

QNUM	Q1-A	Q1-B	Q1-C/1	Q1-C/2	Q1-D	Q1-E	Q1-F	Q1-G
2001	1	10 yrs.	1		MIS	0		
2002	1	5 yrs.	1		1 IS Dir.	0		
2003	1		1			0		
2004	1	6 yrs.	0		distributed	0		
2005	1	2 yrs.	1		1 Web developer	1 (will be in future)	Not yet but will.	
2006	1	5 yrs.	1		1 SAP dev. team	0		
2007	1	DK	1		1 Not yet decided	Not yet		
2008	0		1		1 NA	0		
2009	1	Just started.	1		1 Stacey Jennings	0		
2010	1	yrs.	1		1 Leslie		1 couple mths.	Leslie
2011	0		0	NA	NA	0		
2012	1	10 yrs.	1	Probably	Reuben Clark	0		
2013	1	3 yrs.	1			0		
2014	0		1		1 Self	0		
2015	1	3 yrs.	1	Investigating it. Talking w/ vendor.	Tom Hickey	0		
2016	1	1990	1	Skeptical.	Myself & another day to day handle.			
2017	0		0		1 None yet.	0		
2018	0		1	possibily	Don't use it	0		
2019	1	9 yrs.	1		1 I do (Ron Fischer)	0		
2020	1	10 yrs.	1		1 EC Mgr.		1 some implemented, more coming	EC Mgr.
2021	1	5 yrs.	1		1 self	0		
2022	1	5 yrs.	1	DK		0		
2023	1	3 yrs.	1		0 self	0		
2024	1	Varies w/ function	0		0 EDS	0		
2025	1	Over 5 yrs.	1		1 IT Dept.	0		
2026	1	5 yrs.	1		1 self	0		
2027	1	3 yrs.	1		1 IS Dept.	0		

M N O P Q R S T

QNUM	Q1-A	Q1-B	Q1-C/1	Q1-C/2	Q1-D	Q1-E	Q1-F	Q1-G
2028	0		1	1			0	
2029	1	4 yrs.	1		1 MIS/ Sys. Dev.		0	
2030	1	5 yrs.		1 Probably in future	MIS		0	
2031	1	5 yrs.	1		1 MIS		0	
2032	1	Several years		1	IS Dept. w/ functional 1 areas.		0	
2033	1	10-12 yrs.	1		1 MIS		0	
2034	1	8 yrs.	1		1 MIS/CIO		0	
2035	1	11 yrs.		1 Within the next 2-3 yrs.	IS Dept.		0	
2036	1	6 yrs.	1		1 MIS		0	
2037	1	15 yrs.		1 unknown at this time.	MIS		0	
2038	1	4 yrs.	1		1 MIS		0	
2039	1	7.5 yrs.	1		MIS Dept. or each 1 individual dept.		0	
2040	1	8 yrs.	1		1 MIS		0	
2041	1	2 yrs.	1		1 MIS		0	
2042	1	10 yrs.	1		1 MIS Dept.		0	
2043	1	15 yrs.	1		1		0	
2044	1	8 yrs.	1		0 Coord. Inventory Sys.		0	
2045	1	10 yrs.	1		Mgr. Cost Reductions 1 Projects		0	
2046	1	5 yrs.	1		1 Self		0	
2047	1	10-12 yrs.	1		1 Finance groups		0	
2048	1	7 yrs.	1		Between IS and 1 Customer Relations		0	

M   N   O   P   Q   R   S   T

QNUM	Q1-A	Q1-B	Q1-C/1	Q1-C/2	Q1-D	Q1-E	Q1-F	Q1-G
2049		1 5-10yrs.		1 potentially	IS Dept.	0		
2050		1 10 yrs.		1	Nancy Farmer	0		
2051		1 11 yrs.		1	1 Sys. Consultant	0		
2052		1 10 yrs.		it would be 1 investigated.	IT group	0		
2053		1 8 yrs.		1	1 NA	0		
2054		1 3 yrs.		1	1 self	0		
2055	0 - plan to use IL			1	0 Division of GE	0		
2056		1 4-6 yrs.		1	1 IS Dept.	0		
2057		0		OK - installing SAP system (A global sys.) complete functionality 1 of operating areas.		0		
2058		1 1.5 yrs.		1	0 Mr. Bouchard	0		
2059		0		0 NA		0		
2060		1 10 yrs.		1	0 Self	0		
2061		0		0 We will if it need be.		0		
2062		1 2 yrs.		1	1 Self	0		
2063		0		1	1 Mgr. of EC	0		
2064		1 5 yrs.		1	1 NA	0		
2065		0		1	1 Self	0		
2066		1 10 yrs.		1	2 Treasury Dept.	0		
2067		1 5+ yrs.		1	Gary Hargreves-EDI 1 Mgr.		planning/devel 0 opment stages	Mgr. of EC
2068		1 OK		1 possibility	IS & Treasury Dept.	0 Not yet but will.		
2069		1 5 yrs.		1 over time	Div. under CIO & IS	0		

M N O P Q R S T

QNUM	Q1-A	Q1-B	Q1-C/1	Q1-C/2	Q1-D	Q1-E	Q1-F	Q1-G
2070		1 Pilot Stages	1		1 Systems Area		1 Not yet	
2071		1 15-20 yrs.	1		1 Each Division Manages own.	0		
2072		1 5 yrs.	1		1 NA	0		
2073		1 5 yrs.	1		1 NA	0		
2074		0 NA		1	1 Emily Troutner	0		
2075	0			1	1 NA	0		
2076	0 - very little internally. We do it "Intranet"			0	0	0 - Not yet but we will be using Internet in the future.		
2077		1 10 yrs.	1		1	0		
2078		1 3 yrs.		1 Probably not	Dir. of EC	0		
2079		1 2 yrs.		0 In process of	Comp. Operations	0		
2080		1 9 yrs.	1		1 Self	0		
2081		1 10 yrs.	1		1 Self	0		
2082		1 7 yrs.	1		1 Self	0		
2083		1 8 yrs.	1 - use of VAN	Future	EDI EC Specialist	0		
2084		1 15 yrs.	1		1 Mr. Prescott	0		
2085		1 8 yrs.	1		1 Self	0		

QNUM	Q1-H
2001	
2002	
2003	
2004	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	Bob Maiorisi
2014	
2015	
2016	
2017	
2018	
2019	
2020	same
2021	
2022	
2023	
2024	
2025	
2026	
2027	

QNUM	Q1-H
2028	
2029	
2030	
2031	
2032	
2033	
2034	
2035	
2036	
2037	
2038	
2039	
2040	
2041	
2042	
2043	
2044	
2045	
2046	
2047	
2048	

QNUM	Q1-H
2049	
2050	
2051	
2052	
2053	
2054	
2055	
2056	
2057	
2058	
2059	
2060	
2061	
2062	
2063	
2064	
2065	
2066	
2067	NA
2068	
2069	

QNUM	Q1-H
2070	Systems Area
2071	
2072	
2073	
2074	
2075	
2076	
2077	
2078	
2079	
2080	
2081	
2082	
2083	
2084	
2085	

W   Z

QVLM	Q11	Q11 COMM	Q2J	Q2A	Q3-B	Q3-C PAPER-BASED
2001	1				0	0
2002	1				0	2
2003					0	1
2004	1.5 mths				1	1 1.3
2005	1				1	0
2006	1				1	3
2007	1				1	3
2008	1				3	1
2009	1				0	4
2010					1	1
2011	1					0
2012						1
2013	1				0	1
2014	1				0	1
2015	1			Depends for certain things		2
2016	1			0 (We will invent a new one)	0.1	
2017	1				1	2
2018	1 Just started looking into it and plan to do it				1	1
2019	1				1	2
2020	1				1	2 1.3
2021	1				0	0
2022	1				1	2
2023	1				1	3
2024	1				1	1
2025	1				1	Ok yes, new 3 added
2026	1				1	0
2027	1				1	3

V W X Y Z

OMSM	Q1-	Q1-COMM	Q1-J	Q2-A	Q2-B	Q2-C PAPER-BASED
2328		We have a website that provides info for our customers. We have just started researching our competitors & are scoping out the business.			1	2
2329	( )				1	2
2030					1	3
2031					1	1
2032					1	1
2033					1	1
2034		We have a concrete plan which will be implemented by '98.			1	1
2035					1	1
2036					1	2
2037		The internet opens up new channels to obtain customers. Something our company wants.			1	1
2038		We want people to be able to place & track orders with us & let our stores access vendor catalogs through Internet.			1	1
2039					1	3
2040					1	1
2041					1	4
2042					1	1
2043					1	1
2044					1	1
2045					1	1
2046					1	2
2047					1	1
2048					1	2

V   W   X   Y   Z

ORGM	Q1-I	Q1-I COMM	Q1-J	Q2-A	Q2-B	Q2-C PAPER-BASED
2049	1				1	1
2050	1				1	1
2051	1				1	1 1.5
2052	1				a Little bit longer	
2053	1				1	1
2054	1				1	1
2055	1				1	1
2056	1				1	1
2057	1				1	1
2058	1				1	2 1.5
2059	1					1 DK Don't know. Depends on customer request.
2060	1					
2061	1				1	1
2062	1				1	1
2063	1				1	2
2064	1		NA		1	1
2065	1				1	1
2066	1				1	1
2067	1				2	
2068	1				1	its different for different subsidiaries
2069	1				1	1

V   W   X   Y   Z

QNUM	Q1-I	Q1-I COMM	Q1-J	Q2-A	Q2-B	Q2-C PAPER-BASED
2070	1				(1)	1
2071	1				1?	1
2072	1				1?	3 OA
2073	1				1	3
2074	1				1	
2075	1				1	3
2076	1			Not sure		3 Will may know
2077	1				1	3
2078	1				1	2
2079	1				1 OA 1-2 yrs.	1
2080	1				1	2
2081	1				1	2
2082	1				1	1
2083	1				1	1
2084	1				1	2 Not sure
2085	1				1	3

Q 2c.

QNUM	Q2-C PAPER-BASED (AA)	Q2-C PROP. VAN (AB)	Q2-C PUBLIC INTERNET (AC)	Q2-C EXTRANET (VPN) (AD)
2001		2		
2002		2		
2003				
2004	1,3	1	3	
2005	2	2	2	
2006	2	2	2	2
2007		2		
2008	2			
2009	1	1	2	
2010	1	2	1	
2011	2			
2012	1			
2013	3	3	3	
2014	2			
2015		2		
2016			•	2
2017		2		
2018				
2019		2		
2020	1,2	2	2	2
2021	2			
2022	2	2		
2023		2		
2024			3	
2025	DK yet, too soon!			
2026		2		
2027			2	

QNUM	AA Q2-C PAPER-BASED	AB Q2-C PROP. VAN	AC Q2-C PUBLIC INTERNET	AD Q2-C EXTRANET (VPN)
2028			2	
2029		2		
2030		2		
2031	2			
2032	2			
2033	2			
2034		2		
2035			2	
2036		2		
2037		3		
2038		2		
2039	2			
2040	1			
2041		2		
2042		2		
2043		3		
2044	1	1	1	1
2045	1	1	1	1
2046		2		
2047				2
2048		2	2	2

AA AB AC AD

QNUM	Q2-C PAPER-BASED	Q2-C PROP. VAN	Q2-C PUBLIC INTERNET	Q2-C EXTRANET (VPN)
2049	2		2	
2050		2		
2051	1,3	3	3	3
2052		3		
2053		2		
2054		2		
2055	3	3	3	3
2056			2	
2057			2	
2058	1,3			
2059	DK			
2060	Don't know. Depends on customer requests.			
2061	2			
2062		2		
2063	3	3	2	3
2064			1	
2065			Modem	
2066				2
2067				2
2068	all different for different subsidiaries			
2069			2	

AA   AB   AC   AD

QNUM	Q2-C PAPER-BASED	Q2-C PROP. VAN	Q2-C PUBLIC INTERNET	Q2-C EXTRANET (VPN)
2070			1	
2071				2
2072	DK	DK	DK	DK
2073			2	
2074			2	
2075			2	
2076	MIS may know.			
2077			2	
2078			2	
2079	1		1	1	1
2080			2	
2081			3	
2082			2	
2083	1		1	1	1
2084	Not sure			
2085			2	

Software Product
Vendors

INPUT

Q5a Planvas.

Supply Tech	1
Microsoft	~~1111~~ ~~1111~~ 111
Sterling Commerce	~~1111~~ ~~1111~~ 11
Netscape	~~1111~~ 111
Geis	11
Premenos	~~1111~~ 1
Harbinger	1
IBM	1111
SAP	1
AOL	1
Domino Merchd	1
Lotus	1

	BN	BO	BP
QNUM	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
2001	Supply Tech.		
2002	Microsoft	Corel	Novell
2003	DK		
2004	Sterling Commerce	IBM	
2005	Don't know yet; too soon.		
2006	Microsoft	Netscape	IBM
2007	Internet software: Netscape		
2008	Netscape	Microsoft	Sterling, Premenos
2009	DK		
2010	No comment		
2011	DK		
2012	Geis		
2013	Microsoft		
2014	Microsoft	IBM	
2015	Preminos	Sterling	
2016	Geis	Harbinger	Sterling
2017	DK		
2018	No idea, haven't really looked at vendors yet.		
2019	Passed on this quest.		
2020	Microsoft	Harbinger	
2021	DK	Dec	Sterling
2022	DK		
2023	Netscape		
2024	NA		
2025	DK		
2026	Sterling	GTE	
2027	Harbinger		

BN   BO   BP

QNUM	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
2028	Microsoft	Oracle	
2029	Microsoft	Lotus	
2030	Netscape		
2031	Microsoft		
2032	Sterling	Oracle	
2033	IBM	Lotus	
2034	Premenos		
2035	Premenos (for EDI)		
2036	Premenos	Oracle	
2037	Sterling	Geis	
2038	SAP	Oracle	
2039	Microsoft	Marisel	Software Spectrum
2040			
2041	Microsoft	IBM	
2042	Premenos	Harbinger	
2043	DK		
2044	Sterling software		
2045	Sterling Commerce	TSI	
2046	DK		
2047	DK		
2048	Sterling Commerce		

BN   BO   BP

QNUM	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
2049	Most of it is inhouse		
2050	Premenos	Harbinger	
2051	IBM	Microsoft	Netscape
2052	Not really		
2053	AOL	Compuserve	
2054	DK		
2055	DK		
2056			
2057	Microsoft	SAP	
2058	Netscape	Explorer	
2059			
2060	DK		
2061	Microsoft	Unisys (getting rid of very soon)	
2062	Domino Merchant		
2063	Microsoft	Oracle	
2064	DK		
2065	Lotus	Microsoft	
2066	Netscape		
2067	IBM	GE	AT&T
2068	unknown		
2069	Sterling	Premenos	

BN BO BP

QNUM	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
2070	SAP	Oracle	Peoplesoft
2071	Sterling Commerce	Netscape	Harbinger
2072	DK		
2073	DK		
2074	Netscape	SAP	Microsoft
2075	NA		
2076	DK vendors at all		
2077	Sterling		
2078	DK		
2079	DK		
2080	Sterling		
2081	DK		
2082	Netscape		
2083	Sterling Commerce		
2084	IBM		
2085	DK		

Q 5a   PLANNERS

INPUT

Services   Vendors

Byton /NSG	1
✓ AT&T	~~4444~~
Microsoft	1
✓ Sterling	~~4444~~ 111
✓ GEIS	~~4444~~ 11
Premenos	1
Enter	1
✓ IBM	1111
✓ Andersen Consulting	~~4444~~ 11
H P	1
✓ Harbinger	111
✓ KPMG	11
UU Net	1
MCI	1
Net Tim	1
Ernst & Young	1
Netscape	1
EDS	1
SAP	1

EVALUATION OF INTERNET COMMERCE IN MANUFACTURING

User Questionnaire

Note: this survey uses the following definitions and abbreviations:
- Electronic Commerce (EC): the purchase and sale of goods and services where the transactions flow between the buyer and seller via a computer network.
- Internet Commerce (IC): electronic commerce that uses the Internet.
- EDI (electronic document interchange): a set of formatted, standardized messages that enable computer-to-computer business transactions between trading partners. Examples of transactions include processing sales orders and invoices electronically.

1. a. Do you use electronic commerce in your organization? *M*

Yes	No
(go to 1b)	(go to 1c)

    b. *N* How long have you been using electronic commerce?

    c. *O* Are you currently using EDI? *P* Will you incorporate EDI into Internet Commerce?

    d. *Q* Who manages EC in your company/organization?

    e. *R* Do you use the Internet in your electronic commerce?

Yes	No
(go to 1f)	(go to 1i)

    f. *S* How long has your organization been doing Internet Commerce?

    g. *T* Who manages IC in your company/organization.

    h. *U* Who will manage IC for your company/organization?

(Go to Q2)

    i. *V* Is Internet Commerce planned in the next 2-3 years? Y/N_____
        If "Yes", go to **Part II - Prospect Questionnaire**.

Comments

j. *W* **If no, why not?**

(Terminate)

2. a. ✗ What is the status of your migration to Internet Commerce?

_a_ Currently underway/this year	_d_ Done
_b_ By end-1998	_e_ Adding more functions
_c_ 1999-2000	

2.c. Please describe your migration:

FROM	TO		
	Private VAN	Public Internet	Extranet/VPN
Paper-based			
Proprietary VAN			
Public Internet			
Extranet (VPN)			

3. How important is each of the following objectives in your planning for Internet Commerce? (5=very important)

b. And how satisfied are you with the achievement of these objectives so far? (5=very satisfied)

Objective	Importance Rating (1-5)	Satisfaction Rating (1-5)	Comments
Reduce Costs of Operation	AC	AD	AE
Reduce Order-to-Delivery Time	AF	AG	AH
Extend Reach to Additional Trading Partners	AI	AJ	AK
Improve Customer Service	AL	AM	AN
Increase Ability to Manage Business	AO	AP	AQ
Increase Speed of Introduction of New Products & Services	AR	AS	AT
Offer Longer Hours When "Open for Business"	AU	AV	AW
Other1	AX	AY	AZ
Other2	BA	BB	BC

BD

4. Please describe your approach to implementation. For example, which of the following would apply to the implementation approach?

Enterprise-wide (all applications at once) _____ a
Department/function by Department/function _____ b
Process by Process _____ c

Details/Description

BE

5. a. In your opinion, who are the leading vendors in Internet Commerce? Please name 1-3 of each type.

Type of Vendor	Leading Vendor
Software Product Vendors	
	BF
	BG
	BH
Services Vendors	
	BI
	BJ
	BK
Hardware Vendors	
	BL
	BM
	BN

5. b. In your opinion, who are the emerging vendors in Internet Commerce?

Emerging Vendor	Area of Specialty
BO	BP
BQ	BR
BS	BT

BU (Comments).

6. a. Please rate on a scale of 1 to 5 (1 = unimportant, 5 = important criterion) the criteria your organization uses to select an implementation vendor.

- _BV_ Experience in electronic commerce/EDI
- _BN_ Experience in Internet technology
- _BX_ Cost
- _BY_ Speed
- _BZ_ Promised business impact
- _CA_ _BA_ Existing and satisfactory relationship with vendor
- _CB_ Other (Please describe)

6. b. Please rate on a scale of 1 to 5 (1 = unimportant, 5 = important criterion) the criteria your organization uses to select an operations vendor.

- _CC_ Experience in electronic commerce/EDI
- _CD_ Experience in Internet technology
- _CE_ Experience in outsourcing/operations management services
- _CF_ Cost
- _CG_ Promised business impact
- _CH_ Existing and satisfactory relationship with vendor
- _CI_ Other (Please describe)

7.a. What software products, hardware products and services have been/will be required for the implementation of Internet Commerce in your organization?

Software Product	Required? (Y/N)	New Purchase? (Y/N)	Product (if known)
Development Tools	CJ	CK	CL
Security	CM	CN	CO
Messaging	CP	CQ	CR
Communications	CS	CT	CU
Full Application Package, e.g. billing, ordering	CV	CW	CX
EDI-related, e.g. mapping, translator	CY	CZ	DA
Catalog	DB	DC	DD
Other 1	DE	DF	DG
Other 2	DH	DI	DJ

7.b.

Hardware Product	Required? (Y/N)	New Purchase? (Y/N)	Product/Vendor
Servers: Enterprise	DK	DL	DM
Servers: Departmental	DN	DO	DP
Network Hardware	DQ	DR	DS
Desktop Hardware	DT	DU	DV
Network Computers	DW	DX	DY
Other 1	DZ	EA	EB
Other 2	EC	ED	EE

7.c.

Services	Required? (Y/N)	Plan to Use In-house (I), External Vendor (E) or Both (B)	Possible Vendor
Consulting/Planning	EF	EG	EH
Application Development	EI	EJ	EK
Integration With Existing Applications	EL	EM	EN
EDI-related Services	EO	EP	EQ
Education/Training	ER	ES	ET
Conversion of Existing EC Applications	EU	EV	EW
Other 1	EX	EY	EZ
Other 2	FA	FB	FC

8. How important is Internet Commerce to the following processes/functions of your organization? (5=very important)

Process/function	Importance Rating (1-5)
Marketing and Advertising	FD
Sales	FE
Purchasing	FF
Customer Service	FG
Production:	FH
Raw Material Scheduling	FI
Inbound Material Tracking	FJ
Scheduling	FK
Inventory Management	FL
Distribution	FM
Routing/Scheduling	FN
Sales Forecasting	FO
Channel Management	FP
Manufacturing Production Operations	FQ
Production Planning	FR
Other 1	FS
Other 2	FT

9. Regarding your organization's experience with the implementation and operation of Internet Commerce, please answer the following:
a. What was good/effective?

FU

b. What was bad/ineffective?

FY

c. What are some of the "lessons learned"?

FW

d. What advice do you have for others?

FX

10. What products are you currently using for Internet Commerce? Please rate your satisfaction with these products on a scale of 1-5 (5=very satisfied)

IC Software Product Type	Product Name	Satisfaction Rating (5=high)	Comments for Rating of 1 or 2
Translation	FY	FZ	GA
Mapping tool	GB	GC	GD
Scheduling tool	GE	GF	GG
Communications	GH	GI	GJ
Payments processing	GK	GL	GM
Messaging	GN	GO	GP
Security	GQ	GR	GS

11. What services are you currently using for Internet Commerce? Please rate your satisfaction with these services on a scale of 1-5 (5=very satisfied)

Type of Service	Satisfaction Rating (5=high)	Vendor
GT	GU	GV
GW	GX	GY

12. Please rate on a scale of 1-5 (1=low, 5=high) the criticality of each of the following potential inhibitors to planning and implementing Internet Commerce.

Inhibitor/Concern	Criticality (1-5)	Comments
Security	GZ	HA
Cost of Implementation	HB	HC
Cost of Operations	HD	HE
Acceptance by Large percentage of Trading Partners	HF	HG
Availability of Internet Access	HH	HI
Ability to Manage Change	HJ	HK
Speed/Bandwidth (Network Unable to Handle Increased Traffic)	HL	HM
Key Decision Makers Not Familiar with Internet Technology	HN	HO
Lack of Appropriate Development Skills	HP	HQ
Lack of Development Tools	HR	HS
System Not Continuously Available	HT	HU
Lack of Internet Application Packages	HV	HW
Key Decision Makers Not Convinced of Internet Benefits	HX	HY
Other 1	HZ	IA
Other 2	IB	IC

13. Who is the Internet Commerce champion in your company? Who is the IC decision maker?

Position	IC Champion	IC Decision Maker	Comments
CEO/CFO	I D	I E	I F
CIO/IS Manager	I G	I H	I I
Network Manager	I J	I K	I L
Business Function Personnel Function: Position:	I M	I N	I O
Other 1	I P	I Q	I R
Other 2	I S	I T	I U

14. Do you have any other comments that you would like to make on the implementation and requirement for Internet Commerce?

I V

→ PIA,   Pages 51 through 70

from
Peter Lines.

A

European Data Analysis

This Appendix contains an analysis of the European data collected in a parallel exercise to that undertaken for the U.S. market and reported on in the main body of the report.

The Exhibit classification in this Appendix maps exactly across to the equivalent U.S. data Exhibits included in the main body of the report with the exception of the Executive Summary.

The mapping system is as follows:

- Exhibit AA-1 corresponds to Exhibit I-1.

- Exhibit AA-2 corresponds to Exhibit I-2.

- Exhibit AB-1 etc. correspond to Exhibits III-1 etc.

- Exhibits AC-1 etc. correspond to Exhibits IV-1 etc.

- Exhibits AD-1 etc. correspond to Exhibits V-1 etc.

// Please add (Europe)
to each Exhibit Title.

AA
Sample Characteristics

Exhibit AA-1

Field Survey Analysis

Country	Internet Commerce Activity		
	Implementing	Planning	No Plans
United States	23	85	93
Europe	7	43	0
Total	30	128	93

Source: INPUT

Exhibit AA-2

See attached

Country	Implementing	Planning	No Plans
Germany	5	14	0
France	2	16	0
UK	0	13	0
Total	7	43	0

AA

EXHIBIT X-2

Respondent Distribution by ~~Company~~ Company Annual Revenues.

Chart: Respondent Annual Revenues (vertical axis) vs. Number of Respondents (horizontal axis)

- >5B: ~~25~~ 4
- 1B-5B: ~~72~~ 18
- 250-1B: ~~86~~ 14
- 100-250: ~~37~~ 10
- <$100M: ~~32~~ 1
- No reply: ~~14~~ 3

Horizontal axis marks: 50, 100

Total Sample ~~201~~ 50

52.1
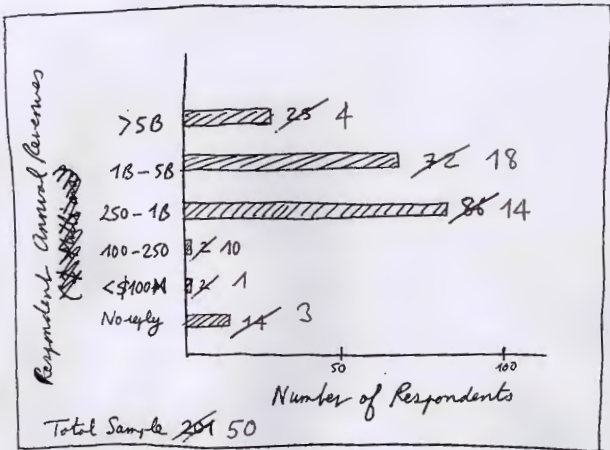
AB
Planning Considerations

Exhibit AB-1

please re-order descending.

Objectives for Internet Commerce

Objective	Importance
Improve Customer Service	3.2
Reduce Cost of Operations	3.6
Reduce Order-to-Delivery Time	3.3
Extend Reach to Additional Trading Partners	3.9
Increase Ability to Manage Business	3.7
Increase Speed of Intro of New ----	2.7
Offer Longer Hours when "Open for Business"	3.7

Importance (1=low, 5=high)

U.S. Sample Size= 108
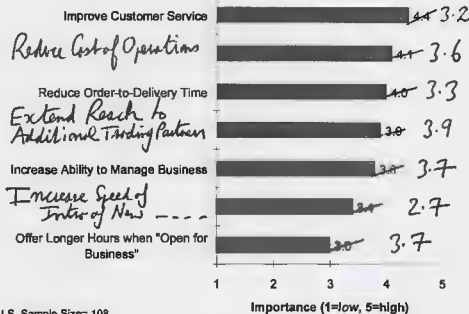
Source: INPUT

Exhibit AB-2

Objectives for Internet Commerce - Implementers

Objective	Importance
Reduce Order-to-Deliver Time	4.0
Extend Reach to Additional Trading Partners	4.0
~~Improve Customer Service~~ *Increase Ability to Manage Business*	4.0
Reduce Cost of Operations	3.9

Importance (1=low, 5=high)

Sample # = 7
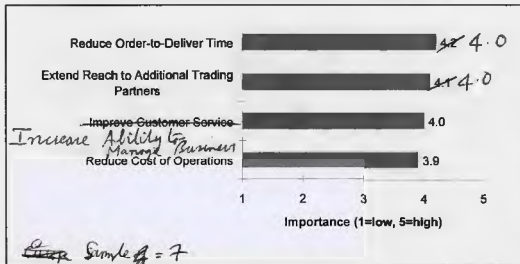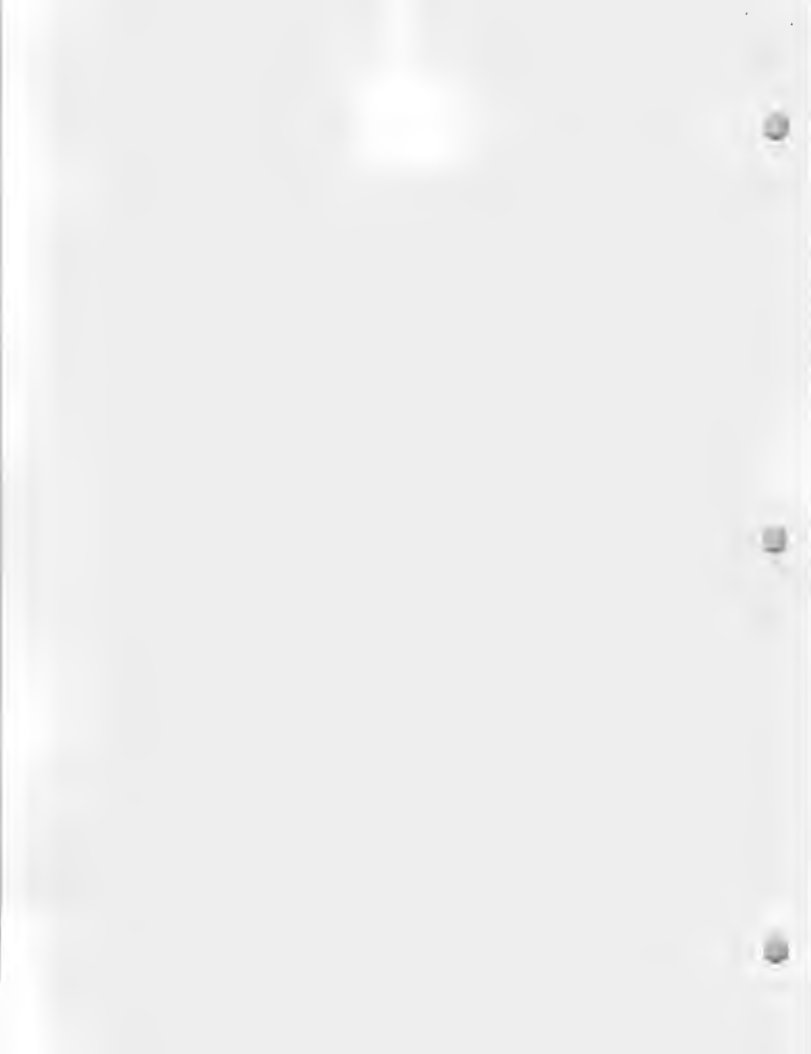
Source: INPUT

please re-order in descending sequence. ↓ ✓

Exhibit AB-3

Objectives for Internet Commerce - Planners

Offer Longer Hours
~~Improve Customer Service~~ — 3.9 / 4.5

Reduce Cost of Operations — 3.6

Increase Ability to Manage Business
~~Reduce Order-to-Delivery Time~~ — 3.9 / 3.7

Extend Reach to Additional Trading Partners — 3.8 / 3.9

Importance (1=low, 5=high)

Sample = 43

Source: INPUT

Exhibit AB-4

re-order ↓ ✓

Critical Inhibitors to Internet Commerce Development

Security — 4.5
Acceptance by Trading Partners — 4.0
Internet Access Availability — 3.2
Cost of Operations — 2.6
Ability to Manage Change — 2.6
Network Bandwidth — 4.1
Lack of Internet Familiarity — 1.9
Cost of Implementation — 2.6
System Availability — 2.8
Internet Benefits not Convincing — 2.0

Importance (1=low, 5=high)

Sample = 50

Source: INPUT

Exhibit AB-5

Critical Inhibitors to Internet Commerce Development - Implementers ✓

Speed/Bandwidth Security — 4+ 4.8
4.7
Acceptance by Trading Partners — 4+ 3.7
Internet Access Availability — 4+ 3.3
Internet Benefits not Convincing — 3.8

Importance (1=low, 5=high)

Sample = 7

Source: INPUT
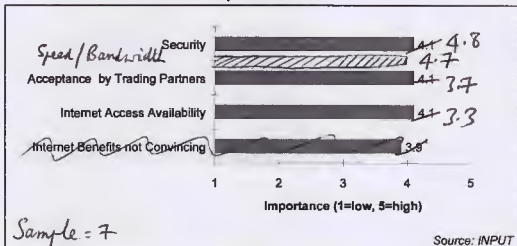
Exhibit AB-6

Critical Inhibitors to Internet Commerce Development - Planners ✓

Security — 4.5
Acceptance by Trading Partners — 4+ 4.0
Internet Access Availability — 3.8 4.0
Speed/Bandwidth

Importance (1=low, 5=high)

Sample = 43

Source: INPUT
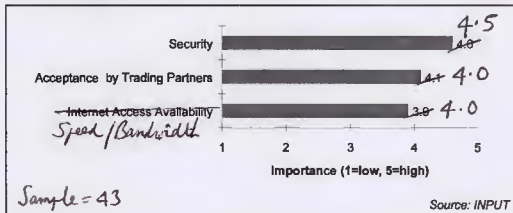
Exhibit AB-7

Distribution of Planned IC Implementation Budget Categories ✓

Horizontal bar chart titled "Distribution of Planned IC Implementation Budget Categories" with handwritten annotations. Categories (top to bottom):
- More than $1M — 10 (handwritten: 3)
- Between $250K - $1M — 24 (handwritten: 8)
- Between $100K - $250K — 28 (handwritten: 11)
- Between $25K - $100K — 24 (handwritten: 5)
- Less than $25K — 8 (handwritten: 0)

X-axis: Percentage of Sample, scale 0, 10, 20, 30

Handwritten annotation lower left: Users = (crossed out) 27

Source: INPUT

Exhibit AB-8

Distribution of Annual Revenue Categories for the User Sample ✓

Source: INPUT

Users= 27

Between $5B and
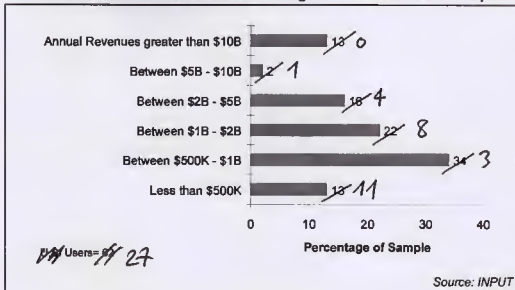
Exhibit AB-9

Distribution of Planned IC Implementation Budget Categories – Firms with Annual Revenues ~~Greater than~~ $10 B ✓

Source: INPUT
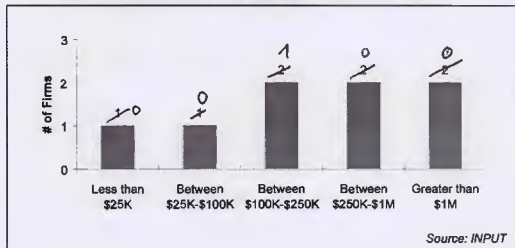
Exhibit AB-10

Distribution of Planned IC Implementation Budget Categories – Firms with Annual Revenues Between $2 B and $5 B ✓

Source: INPUT
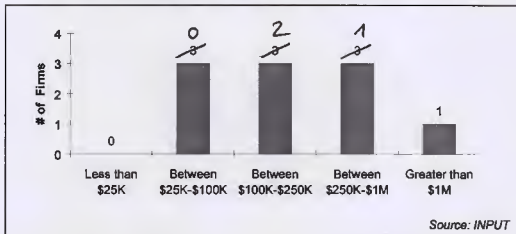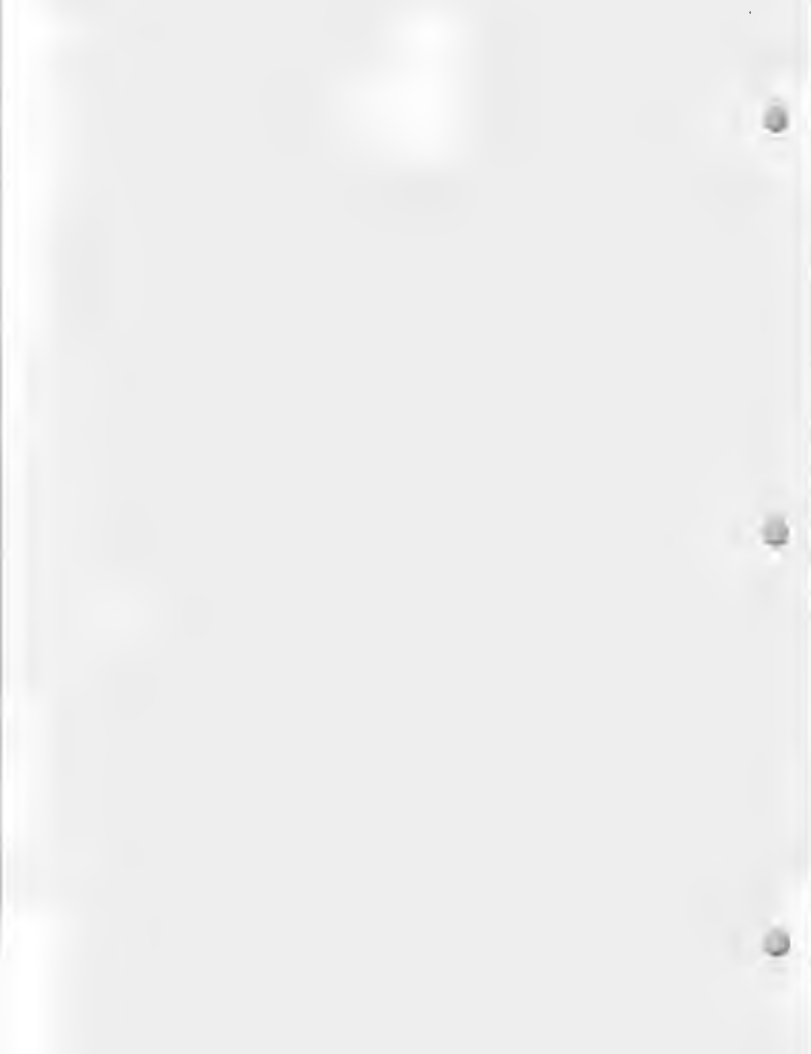
Exhibit AB-11

**Distribution of Planned IC Implementation Budget Categories –
Firms with Annual Revenues Between $1 B and $2 B**

Source: INPUT
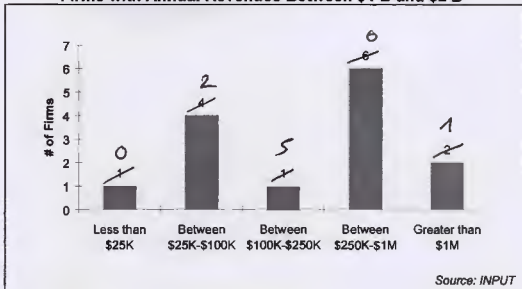
Exhibit AB-12

**Distribution of Planned IC Implementation Budget Categories –
Firms with Annual Revenues Between $500 M and $1 B**

Source: INPUT
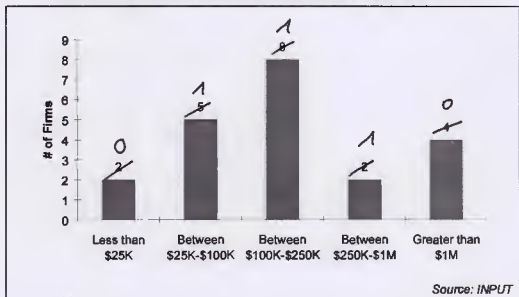
Exhibit AB-13

Distribution of Planned IC Operational Budget Categories ✓

Horizontal bar chart with handwritten annotations:

- More than $1M — 3 / 0
- Between $250K–$1M — 4 / 2
- Between $100K–$250K — 11 / 5
- Between $25K–$100K — 24 / 11
- Less than $25K — 13 / 2

X-axis: # in Sample (0, 10, 20, 30)

Number of Respondents= 50
Users = 20

Source: INPUT
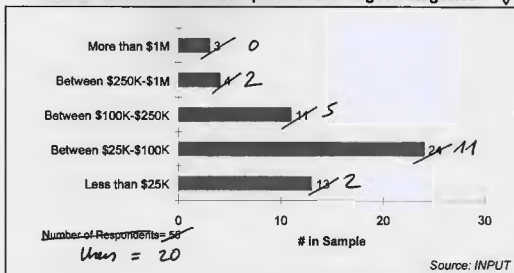
Exhibit AB-14

Distribution of Annual revenue Categories for the User Sample ✓

Horizontal bar chart with handwritten annotations:

- Annual Revenues Greater than $10B — 6 / 0
- Between $5B–$10B — 1
- Between $2B–$5B — 9 / 2
- Between $1B–$2B — 12 / 7
- Between $500K–$1B — 22 / 3
- Less than $500K — 5 / 7

X-axis: # in Sample (0, 5, 10, 15, 20, 25)

Number of Respondents= 55
Users = 20

Source: INPUT
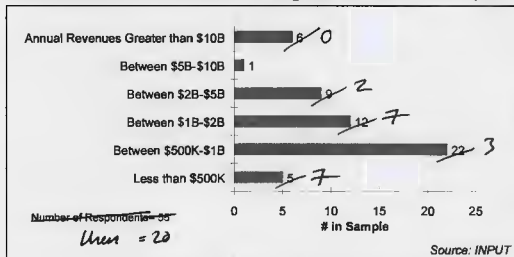
Exhibit AB-15

Between $5 and $10 B

Distribution of Planned IC Operational Budget Categories – Firms with Annual Revenues Greater than $10 B ✓

Source: INPUT
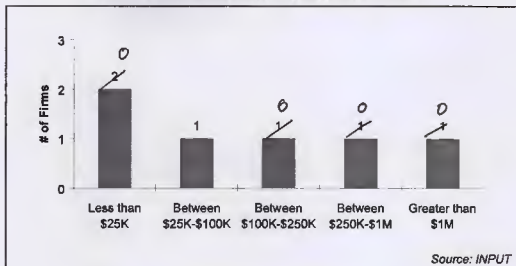
Exhibit AB-16

Distribution of Planned IC Operational Budget Categories – Firms with Annual Revenues Between $2 B and $5 B ✓

Source: INPUT
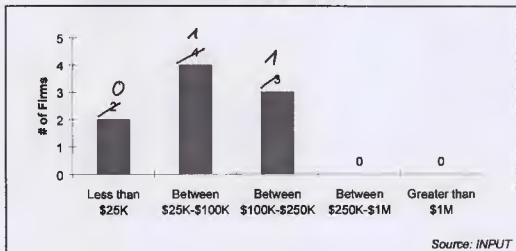
Exhibit AB-17

Distribution of Planned IC Operational Budget Categories – Firms with Annual Revenues Between $1 B and $2 B

Source: INPUT
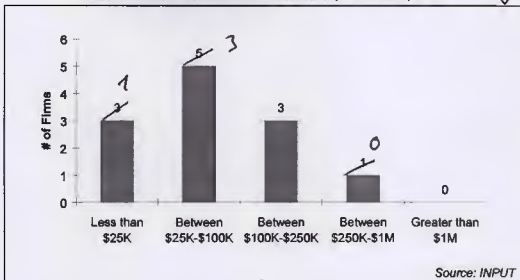
Exhibit AB-18

Distribution of Planned IC Operational Budget Categories – Firms with Annual Revenues Between $500 M and $1 B

Source: INPUT
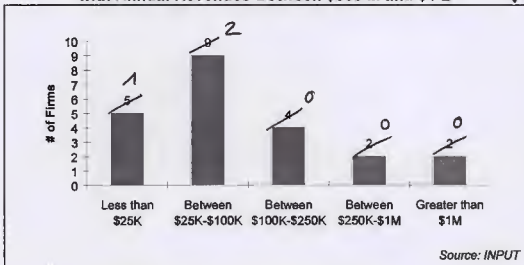
AC
Internet Commerce Implementation

Exhibit AC-1

Plans for IC Implementation

Category	% of Sample
Completed	2
Currently in Process	19
Complete by end 1999	37
Complete by 2000-01	42

103 Users
43 Users

% of Sample

Source: INPUT
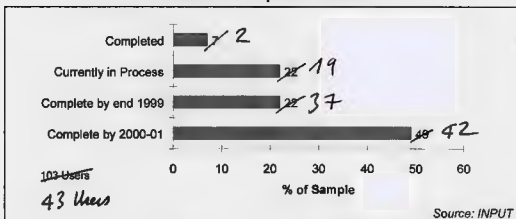
Exhibit AC-2

Objectives for Internet Commerce - Implementers

Category	% of Sample
Adding Functionality	0
Completed	14
Currently in Process	86
Complete by end 1999	0
Complete by 2000-01	0

23 Users
7 Users

% of Sample

Source: INPUT
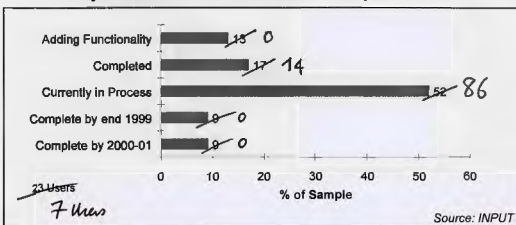
Exhibit AC-3

Objectives for Internet Commerce - Planners ✓

Currently in Process	6 / 44%
Complete by end 1999	44 / 26%
Complete by 2000-01	50 / 60%

0%   20%   40%   60%   80%

% of Sample

~~80 Users~~ 36 Users
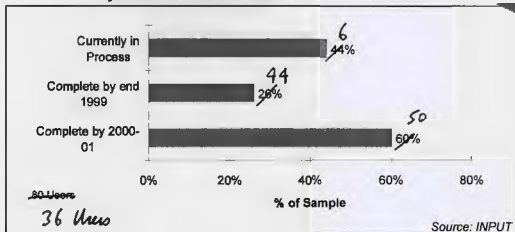
Exhibit AC-4

Existing and Prior Systems for Internet Commerce Migration ✓

Proprietary VAN	53 76
Paper Based Systems	30 24
Virtual Private Networks	17 0

0   10   20   30   40   50   60

% of Sample

50 Users

PCM27
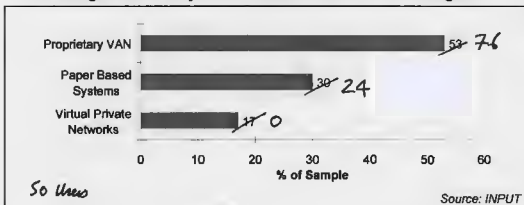
Exhibit AC-5

Current Internet Commerce Migration ✓

Proprietary VAN		52 *29*
Paper Based Systems		43 ✓
Virtual Private Network	5 *29*	

% of Sample — 0, 10, 20, 30, 40, 50, 60

7 thru

Source: INPUT
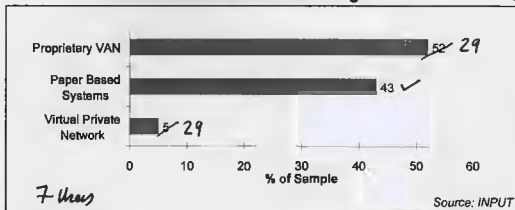
Exhibit AC-6

Planned Internet Commerce Migration ✓

Proprietary VAN		58 *72*
Paper Based Systems	21 *28*	
Virtual Private Network	20 *0*	

85 Users

% of Sample — 0, 10, 20, 30, 40, 50, 60

43 Users

Source: INPUT
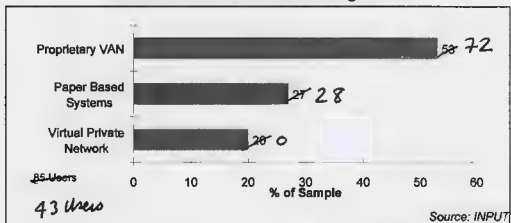
Exhibit AC-7

Internet Commerce Migration Target – Current Proprietary VAN Users

Source: INPUT
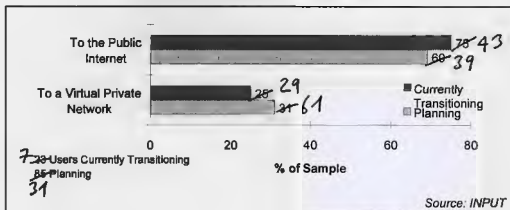
Exhibit AC-8

Internet Commerce Migration Target – Paper Based Users

Source: INPUT
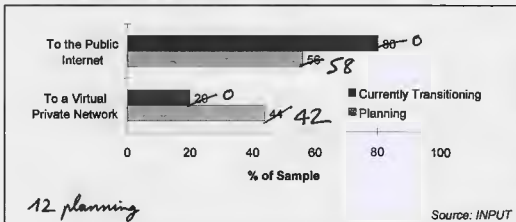
Exhibit AC-9

Implementation Approaches for Internet Commerce ✓

Process by Process — 48 *29*
Department — 30 *51*
Enterprise-wide — 19 *20*

0 10 20 30 40 50 60
% of Sample

49 Users

Source: INPUT
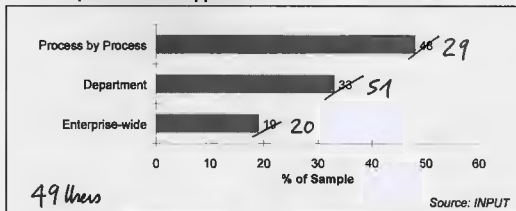
Exhibit AC-10

Current Implementation Approaches for Internet Commerce ✓

Process by Process — 43 *14*
Departmetn — 35 *57*
Enterprise-wide — 22 *29*

0 10 20 30 40 50
% of Sample

7 Users

Source: INPUT
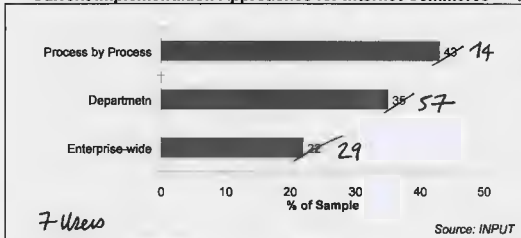
Exhibit AC-11

Planned Implementation Approaches for Internet Commerce ✓

Process by Process ~~48~~ 31

Department ~~32~~ 50

Enterprise-wide 19

0 10 20 30 40 50 60
% of Sample

42 Users

Source: INPUT
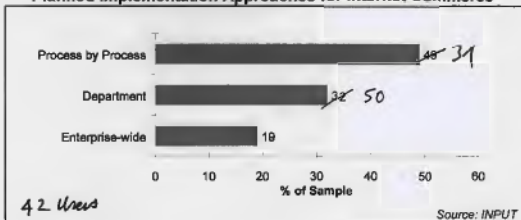
Exhibit AC-12

Importance of Internet Commerce to Specific Business Processes ✓

Customer Services ~~4.2~~ 2.8 / ~~4.0~~ 3.3

Marketing ~~3.0~~ 3.0 / ~~3.8~~ 4.2

Purchasing 3.6 / ~~3.7~~ 3.9

Sales ~~4.2~~ 3.2 / ~~4.0~~ 4.2

Production ~~3.2~~ 3.8 / ~~3.0~~ 3.3

■ Implementing
□ Planning

1 2 3 4 5
Importance (1=low, 5=high)

7 ~~23~~ Implementers
43 ~~36~~ Planners

Source: INPUT
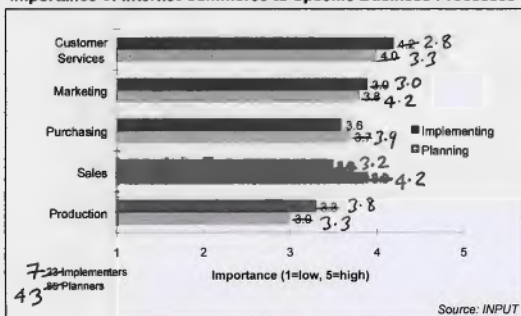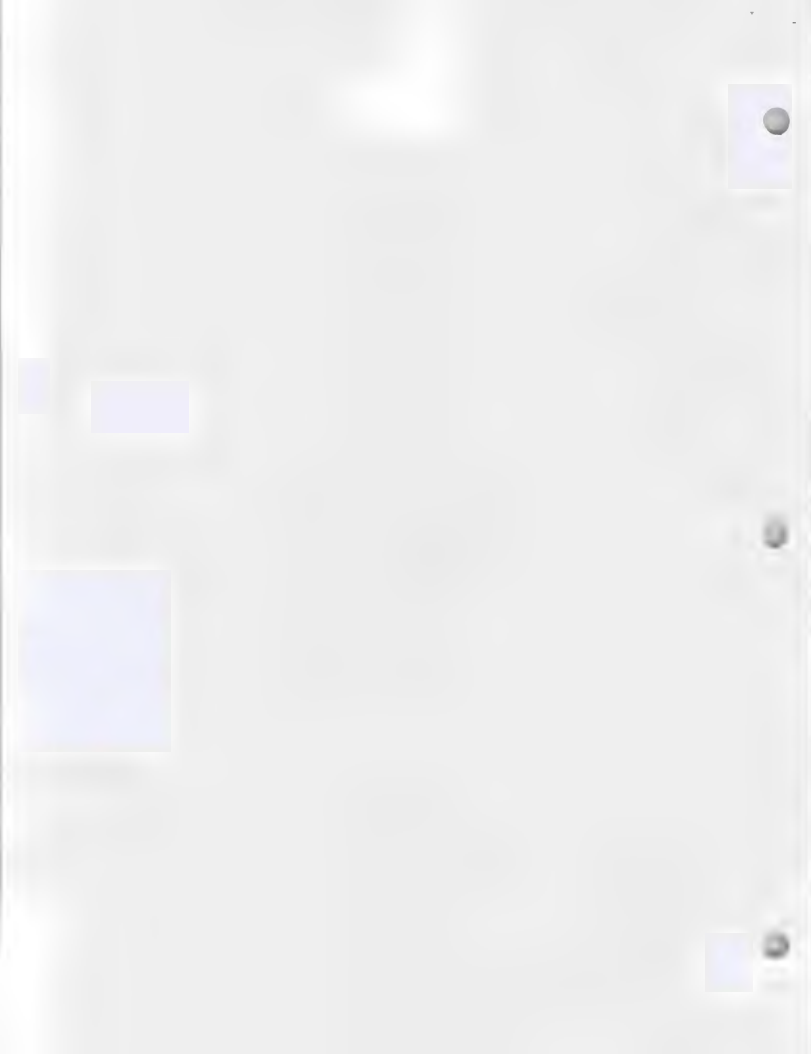
Exhibit AC-13

Importance of Internet Commerce to Specific Production Processes

Bar chart showing importance ratings (1=low, 5=high) for Implementing and Planning across production processes:

Process	Implementing	Planning
In-bound Material Tracking	2.0 (2.2)	2.3 (3.1)
Channel Management	2.2 (3.1)	2.3 (3.1)
Inventory Management	4.0 (3.0)	3.9 (3.1)
Distribution	3.8 (3.0)	4.2 (3.3)
Routing/Scheduling	3.0	2.6 (3.1)
Sales Forecasting	2.2 (2.0)	3.2 (3.1)
Raw Material Scheduling	2.2	2.1
Production Operations	1.8	1.5
Production Planning	3.0	2.0 (3.0)

Importance (1=low, 5=high)

■ Implementing
▨ Planning

7 implementers
43 planners

Source: INPUT

Exhibit AC-14

Internet Commerce Champions ✓

Bar chart titled "Internet Commerce Champions" showing Number of Responses (0 to 10) on the x-axis:
- CIO/IS Manager: ~9 (handwritten: x 0)
- Functional Manager: ~2 (handwritten: x 0)
- Network Managers: ~1 (handwritten: + 3)
- Other Functions: ~3 (handwritten: x 0)

3 User Responses

Source: INPUT

Exhibit AC-15

Internet Commerce Decision Makers ✓

Bar chart titled "Internet Commerce Decision Makers" showing Number of Responses (0 to 14) on the x-axis:
- CIO/IS Manager: ~12 (handwritten: 12 - 3)
- CEO: ~1 (handwritten: x 1)
- Functional Manager: ~1 (handwritten: x 0)
- Network Managers: ~1 (handwritten: x 0)

4 User Responses

Source: INPUT

AD
Internet Commerce Products and Services

Exhibit AD-1

Principal Software product Areas for Internet Commerce ✓

Handwritten annotations on chart:

- Security: 91 → 71, 102 → 74
- Communications Productions (Products): 72 → 57, 87 → 53
- Development Tools: 83 → 86, 70 → 65
- Messaging ~ Merging: 83 → 43, 72 → 47
- EDI Related Products: 74 → 14, 71 → 33
- Full Applications Package: 74 → 57, 59 → 40
- Catalog Software: 36 → 43, 30 → 28

Legend: ■ Implementing ▨ Planning

X-axis: 0 20 40 60 80 100
% of Sample

Source: INPUT

43 Implementers
7 Planners
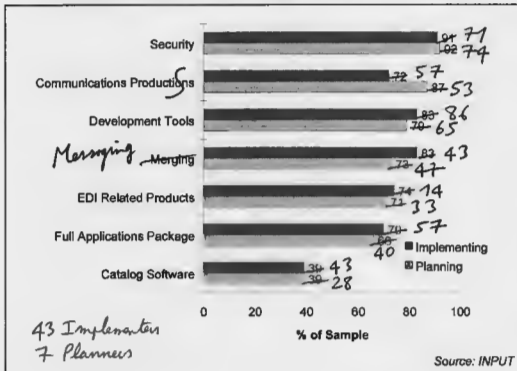
Exhibit AD-2

Principal Software Product Areas - Implementers ✓

Bar chart "Number of Mentions" (0 to 25):
- Security: 24 → 5 (handwritten)
- Communications Products: 20 → 4 (handwritten)
- Development Tools: 19 → 6 (handwritten)
- Messaging: 19 → 4 (handwritten)
- EDI Related Products: 17 → 1 (handwritten)
- Full Applications Package: 18 → 4 (handwritten)
- Catalog Software: 18 → 3 (handwritten)

User sample 23
7 Users (handwritten)

Source: INPUT
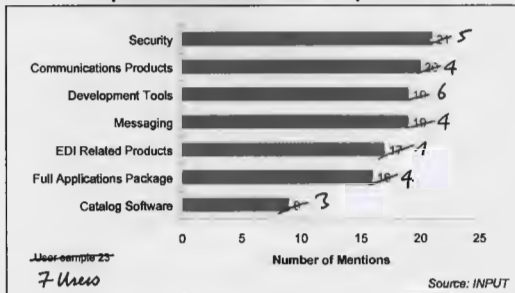
Exhibit AD-3

Principal Software Product Areas - Planners ✓

Bar chart "Number of Mentions" (0 to 100):
- Security: 78 → 32 (handwritten)
- Development Tools: 67 → 28 (handwritten)
- Messaging: 62 → 20 (handwritten)
- Communications: 61 → 23 (handwritten)
- EDI-related: 60 → 14 (handwritten)
- Full Application Package: 55 → 17 (handwritten)
- Catalog Software: 25 → 12 (handwritten)

43 Planners (handwritten)

Source: INPUT
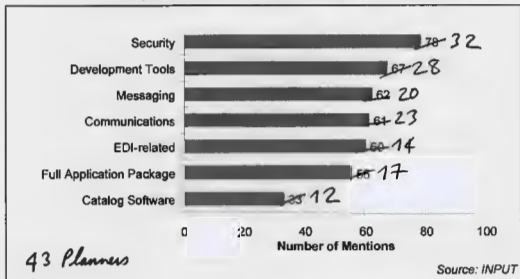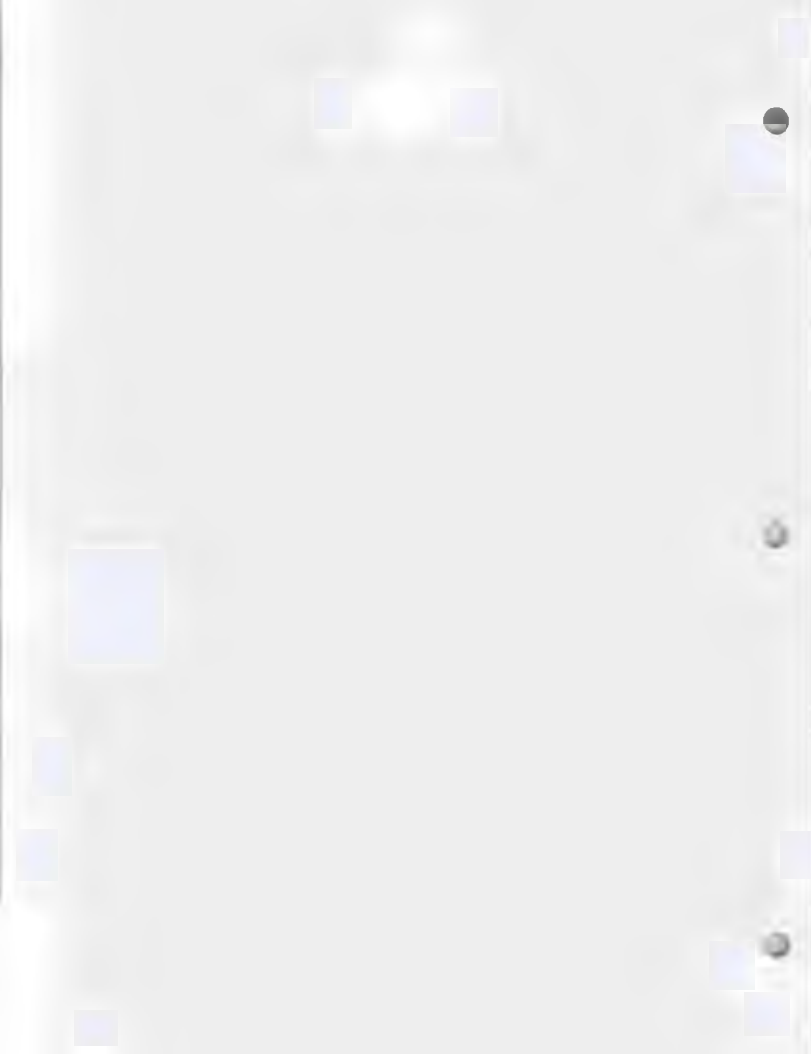
Exhibit AD-4

User Satisfaction with Internet Commerce Software Products ✓

Bar chart "Satisfaction (1=low, 5=high)" with handwritten annotations:

- Tranelations (Translations) — *S* — 44 → 3.0
- Mapping Tools — 4.2 → No Rating
- Scheduling Tools — 4.2 → No Rating
- Communicationos — 4.2 → 4.0
- Security — 4.4 → 4.3
- Payment Processing — 3.6 → 4.7
- Messaging — 3.7 → 3.0

U.S. Sample Size 23

7 Users

Source: INPUT
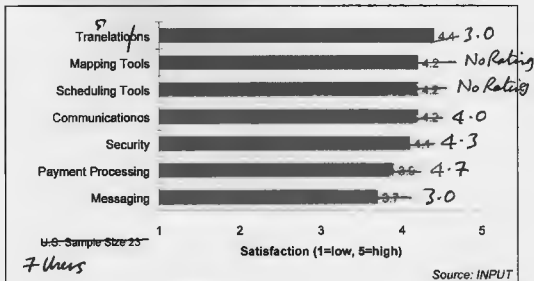
Exhibit AD-5

User Satisfaction with Internet Commerce Services ✓

Bar chart "Satisfaction (1=low, 5=high)":

- Communications — 4.8
- EDI — 4.8
- VAN — 4.0
- Internet Service Per — 3.7

Source: INPUT
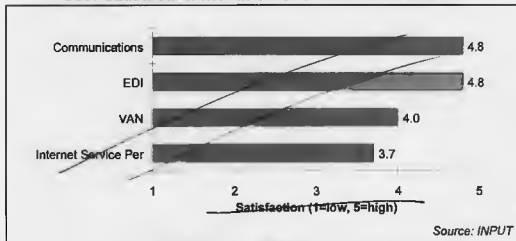
No data returned.

insert this in BOX.

Exhibit AD-6

Software Product Firms Seen as Leaders in Internet Commerce - Implementers

Handwritten annotations (left margin, top to bottom):
Information Builders, *Oracle*, *Microsoft*, *TDS*, *Sun*, *Gemini*, *Netscape*, *Symantec*, *SAP*, *Software AG*

Chart bars:
- Microsoft — (handwritten ✓2)
- Premenos — 2 (handwritten "3 2")
- GTE — 2
- Netscape — 2
- IBM — 2
- GEIS — 1
- ACTRA — 1
- St. Paul — 1
- Lotus — 1
- Connect IM — 1
- No Opinion — 5

x-axis: 0 1 2 3 4 5 6 — **Number of Mentions**

23 Implementers (handwritten: *7 Implementers*)

Source: INPUT
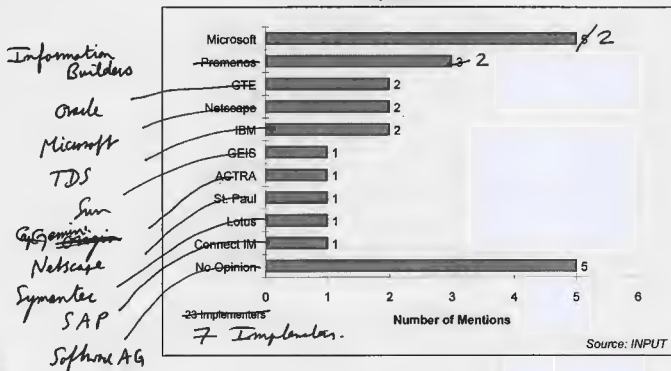
Exhibit AD-7

Services Firms Seen as Leaders in Internet Commerce - Implementers

Handwritten annotations (left margin):
TDS, *GE*, *Microsoft*, *Intentia*, *Sun Service*, *Net Dynamics*

Chart bars:
- GEIS — (handwritten "2 3")
- AT&T — (handwritten "2 1")
- CSC — 1
- Sterling Commerce — 1
- ADVANTIS — 1
- TPN — 1
- MSN — 1
- JDE Associates — 1
- No Opinion — 7

x-axis: 0 1 2 3 4 5 6 7 8 — **Number of Mentions**

18 Implementers (handwritten: *7 Implementers*)

Source: INPUT

PCM27

Exhibit AD-8

Hardware Vendors Seen as Leaders in Internet Commerce - Implementers ✓

Handwritten annotations: IBM; Siemens; Sun; 7 implementers

Source: INPUT
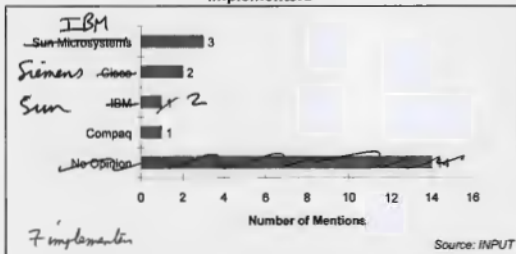
Exhibit AD-9

Software Product Firms Seen as Leaders in Internet Commerce - Planners ✓
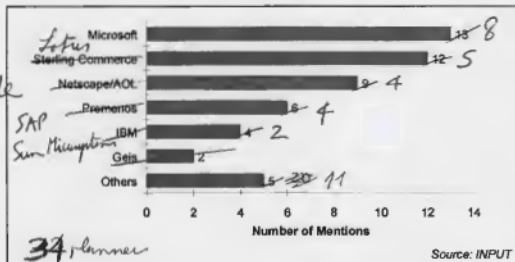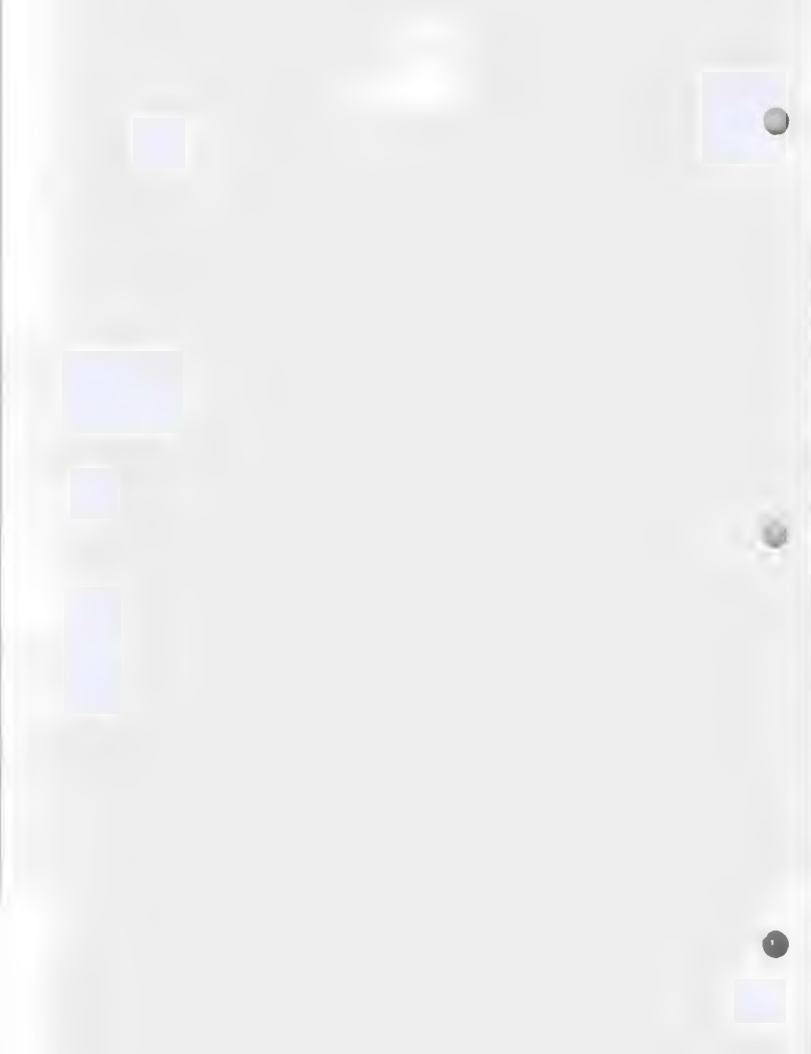
Handwritten annotations: Lotus; oracle; SAP; Sun Microsystems; 34 planner

Source: INPUT

Exhibit AD-10

Services Firms Seen as Leaders in Internet Commerce - Planners ✓

Handwritten notes in left margin: Compuserve / Telekom / BT

Bar chart with handwritten annotations:
- Sterling Commerce ~ 8 → 2
- GEIS ~ 7 → 2
- Andersen Consulting ~ 7 → 2
- AT&T — 5
- IBM — 4
- Harbinger — 3
- KPMG — 2
- Others — 12 → 23

X-axis: Number of Mentions (0, 5, 10, 15)

Source: INPUT

Handwritten: 29 planners
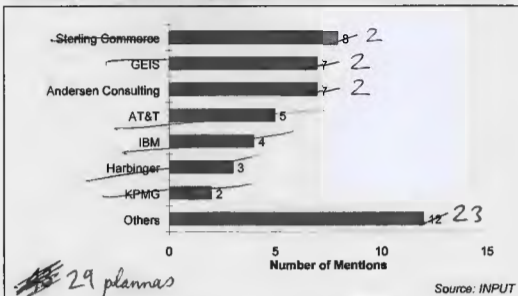
Exhibit AD-11

Hardware Vendors Seen as Leaders in Internet Commerce - Planners ✓

Bar chart with handwritten annotations:
- IBM — 22 → 7
- HP ~ 8 → 5
- Compaq/Digital ~ 6
- Sun Microsystems ~ 7
- Dell — 2 (*Bull* handwritten)
- Others — 4 ✓

X-axis: Number of Mentions (0, 5, 10, 15, 20, 25)

Source: INPUT

Handwritten: 25 planners

Exhibit AD-12

please sort in descending order ✓
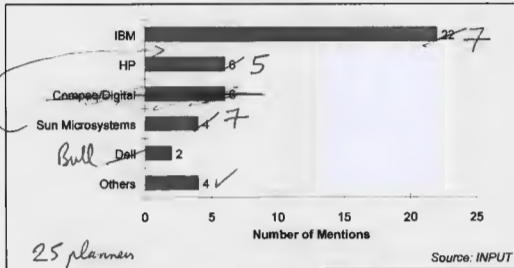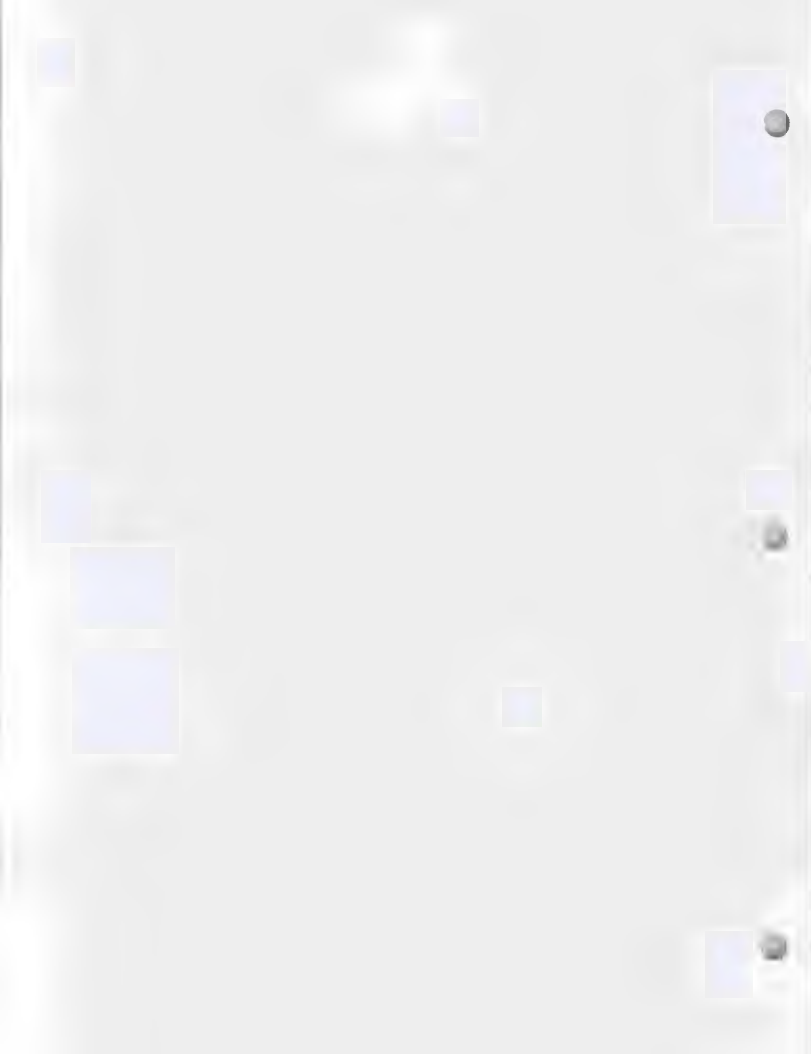
Internet Commerce Implementation Vendor selection Criteria

Electronic Commerce Experience — 4.4
Internet Technology Experience — 4.5 4.7
Service Speed — 4.1 2.7
Promised Business Impact — 3.0 3.1
Cost Experience — 3.0 2.3
Existing Vendor Relationship — 3.0 2.7

1 2 3 4 5
Satisfaction (1=low, 5=high)

See V-12 make same correction.

Source: INPUT

Exhibit AD-13

please sort ✓

Internet Commerce Operational Services Vendor Selection

Experience in Internet Technology — 4.4
Experience in Electronic Commerce — 4.3
Experience in Outsourcing — 3.0 3.4
Cost Experience — 3.5 3.7
Promised Business Impact — 3.0 3.4
Existing Vendor Relationship — 3.0 3.6

1 2 3 4 5
Satisfaction (1=low, 5=high)

Criteria
?

Same mistake in V-13

Source: INPUT

Q10a (PLANNING).

IMPLEMENTATION

$ Millions Annual Revenues

		< 500	501 -1,000	1,001 -2,000	2,001 - 5,000	5001 T	10,001 +	
a	R1							6
b	R2	11	1	11				5
c	R3	11	1	~~411~~	11	1		11
d	R4	4111 1	1		1			8
e	R5	1		1	1			3
		11	3	8	4	1	0	27

+ BANYAN GETTING TO BE DIRECTORY-AGNOSTIC

With Microsoft Corp's Active Directory almost upon us, and
Novell Inc's NDS going up on a raft of platforms, directory and
network operating system vendor Banyan Systems Inc is
re-tooling as swiftly as it can. It will continue to service
its well-regarded StreetTalk directory and Vines operating
system but these, from now on, will only generate incremental
business, especially services revenue, not deliver new
customers. That's why Banyan is developing security,
administration and single sign-on applications that work with
multiple directory and messaging infrastructures, including
StreetTalk. The SiteMinder technology it OEMs from Netegrity is
key to this strategy although we're still somewhat unclear
about just how many pies Banyan plans to put its finger into.
It describes its future as providing web and internet-based
access and control of directory-based services, but we can't
recall a conversation about the internet in which Banyan's name
has ever been raised. That said, providing integrated web-based
name space management and service administration sounds like a
reasonable business model, although there appears to be a
plethora of companies converging on this space. Not all are
going to make it, but Banyan, with a significant installed base
to sell into, and growing directory consulting and professional
services businesses should see it through to the next level.
SiteMinder supports NT (with Active Directory to follow) and
Netscape's Directory Server in addition to StreetTalk. Support
for NDS will be next. StreetTalk is already available for use
with NT.

+ UNIX GETS AN EXPO OF ITS OWN AGAIN

Unix is getting its very own trade show again, because vendors
are apparently finding industry behemoths such as Comdex, PC
Expo and Networld+InterOp, or even boutique events such as
Comdex Enterprise, too untargeted for their event dollars. It's
no coincidence that the news goes hand in hand with the
boilerplate of the week which should probably read 'Unix is
back'; and renewed talk of 'open systems.' UniForum, the US
Unix association - albeit a somewhat different organization to
the one which operated during Unix's glory days in the 1980s -
has put its name to a Wide Open World Open Systems Computing
Conference & Expo to be held between April 27 and 29 next year
in Washington DC. Chicago's Professional Event Management Inc -
wherein lies remnants of Pemco, the company which promoted the
first every UniForum show in 1984 - is staging the event. The
event is unabashedly a Unix, Linux and cross-platform
development affair "it's not Windows NT and it's not internet,"
said UniForum Association president Alan Fedder. He expects
UniForum members including Sun, HP, IBM, Intel, Compaq, SCO,
NCR, Red Hat and others to exhibit. Decus is also said to be
lending its support. The last UniForum show as in 1996.
Softbank Comdex Inc pulled the plug on a 1997 event due to lack
of interest. The last Unix Expo was in 1996. WOW's conference
program will include sessions on "usable telecommunications,

Q 10+ (PLANNING)

Europe.

OPERATIONS.

	≤ 500	501 -1000	1,001 -2,000	2,001 -5,000	5,001 10,000	10,000+	
a R1		1	1				2
b R2	1111	11	111	1	1		11
c R3	1		111	1			5
d R4	11						2
e R5							0
	7	3	7	2	1	0	20

the company's needs - submitted by America Online Inc staff before the fateful March 1996 deal. These documents were used by John Warden, Microsoft's lead attorney, to bolster Microsoft claims that superior technology was what won the browser battle for Redmond - in particular, a comparison sheet between Internet Explorer and Netscape Navigator. Warden asked, "doesn't this show in every category...that Microsoft was the winner?" Colburn said that the late delivery of Windows 3.1 and Macintosh versions of the browsers from Microsoft, not reflected in the check sheet, might "taint" the rest of the results. However, Warden asked whether, it was true that IE had won in every category. Colburn agreed, still maintaining that access to the Windows 95 desktop was "decisive" but saying that IE was "the best solution for us, but we also felt the Netscape solution would have been just as good over time."

+   NOTES FROM THE MICROSOFT TRIAL

- One of the more controversial pieces of evidence to emerge from the paper-storm circling above yesterday's testimony was an email forwarded between America Online and Netscape in October 1995. It was written by Steve Case who heads up AOL, and referred to the proposed 1995 strategic alliance. A snippet from the document reads: "We can use our own respective strengths to kick the shit out of the beast from Redmond."

- Case, in the same email, refers to Netscape CEO Jim Barksdale as "dearest comrade" and compares Microsoft with Hitler. David Colburn, asked whether it was common practice with AOL in 1995 to strike analogies between Microsoft with Hitler, sheepishly replied: "I wouldn't say it was the practice."

- Mark Murray, speaking for Microsoft to the press outside the courtroom, refused to comment on whether 'the beast from Redmond' felt that AOL was trying to smear it through the online giant's involvement in the government case.

- Milwaukee, Wisconsin-born David Colburn's on screen moniker at AOL is 'DKRJJ' - which stands for David, Katie, Rachel, Jessica and Jason - himself, his wife and his kids. Aaaaaah!

+   IBM AND SUN 'TALKED ABOUT MELDING UNIXES'

Maybe it was the way we asked the question. Sun Microsystems Inc chief operating officer, Ed Zander said Sun had not been invited to join IBM Corp's Monterey AIX kernel consortium. But that's because, according to sources, the two companies had previously examined the possibility of fusing AIX and Solaris technologies but in the end decided to go their separate ways. Instead IBM has decided to integrate AIX, Santa Cruz Operation Inc, Sequent Computer Systems Inc and other Unix operating system technologies into Monterey.

EUROPE.

Respondent Distribution by ~~Company~~ Company
Annual Revenues.

I   P

Respondent Annual Revenues

		I	P
>5B	25 4	11	2 11
1B–5B	18 / 72	111	5 ++++ ++++
250–1B	86 14	1	3 ++++ ++++
100–250	12 10		10 ++++ ++++
<$100M	3 1		1 1
No reply	14 3		2 11

50   100

Number of Respondents   7   43

Total Sample 201

Exhibits AB-1/2/3.

	43		7		50	
Longer Hours	3.9	167.7	2.6	18.2	185.9	3.7
Extend Reach	3.9	167.7	4.0	28.0	195.7	3.9
Increase Ab tr	3.7	159.1	4.0	28.0	187.1	3.7
Reduce Cost	3.6	154.8	3.9	27.3	182.1	3.64
Order to delivery tion	3.2	137.6	4.0	28.0	165.6	3.3
Speed of Intro	2.7	116.1	2.4	16.8	132.9	2.7
Cem Serv	3.3	141.9	2.7	18.9	160.8	3.2

Planning

Europe

COUNTRY	COMPANY	Q2-B
Fr	Kimberly Clark Sopalin	b
UK	Toshiba Electronics UK Ltd	b
UK	Courtaulds Films Cellophane	c
UK	IMI Group	b
UK	Staedtler UK Ltd	c
UK	Lucas Aerospace	b
UK	Pretty Polly	
UK	Enichem Elastromers	c
Fr	Hurel Dubois Avions	b
Fr	Jacob Delafon	c
Fr	Mecanique Automobile Du Nord	c
Fr	Hercules France	c
Fr	Manubeuge Automobile (Renault)	c
Fr	Heidelberg Webpress	c
UK	BICC	b
UK	Peter Scott & Co	c
UK	Andrew Ltd	c
UK	British Alcan	b
UK	American Air Filters	a

a. This year   11   2

b By and   4444 4444
-1998   4444 1   16

c 1999-2000   4444 4444
           4444 111   18

                 36

~~PLANNIE~~

INMPLEMENTERS

     a   4444111   ~~6~~
     b
     c
     d   1 7

            43

COUNTRY	COMPANY	Q2-B
UK	Rexam (formly Bowater)	b
Ger	Haarman & Reimer GmbH	c
Ger	SPAT Hamburger	c
Ger	SIKA Chemie AG	b
Ger	Kaeseri Champignon GmbH	c
Ger	Kloeckner Moeller GmbH	b
Ger	Sud Chemie AG	c
Ger	Schlindler Aufzugefabrik	c
Fr	Vedette Industries	b
Fr	Societe du Pipeline Sud European	
Fr	Trefimetaux	
Fr	Haagen Dazs	b
Fr	ORS France	b
Fr	Metaleurop	c
Fr	Ratier-Figeac	b
Fr	Vedial	
Fr	Viessman France	a
Ger	Durrkopp Adler AG	b
Ger	MAN Plamag Druckmaschinen AG	processes

COUNTRY	COMPANY	Q2-B
Ger	DLW Aktiengesellschaft	c
Ger	Rhone Poulenc Rorer GmbH	
Ger	Voko Franz Vogt & Co KG	c
Ger	STC GmbH	b

COUNTRY	COMPANY	Q4-A
Fr	Kimberly Clark Sopalin	b
UK	Toshiba Electronics UK Ltd	a
UK	Courtaulds Films Cellophane	c
UK	IMI Group	b
UK	Staedtler UK Ltd	a
UK	Lucas Aerospace	c
UK	Pretty Polly	b
UK	Enichem Elastromers	b
Fr	Hurel Dubois Avions	a
Fr	Jacob Delafon	b
Fr	Mecanique Automobile Du Nord	b
Fr	Hercules France	c
Fr	Manubeuge Automobile (Renault)	b
Fr	Heidelberg Webpress	b
UK	BICC	c
UK	Peter Scott & Co	b
UK	Andrew Ltd	a
UK	British Alcan	b
UK	American Air Filters	c

8   a. ~~4444~~ 111

21   b. ~~4444~~ ~~4444~~ ~~4444~~ ¹ ~~4444~~

13   c. ~~4444~~ ~~4444~~
       111
___
42

COUNTRY	COMPANY	Q4-A
UK	Rexam (formly Bowater)	b
Ger	Haarman & Reimer GmbH	
Ger	SPAT Hamburger	c
Ger	SIKA Chemie AG	c
Ger	Kaeseri Champignon GmbH	b
Ger	Kloeckner Moeller GmbH	c
Ger	Sud Chemie AG	b
Ger	Schlindler Aufzugefabrik	c
Fr	Vedette Industries	c
Fr	Societe du Pipeline Sud European	b
Fr	Trefimetaux	c
Fr	Haagen Dazs	a
Fr	ORS France	a
Fr	Metaleurop	c
Fr	Ratier-Figeac	b
Fr	Vedial	b
Fr	Viessman France	b
Ger	Durrkopp Adler AG	b
Ger	MAN Plamag Druckmaschinen AG	a

COUNTRY	COMPANY	Q4-A
Ger	DLW Aktiengesellschaft	b
Ger	Rhone Poulenc Rorer GmbH	b
Ger	Voko Franz Vogt & Co KG	a
Ger	STC GmbH	b
Ger	EWE Aktiengesellschaft	c

QSA   AD-11

HP   ~~4444~~   5
Sun   4444 11   7
IBM   ~~4444~~ 11   7   25
Bull 11   2   named
                              responses.
Compaq 1
Dell 1

Microsoft Corp alleged that America Online Inc (AOL) and
Netscape Communications Corp had attempted to split the
internet software and services market between them at
yesterday's anti-trust testimony. Defense attorney John Warden
raised the issue when cross-examining David Colburn, AOL's
senior vice president of business affairs. Using a string of
internal AOL documents, Warden attempted to prove that AOL's
abortive 1995 agreement with AOL, and the deal that it
concluded with Netscape just after it had signed the agreement
with Microsoft in March 1996, were attempts at market division.
Warden read out an email from AOL's CEO Steve Case which stated
that the two sides had "hammered out a deal" in December 1995
but Colburn declared that there "had not been any meeting of
minds." He stated that the primary goal of the December deal
was to "enter into a strategic partnership with Netscape." The
gist of the deal, which was never signed, was that Netscape
would get out of online services and AOL would back away from
internet software products such as NaviServer. According to
Warden, AOL and Netscape tried to strike a deal once again in
March 1996. He produced an internal email written by Colburn
about Netscape's then nascent portal, NetCenter, which reads,
"Guys, they are competitors to us in the same way that
Microsoft's MSN is." Warden then asked if Colburn felt that
statement was truthful and he agreed that it was. Warden than
asserted that the 1996 deal, which was along similar lines to
the December 1995 attempt, was "a market division proposal."
Colburn replied, "I would not say that." In further
questioning, Colburn asserted that the proposal could not be
one of a market split because AOL was "never in the market"
with its NaviServer product. He also denied Warden's statement
that the deal offered the same kind of unfair competitive
advantage that the Department of Justice is accusing Microsoft
of trying to take. Lead government attorney David Boise,
talking on the steps of the courthouse, refuted the claims. Boi
se said that "small companies get together all the time." But
he claimed that there was a "clear distinction" under antitrust
law that while Microsoft was a "monopolist", neither AOL nor
Netscape "ever approached monopoly" in the way that Microsoft
has.

\+   MICROSOFT TRIES TO DOWNPLAY IMPORTANCE OF AOL DEAL

John Warden, Microsoft Corp's defense attorney, spent much of
the morning's testimony trying to establish the importance or
otherwise of 'icon on the desktop' OEM deals to America Online
Inc, in the hope of proving that AOL's March 1996 deal with
Redmond was not of the importance that AOL claims. Warden asked
David Colburn of AOL: "Is it a fact that for most of the time
Microsoft was talking about licensing IE...AOL was already pre-
installed on most consumer PCs?" Colburn replied in the
affirmative but said that AOL was faced with something very
new" meaning the Microsoft Network. He said, "all of a sudden
we had what we believed would be a very significant
competitor." The deal with Microsoft, did not put the AOL icon
directly on the desktop as the as the MSN icon is, and as AOL's

COUNTRY	COMPANY	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.
Fr	Kimberly Clark Sopalin	HP	CISCO	
UK	Toshiba Electronics UK Ltd			
UK	Courtaulds Films Cellophane	SUN	IBM	
UK	IMI Group	HP		
UK	Staedtler UK Ltd	IBM	Compaq	ANS
UK	Lucas Aerospace			
UK	Pretty Polly	IBM	ANS	
UK	Enichem Elastromers	HP		
Fr	Hurel Dubois Avions	Bull	IBM	Dell
Fr	Jacob Delafon	Most leading manufacturers		
Fr	Mecanique Automobile Du Nord			
Fr	Hercules France	HP	ICL Sorbus	Bull
Fr	Manubeuge Automobile (Renault)	Compaq	HP	
Fr	Heidelberg Webpress	SUN	IBM	
UK	BICC	Boundless Technologies	ANS	
UK	Peter Scott & Co	Top Call,	IBM	
UK	Andrew Ltd	IBM		
UK	British Alcan			
UK	American Air Filters	All the leading manufacturers		

COUNTRY	COMPANY	QS-A HW - LEAD, VEND	QS-A HW - LEAD VEND	QS-A HW - LEAD VEND
UK	Aspen (formly Bowater)	SUN	Akzonobel	ThetaCorp
Ger	Dearman & Raines GmbH	Ibv		
Ger	SPAT Hamburger	IBM	Compaq	Sun
Ger	SNA Chemie AG			
Ger	Kassen Champignon GmbH			
Ger	Kirschner Wonder GmbH	IBM	Digital	ST & I
Ger	Sud Chemie AG	No particular ranking vendor		
Ger	Schindler Aufzugsarbeit			
Fr	Isolants Industries	Sun	HP	
Fr	Societe du Pipeline Sud European	Groupe Bull	ICL Berkoi	Datacare
Fr	Trefimetaux			
Fr	Integert Data	The leading S-8 manufacturers		
Fr	DRS France	HP	Sun	Compaq
Fr	Indusoccu			
Fr	Razor Figaro	Sun	Compaq	IBM
Fr	Vedur			
Fr	Wileman Freres	HP	Compaq	ICL
Ger	Durasup Jotei AG			
Ger	MAN Planng Druckmaschinen AG	Sun	HP	Compaq

COUNTRY	COMPANY	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.	Q5-A HW - LEAD. VEND.
Ger	DLW Aktiengesellschaft		IBM	
Ger	Rhone Poulenc Rorer GmbH			
Ger	Voko Franz Vogt & Co KG	Any of the international vendors		
Ger	STC GmbH	IBM	Compaq	
Ger	EWE Aktiengesellschaft	Sun	Cisco	Alcatel

Telekom 11 ✓
Unisovе 1
AT&T 1

Internet Dial 1
BT 11 ✓
Compuserve 11 ✓
GEIS 1
CA 1
France Telecom 1
Ascine 1
AT&T 1
Inforgenis 1
Hachinger 1
David 1
Deman 1
CMCS 1
Colt 1
Sligos 1
Tekane 1
ECS

OEM deals did, but placed the symbol inside the Online Services Folder (OSF). Warden persisted with his line of questioning, asking the witness if AOL had still perused OEM deals after the Microsoft deal. Colburn agreed that the firm had, but countered that "what we set up by being in the online services folder has led to a lot of marketing opportunities." Warden asked if marketing costs had gone down since fiscal 1997, Colburn said that he believed so but didn't know "if it was a steady trend." Later in the day, Warden asked Colburn for a comparison of the subscriber bases of AOL and MSN. Colburn said that AOL had 13 million subscriptions worldwide, while he believed MSN had "2 million, probably a little less." Warden pointed out that that this was despite MSN having an icon directly on the desktop, but Colburn retorted that, "Microsoft clearly made the decision to ...sacrifice...MSN, when they put AOL and others on the desktop."

+   SGI CHALLENGES IBM OVER FASTEST COMPUTER CLAIM

IBM Corp upset rival supercomputer vendor Silicon Graphics Inc yesterday when it pressed vice president Al Gore into service to announce "the world's fastest supercomputer." Speaking at a Washington event on new technology developments, Gore announced that IBM's Blue Pacific computer, developed in conjunction with the Lawrence Livermore National Laboratories that will be used to simulate the effects of nuclear explosions, was the world's fastest, with a theoretical peak performance of 3.9TFLOPS. Blue Pacific is a 4,096 PowerPC processor RS/6000 SP machine, and part of the US Department of Energy-funded ASCI Accelerated Strategic Computing Initiative. Up until now, Intel Corp has held the number one spot with the ASCI Red system it installed at the Sandia National Laboratories in 1997. But as Intel is no longer actively developing its supercomputer business, the real battle is between IBM and Silicon Graphics. SGI is working with the Los Alamos Labs on the related ASCI Blue Mountain project. Spokespeople from SGI claimed that IBM had broken the rules of what has traditionally been a friendly rivalry between the two research labs. It says that IBM knows that in two weeks time, at the SC98 Show in Orlando Florida, SGI was set to announce that its Blue Mountain machine, using 6,144 MIPS R10000 processors running at 250MHz, would reach a theoretical peak performance of 4.2TFLOPS, beating IBM to the top of the list. Moreover, says SGI, although IBM claims to have delivered Blue Pacific to Livermore on October 28. it has so far only assembled and tested the full system on its own factory floor in Poughkeepsie, New York. IBM's installation at Livermore is only three-quarter complete, says SGI, which has been installing its own machine on site over the last eight months, where it's been running real weapons code. The full Blue Mountain uses 48 of SGI's 128- processor Origin2000 servers strung together with HIPPI high performance parallel interface switches, has 1.5 Tb of main memory, and 76 Tb of fibre channel disk storage. SGI says that it will deliver Linpack and real code benchmarks that will top IBM's at the SC98 show, where the newest version of the bi-annual Top 500 supercomputer list is

COUNTRY	COMPANY	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
Fr	Kimberly Clark Sopalin	AT & T	Cap Sesa	
UK	Toshiba Electronics UK Ltd			
UK	Courtaulds Films Cellophane	Internet Dial	BT	
UK	IMI Group	BT	AT & T	GEIS
UK	Staedtler UK Ltd	Compuserve	BT	
UK	Lucas Aerospace			
UK	Pretty Polly	GEIS	BT	
UK	Enichem Elastomers	Computer Assoc.	Data Sciences	Pinnacle
Fr	Hurel Dubois Avions	France Telecom	Ericsson	Infogeris
Fr	Jacob Delafon	Axime	Intentia	
Fr	Mecanique Automobile Du Nord			
Fr	Hercules France	AT & T	Worldcom	
Fr	Manubeuge Automobile (Renault)	Inforgeris	Origine	
Fr	Heidelberg Webpress	Compuserve	AOL	Sunware
UK	BICC	Harbinger	SAA	
UK	Peter Scott & Co	Druid		
UK	Andrew Ltd	Demon	Cable & Wireless	
UK	British Alcan			
UK	American Air Filters	CMCS		

COUNTRY	COMPANY	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
UK	Rexam (formly Bowater)	BT Webworld	Net Dynamics	
Ger	Haarman & Reimer GmbH	Unisource	Gentia	
Ger	SPAT Hamburger	Telekom	Touche Ross	Worldcom
Ger	SIKA Chemie AG			
Ger	Kaeseri Champignon GmbH			
Ger	Kloeckner Moeller GmbH	Colt	IBM	AT & T
Ger	Sud Chemie AG	DT	IBM	
Ger	Schlindler Aufzugefabrik			
Fr	Vedette Industries			
Fr	Societe du Pipeline Sud European	Sligos	ECS	France Telecom
Fr	Trefimetaux			
Fr	Haagen Dazs	Tekane	ISTA	
Fr	ORS France	ECS	Cap Sogeti	
Fr	Metaleurop			
Fr	Ratier-Figeac	Connect	Groupe Bull	Computer Associates
Fr	Vedial			
Fr	Viessman France	Servitik	Sun Service	
Ger	Durrkopp Adler AG	Thyssen	TIG	
Ger	MAN Plamag Druckmaschinen AG	TDS	SNI	
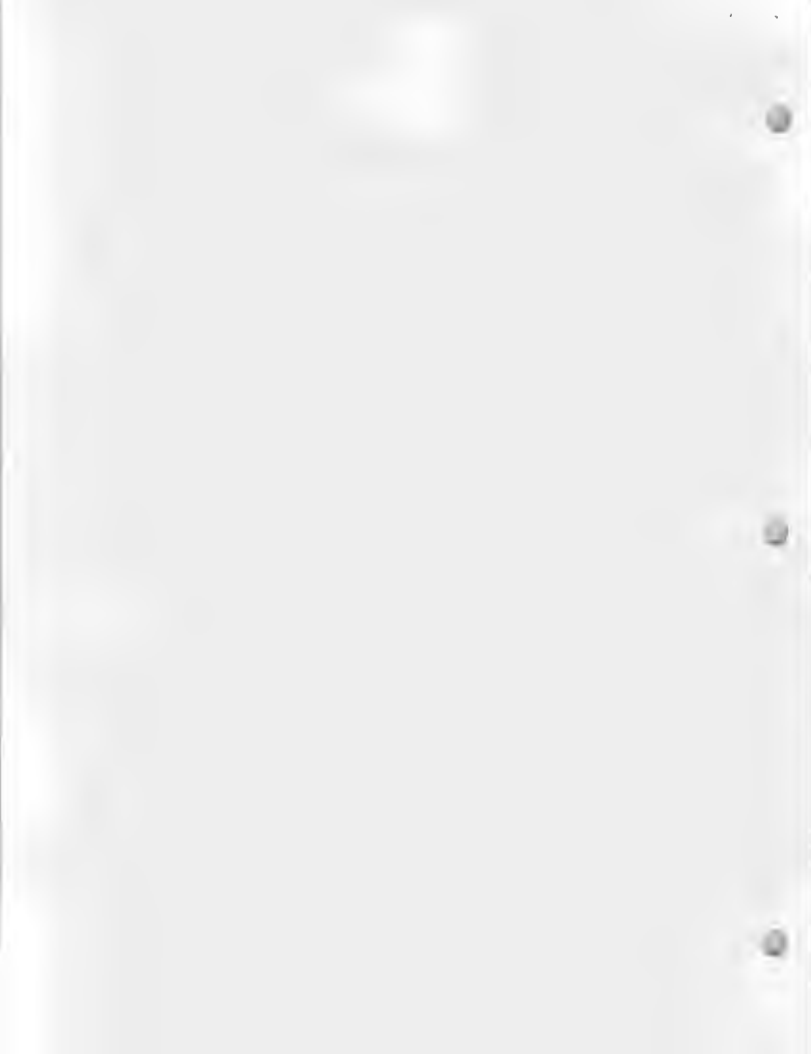
COUNTRY	COMPANY	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.	Q5-A SVCS - LEAD. VEND.
Ger	DLW Aktiengesellschaft			
Ger	Rhone Poulenc Rorer GmbH			
Ger	Voko Franz Vogt & Co KG	Microsoft	Simware	SAP
Ger	STC GmbH			
Ger	EWE Aktiengesellschaft	Price Waterhouse	Sun	

Oracle 1111
Lotus 4444
Open Road 1
CA 1

Microsoft 4444 111
Syscom 1
Cap Sogeti 1
Astra 1
Sun S 11
Lawson 1
Pericom 1
CMG 1
Progres 1
SAP 1111
TDS 1
I Net 1

4b Are there any particular issues related to the area of **Electronic Commerce and Payment Systems** that you would like to see researched by INPUT in 1999?

Comments _____

_____

4c Could you please rate your level of interest in the following topics within the area of **Electronic Commerce and Payment Systems**, again on a 1 to 5 scale:

(Interviewer Note: All topics, unless indicated by an X, are Evaluation Reports, i.e. for each title below read Evaluation of xxxxxxxxxx)

ERP Solutions in Electronic Commerce	_____
Electronic Commerce Platforms by Business Communities	_____
Business to Business Electronic Commerce	_____
Electronic Commerce Case Studies 1999 **X**	_____
Electronic Commerce Service Providers	_____
Internet Enabled EDI	_____
Internet Enabled Supply Chain Management	_____
Internet Enabled Customer Relationship Management	_____
Extranets in Electronic Commerce	_____
The Impact of Portal Services on Electronic Commerce **X**	_____

Any other suggestions (please specify   _____

Comments _____

_____

B. Enterprise Applications Solutions

5a. I would first like to ask you about your firm's overall level of interest in **Enterprise Applications Solutions**? Please rate on a scale of 1 to 5.   _____

Comments _____

_____

COUNTRY	COMPANY	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
Fr	Kimberly Clark Sopalin	Lotus	Infogeris	
UK	Toshiba Electronics UK Ltd			
UK	Courtaulds Films Cellophane	Open Road	BPCS	Microsoft
UK	IMI Group	Computer Assoc.	Microsoft	
UK	Staedtler UK Ltd	Microsoft Commerce	Oracle	IBM
UK	Lucas Aerospace			
UK	Pretty Polly	Microsoft	IBM	
UK	Enichem Elastromers	Lotus Corporation	Oracle	
Fr	Hurel Dubois Avions	Syscom	Ares	
Fr	Jacob Delafon	Lotus	Microsoft	Steria
Fr	Mecanique Automobile Du Nord			
Fr	Hercules France	Cap Sogeti		
Fr	Manubeuge Automobile (Renault)	Microsoft	SUN Service	Origine
Fr	Heidelberg Webpress	Astra	Lotus Domino	
UK	BICC	SUN Service	Information Builders	
UK	Peter Scott & Co	Lawson Software		
UK	Andrew Ltd	Pericom	JBA	
UK	British Alcan			
UK	American Air Filters	CMG	Computer Assoc.	Harbinger

COUNTRY	COMPANY	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
UK	Rexam (formly Bowater)	Progress	SUN	IBM / Microsoft
Ger	Haarman & Reimer GmbH	Lotus Domino		
Ger	SPAT Hamburger	SAP	Microsoft	
Ger	SIKA Chemie AG	TDS Datencom	SAP	Microsoft
Ger	Kaeseri Champignon GmbH			
Ger	Kloeckner Moeller GmbH	I Net	SAP	Allaire
Ger	Sud Chemie AG	Microsoft	DT	IBM / Lotus
Ger	Schlindler Aufzugefabrik			
Fr	Vedette Industries	Oracle	Microsoft	
Fr	Societe du Pipeline Sud European	Sunware Salvo	Lotus Domino	
Fr	Trefimetaux			
Fr	Haagen Dazs	Microsoft	Lotus	Open Market
Fr	ORS France	Oracle	CA	
Fr	Metaleurop			
Fr	Ratier-Figeac	Oracle	Microsoft	
Fr	Vedial			
Fr	Viessman France	Lotus Domino	Oracle	Microsoft
Ger	Durrkopp Adler AG	SAP		
Ger	MAN Plamag Druckmaschinen AG	Microsoft	Oracle	SAP

COUNTRY	COMPANY	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.	Q5-A SW PROD. - LEAD. VEND.
Ger	DLW Aktiengesellschaft	SAP (and their partners)		
Ger	Rhone Poulenc Rorer GmbH	Microsoft	Oracle	
Ger	Voko Franz Vogt & Co KG	Microsoft	Simware	SAP, Peoplesoft
Ger	STC GmbH	Oracle	IBM	White Pine Software
Ger	EWE Aktiengesellschaft	SAP	Sun	Open Road

S/W Prods

Information Builders   11

Origin

TDS ~~IBM~~ 11

SUN

SAP

Symantec

CG

Software AG

Oracle   11

Tebit

Nexum

Microsoft   11

are particularly vulnerable. Absolute runs a web-based
CompuTrace monitoring system which can trace a stolen computer
as soon as it's plugged into a phone line, even if Caller ID is
blocked or the number is unlisted. The tool can also be used
for asset management. Intel said it believed the technology
could help reduce the cost of ownership for mobile computers.
Absolute will add compliance with Intel's Common Data Security
Architecture to its product line. The company says it moved f
rom Canada because most of its customers are large corporates
based in the US It will use the unspecified amount of money to
open regional offices. The venture capital firms participating
in the funding are EnCompass Ventures and CIBC Capital
Partners/Oppenheimer.

\+   VERIO LOSSES INCREASE AS IT BUILDS MARKET SHARE

Verio Inc, the Englewood, Colorado internet service provider,
continues to burn money as it builds market share and has
reported third quarter net losses of $33.6m - almost equal to
revenues of $33.8m. Gross profits are not even scheduled until
the middle of next year. In the meantime, Verio is gobbling up
other companies at an accelerating rate. In the last quarter,
six acquisitions costing a total of $63.4m were completed,
including German web hosting outfit WWW-Service AG, which gives
it a big stake in the European market. These latest purchases
are expected to add $25m to annual revenues. The current
figures include a $3.4m one off charge for reorganization that
has seen 250 jobs go. Shares fell 19% on the results to $14.625.

\+   ORACLE BUYS BUSINESS INTELLIGENCE SOFTWARE HOUSE

Oracle Corp has acquired Miami based business intelligence
software company, Graphical Information Inc for an undisclosed
sum The Miami based software company produces Balanced
Scorecard software, which sets out to provide a big picture
view of a company's performance, and should tie in to Oracle's
existing enterprise resource planning software. The company
says it can provide performance indicators for financial
results, customer relationships, internal business processes
and organizational learning.

Services

Ascine   1
GE   1
Intentia   1
TDS   111
Sun Service 1

Net Dynamics

Microsoft

H/W

IBM   111

Siemens   11

Compaq   1

Sun   11

Dell

to electronics, telecom and bio-tech firms.

+ RTG BELIEVES EASY-TO-USE SCREEN KEYS HAVE BIG FUTURE

Rapid Technology Group Plc, a Dublin, Ireland company is
engaged in talks with leading OEM customers that will determine
whether its computer input technology will make a breakthrough
in the point of sale market in the current financial year. RTG
ended its first year as a public company with figures that show
net losses up 49% to the equivalent of $2.3m after revenues
slumped from $1.2m to $314,504. Like many European start-ups,
the company has had to pour resources into establishing a sales
operation in the US, a market that is crucial to its future
success. RTG claims that it has "leading differentiating
technology" in Screen Key, a system that allows users to
navigate through layers of options on their screens using
backlit colored LCD panels on certain keys. This is designed
for point of sale POS applications as cashiers who would find
using a mouse impractical. Screen Key works with the Windows
graphical environment and RTG says that trials with leading US
retailers have shown it can substantially cut cashier training.
RTG is now preparing an updated range of five separate
products, three aimed at the POS market and others focused on
financial services, call centers and process control. Last
year's revenues were hit by a longer than expected evaluation
time adopted by customers and their reluctance to place
long-term orders when they knew a new range of products were in
the offing.

+ MOTOROLA'S LEXICUS SETS UP R&D CENTER IN BEIJING

Lexicus, the Motorola Inc division that designs voice and
handwriting recognition software, has relocated its Chinese R&D
operations to Beijing to develop Chinese handwriting
recognition software, called WisdomPen, which transforms
writing on a tablet into typed text. Because of the
complexities of keying in Chinese characters, many
professionals still write documents and reports by hand and
there is a huge market for this type of product. The Palo Alto,
California-based division has aimed WisdomPen at small portable
devices with a small memory footprint. The unit has been
working on Chinese handwriting recognition software since the
mid-1990s.

+ SAMSUNG PROMISES 1GHZ ALPHAS WITH 0.18 MICRON PROCESS

Samsung Electronics Co Ltd, announced last week that it has
developed a 0.18 micron microchip process that it plans to
utilize in producing 1GHz Alpha processors. The company, which
shipped samples of 0.18 micron SDRAMs last month, said it will
have 1GHZ Alpha prototype CPUs built with its 0.18 micron
process ready by the second half of next year. Samsung claims
shifting from a 0.25 micron process to a 0.18 micron process

EVALUATION OF INTERNET COMMERCE IN MANUFACTURING

User Questionnaire

Note: this survey uses the following definitions and abbreviations:
- Electronic Commerce (EC): the purchase and sale of goods and services where the transactions flow between the buyer and seller via a computer network.
- Internet Commerce (IC): electronic commerce that uses the Internet.
- EDI (electronic document interchange): a set of formatted, standardized messages that enable computer-to-computer business transactions between trading partners. Examples of transactions include processing sales orders and invoices electronically.

1. a. *M* Do you use electronic commerce in your organization?

Yes	No
(go to 1b)	(go to 1c)

b. *N* How long have you been using electronic commerce?

c. *O* Are you currently using EDI? *P* Will you incorporate EDI into Internet Commerce?

d. *Q* Who manages EC in your company/organization?

e. *R* Do you use the Internet in your electronic commerce?

Yes	No
(go to 1f)	(go to 1i)

f. *S* How long has your organization been doing Internet Commerce?

g. *T* Who manages IC in your company/organization.

h. *U* Who will manage IC for your company/organization?

(Go to Q2)

i. *V* Is Internet Commerce planned in the next 2-3 years? Y/N____ *W*
    If "Yes", go to **Part II - Prospect Questionnaire**.

Comments

j. *X* **If no, why not?**

(Terminate)

Part II Prospect Questionnaire

Y 2.a. Are you planning to migrate existing processes to Internet Commerce? (Y/N) _____

b. What is the timeframe of the migration to IC?

Z {
_____ This year
_____ By end-1998
_____ 1999-2000

c. Please describe the migration:

FROM	TO		
	Private VAN	Public Internet	Extranet/VPN
AA Paper-based			
AB Proprietary VAN			
AC Public Internet			
AD Extranet (VPN)			

3. How important is each of the following objectives in using Internet Commerce (5=very important)?

b. And how satisfied are you with the achievement of these objectives so far? (5=very satisfied)

Objective	Importance Rating (1-5)	Satisfaction Rating (1-5)	Comments
Reduce Costs of Operation	AE	AF	AG
Reduce Order-to-Delivery Time	AH	AI	AJ
Extend Reach to Additional Trading Partners	AK	AL	AM
Improve Customer Service	AN	AO	AP
Increase Ability to Manage Business	AQ	AR	AS
Increase Speed of Introduction of New Products & Services	AT	AU	AV
Offer Longer Hours When "Open for Business"	AW	AX	AY
Other1	AZ	BA	BB
Other2	BC	BD	BE

BF

4. a. Please describe your approach to implementation. For example, which of the following would apply to the implementation approach?

       Enterprise-wide (all applications at once)   _____
       Department/function by Department/function   _____
       Process by Process   _____

b. Details/Description

BG

c. What resources will you require to accomplish your IC implementation??

Implementation Resource	Required (Y/N)	Possible Vendor
In-house	BH	BI
External Vendor	BJ	BK
Both		

5. a. In your opinion, who are the leading software products vendors in Internet Commerce? Services vendors? Please name 1- 3 of each.

Type of Vendor	Leading Vendor
Software Product Vendors	
	BL
	BM
	BN
Services Vendors	
	BO
	BP
	BQ
Hardware Vendors	
	BR
	BS
	BT

5.b. In your opinion, who are the emerging vendors in these areas of Internet Commerce?

Emerging Vendor	Area of Specialty
BU	BV
BW	BX
BY	BZ
CA	CB

6.a. What software products, hardware products and services do you believe will be required for the implementation of IC in your organization? Will any of these be a new purchase?

Software Product	Required? (Y/N)	New Purchase? (Y/N)	Product (if known)
Development Tools	CC	CD	CE
Security	CF	CG	CH
Messaging	CI	CJ	CK
Communications	CL	CM	CN
Full Application Package, e.g. billing, ordering	CO	CP	CQ
EDI-related, e.g. mapping, translator	CR	CS	CT
Catalog	CU	CV	CW
Other 1	CX	CY	CZ
Other 2	DA	DB	DC

6.b.

Hardware Product	Required? (Y/N)	New Purchase? (Y/N)	Product/Vendor (if known)
Servers: Enterprise	DD	DE	DF
Servers: Departmental	DG	DH	DI
Network Hardware	DJ	DK	DL
Desktop Hardware	DM	DN	DO
Network Computers	DP	DQ	DR
Other 1	DS	DT	DU
Other 2	DV	DW	DX

6.c.

Services	Required?(Y/N)	Plan to Use In-house (I), External Vendor (E) or Both (B)	Possible Vendor
Consulting/Planning	DY	DZ	EA
Application Development.	EB	EC	ED
Integration With Existing Applications	EE	EF	EG
EDI-related Services	EH	EI	EJ
Education/Training	EK	EL	EM
Conversion of Existing EC Applications	EN	EO	EP
Other 1	EQ	ER	ES
Other 2	ET	EU	EV

6.d. How important are each of the following Internet access requirements to your organization?

Access Requirements		Rating (5=very important)
Bandwidth	EW	
Security.	EX	
Guaranty of Access	EY	
Other 1	EZ	
Other 2	FA	
Other 3	FB	

FC

7. How important will Internet Commerce be to the following processes/functions of your organization? (5=very important)

Process/function	Importance Rating (1-5)
Marketing and Advertising FD	
Sales FE	
Purchasing FF	
Customer Service FG	
Production: FH	
Raw Material Scheduling FI	
Inbound Material Tracking FJ	
Scheduling FK	
Inventory Management FL	
Distribution FM	
Routing/Scheduling FN	
Sales Forecasting FO	
Channel Management FP	
Manufacturing Production Operations FQ	
Production Planning FR	
Other 1 FS	
Other 2 FU	

FT
FV

FW Comments.

8. What do you see your organization doing over the longer-term in the area of Internet Commerce? For example, will you be adding other business functions, such as purchasing, etc.

FX

FY

9. Please rate on a scale of 1-5 (1=low, 5=high) the importance of each of the following potential inhibitors to planning and implementing Internet Commerce.

Inhibitor/Concern	Importance (1-5)	Comments
Security	F Z	G A
Cost of Implementation	G B	G C
Cost of Operations	G D	G E
Acceptance by Large percentage of Trading Partners	G F	G G
Availability of Internet Access	G H	G I
Ability to Manage Change	G J	G K
Speed/Bandwidth (Network Unable to Handle Increased Traffic)	G L	G M
Key Decision Makers Not Familiar with Internet Technology	G N	G O
Lack of Appropriate Development Skills	G P	G Q
Lack of Development Tools	G R	G S
System Not Continuously Available	G T	G U
Lack of Internet Application Packages	G V	G W
Key Decision Makers Not Convinced of Internet Benefits	G X	G Y
Other 1	G Z	H A
Other 2	H B	H C

10.a. What is your estimate of the total amount your company will spend on the implementation of IC?
Absolute $_____   H D
  or
Range:
       <$25K _____
       $26-$100K _____
       $101K-$250K _____
       $250K - $1M)_____
       > $1M _____

10.b. What is your estimate of the total amount your company will spend on annual IC operations?

Absolute $_____   H E

or

Range:

    <$25K _____
    $26-$100K _____
    $101K-$250K _____
    $250K - $1M)____
    > $1M _____

11.   Do you have any other comments that you'd like to make on the implementation or requirement for Internet Commerce?

    H F

INPUT

For firms that have already started to integrate
Internet Commerce into their processes .... the analysis
of

Combined.

US **INTEGRATED**:   US **PLANNING**:

	US INTEGRATED	Combined	US PLANNING
Reduce Order to Delivery Time	4.2	√ 4.0	3.9
Extend Reach to Additional Trading Partner	4.1	√ 3.9	3.8
Improve Customer Service	4.0	√ 4.4	4.5 ▲
Reduce Cost of Operation	3.9	√ 4.1	4.1
Incr Ability to run B	3.8	√ 3.8	3.8
Speed	3.6	√ 3.4	3.4
Extend Hours	3.0	3.2	3.2
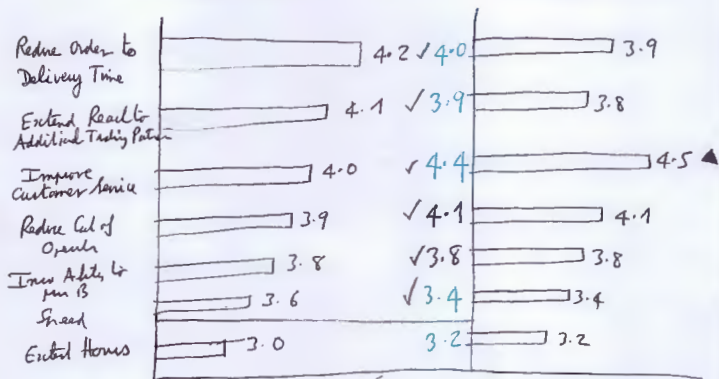
Sample Size
23   85

Q3 Comments:

<u>Order/Delivery</u> Not confident Internet can do faster.

<u>Increase
Ability to
Manage
Business.</u>
Not an issue

<u>Increase
Speed</u>.
Not an issue/
Just implementing.

B. INHIBITORS   Q12   ⬭E⬭   ⬜E̅ INT⬜   ⬜E̅ PLANNING...⬜

What is currently stopping Internet Commerce
from developing   or slowing it down?

Security	4.5
Trading Partner Acceptance	4.1
Internet Access	3.9
Cost	3.8
Chye Mum	

Security much more of an issue for those PLANNING
than those doing.

Internet Access more of an issue for them DOING
than those PLANNING.
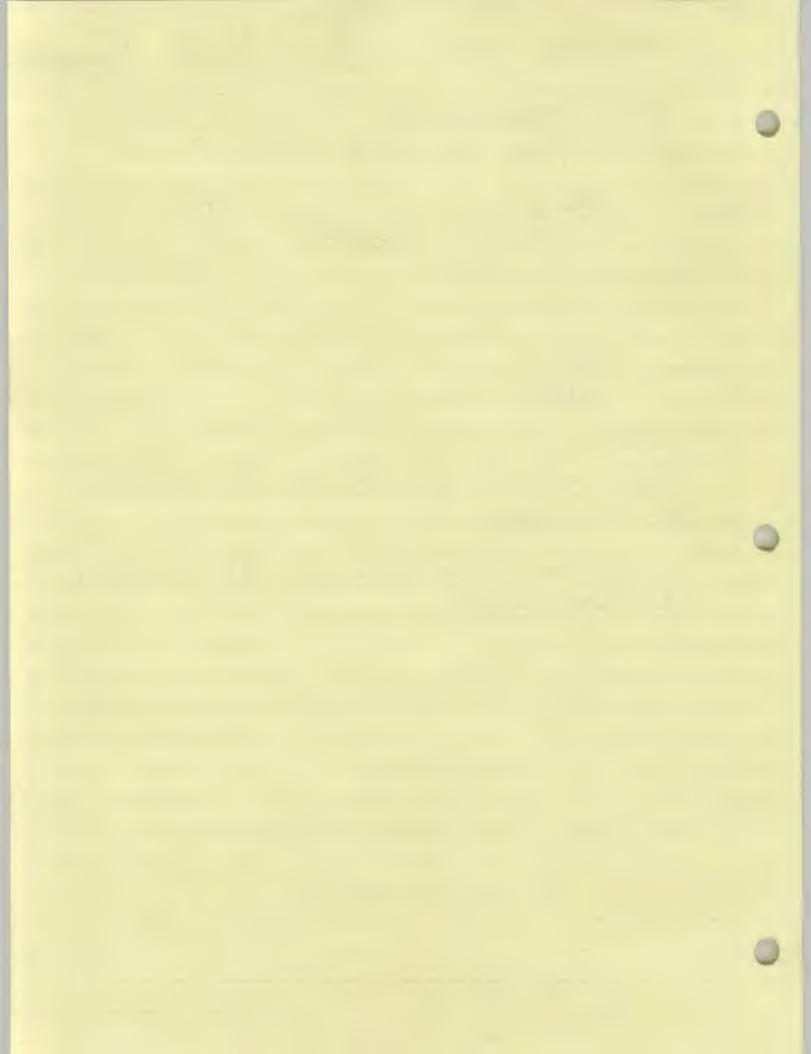
12. Please rate on a scale of 1-5 (1=low, 5=high) the criticality of each of the following potential inhibitors to planning and implementing Internet Commerce.

Inhibitor/Concern	Criticality (1-5)	Comments		
Security	GX 4.1	GV ▲ ✓ 4.6	4.5 ✓	•
Cost of Implementation	GZ 3.8	HA 3.7	3.7 ✓	•
Cost of Operations	HB 3.6	HC 3.8	3.8 ✓	•
Acceptance by Large percentage of Trading Partners	HD 4.1	HE ✓ 4.1	4.1 ✓	•
Availability of Internet Access	HF 4.1	HG ✓ 3.9	3.9 ✓	•
Ability to Manage Change	HH 4.0	HI 3.8	3.8 ✓	ι
Speed/Bandwidth (Network Unable to Handle Increased Traffic)	HJ 4.0	HK 3.8	3.8 ✓	•
Key Decision Makers Not Familiar with Internet Technology	HL 3.8	HM 3.8	3.8 ✓	•
Lack of Appropriate Development Skills	HN 3.8	HÜ ▲ 3.3	3.4	
Lack of Development Tools	HP 3.4	HQ 3.2	3.2	
System Not Continuously Available	HR 3.7	HS 3.7	3.7 ✓	
Lack of Internet Application Packages	HT 3.1	HU 3.2	3.2	
Key Decision Makers Not Convinced of Internet Benefits	HV 3.9	HW 3.5	3.6 ✓	
Other 1	HX —	HY —		
Other 2	HZ —	IA —		

(23) US INTEGRATED

(85) US PLANNING

(108) COMBINED

IT Marketing and Information Services
pac@input.com
(650) 528-6301 VM

CHAPTER IV   OVERVIEW

A.   MIGRATION   PATHS   (Q 2)

> Might transfer timeline
> to Ch III PLANNING.

B.   IMPLEMENTATION   ISSUES

Q 4 (implementation)
+
Q 8 (I)   Import on Processes
Q 7(P)   + Q8P (Comments)

C.   Q13   IC Champions.
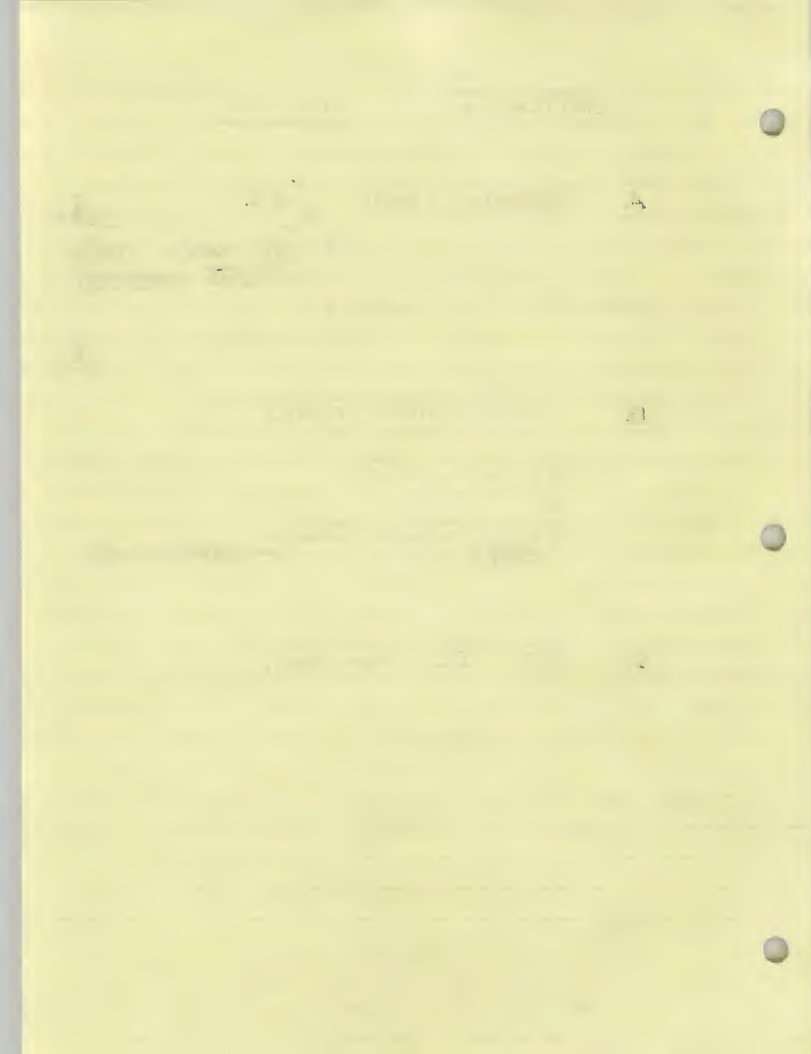
EXHIBIT IV-1

INTERNET COMMERCE MIGRATION ~~STATUS~~ TIMESCALES

already completed ▨ 6%

Currently underway

	#	
Completed or in Process	30	15%
Implnd by 2001	73	35%
No plan	93	40%
	196	

EX 11-6

ANALYSIS
FOR
EXHIBIT IV-1/2/3

					%
Adding additional features	3	13%	—	3	3
Already completed	Integrated 4	17%	Planning —	4	4
Currently underway:	12	52%	11 14%	23	22
~~Already~~ Complete by 1999	2	9%	21 26%	23	22
Complete by 2000-1	2	9%	48 60%	50	49
	23		80	103	100%
no plans				93	
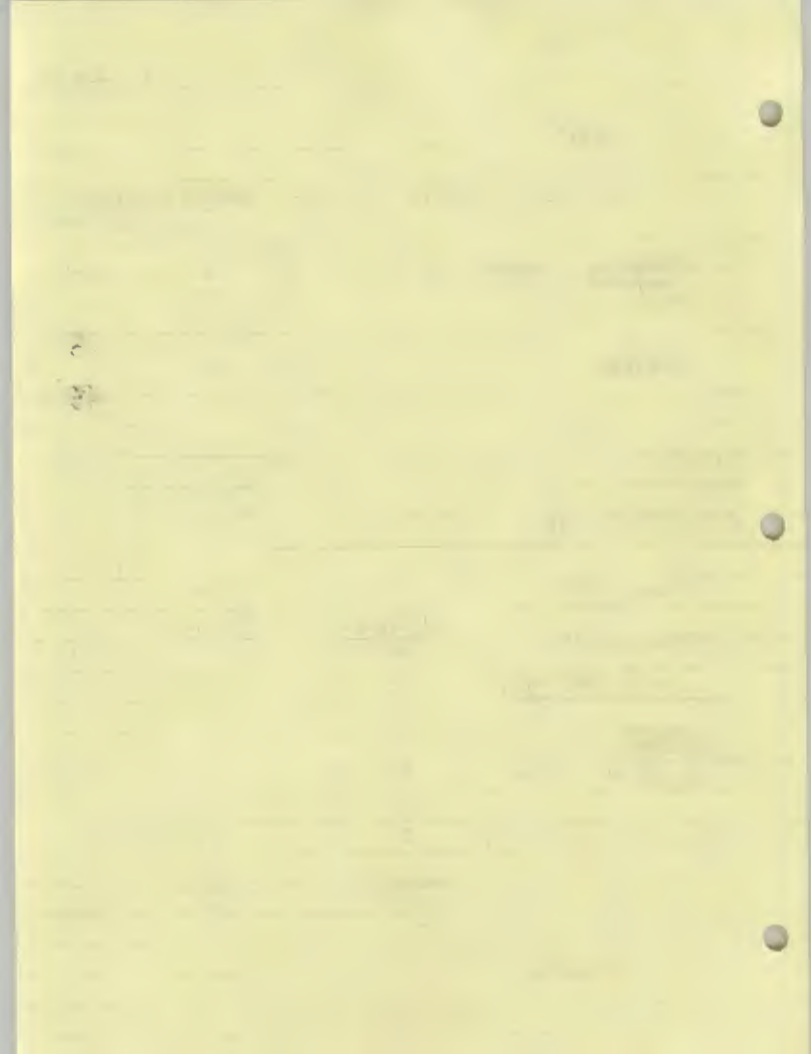
EXHIBIT IV-2-3

INTERNET COMMERCE MIGRATION PLANS

2000-2001
1999-2000 — 60   48

by 1999   About to   26   Co   21
          implement

          Implement   14   Currently   11
          by 1998

To be complete
by end '99.

Complete by
end '98

Currently
indirect

                30   40   60
              % of sample
           (percentages rounded)

PLANNERS

3 D/K
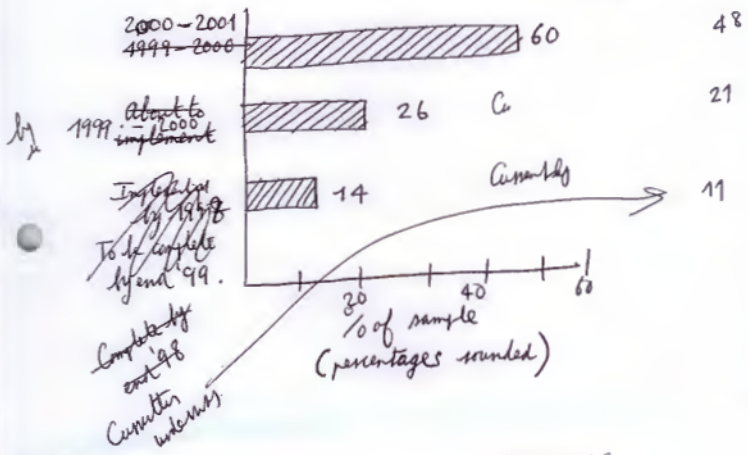
1 4444 4444 1   11   This year
2 4444 4444 4444 4444 21 By end 1998
3 4444 4444 4444 4444
   4444 4444 4444   48   1999-2000
   4444 4444 111   80

2c.

INTEGRATED:

Paper - based.	**10**
Proprietary VAN	12 [2] 9 1
Public Internet	1 → Extinct.
Extranet (VPN)	5

~~28~~ (23) Sample size.

PLANNING:

	1	2	3
Paper-based **AA**	~~4444~~ 11 (7)	~~4444~~ ~~4444~~ 111 (13)	111 (3)
Proprietary VAN **AB**	~~4444~~ 1 (6)	~~4444~~ ~~4444~~ ~~4444~~ ~~4444~~ ~~4444~~ ~~4444~~ 1 (31)	~~4444~~ 111 (8)
Public I-t **AC**	~~4444~~ (7) 11	~~4444~~ ~~4444~~ ~~4444~~ (16)	~~4444~~ (5)
AD Extranet	111 (4)	~~4444~~ 111 (8)	111 (3)

23 ⎫
       ⎬ 68
45 ⎭

28 ⎫
     ⎬ 17
15 ⎭

Sample size: (85) 111
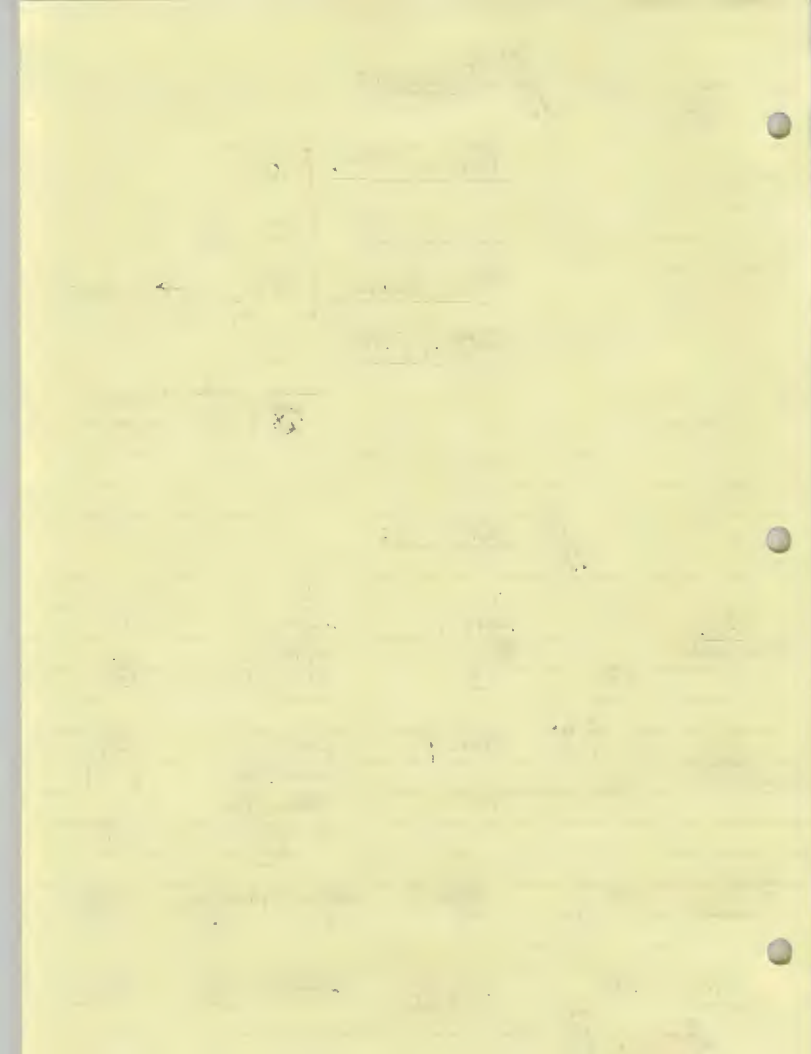
2c.

of the

This is what they are moving **from**:

INTEGRATED

Proprietary VAN. ▨▨▨▨▨▨ 52

Paper Based Systems ▨▨▨▨▨ 43

VPN ▨ 5

% of sample.

Combined Sample

▭▭▭▭▭▭ 53

▭▭▭ 30

▭ 17

108

PLANNING

Proprietary VAN ▨▨▨▨▨▨▨ 53

Paper Based Systems ▨▨▨▨ 27

VPN ▨▨ 20
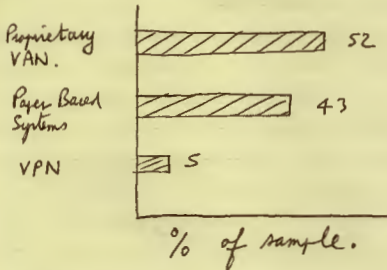
% of sample.
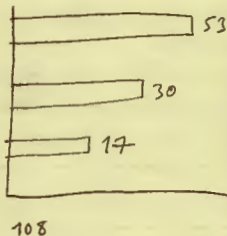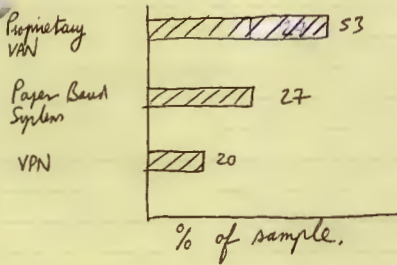
	INT	PL	Σ
Pro-VAN	12	45	57
P-based	10	23	33
VPN	1	17	18
Total	23	85	108
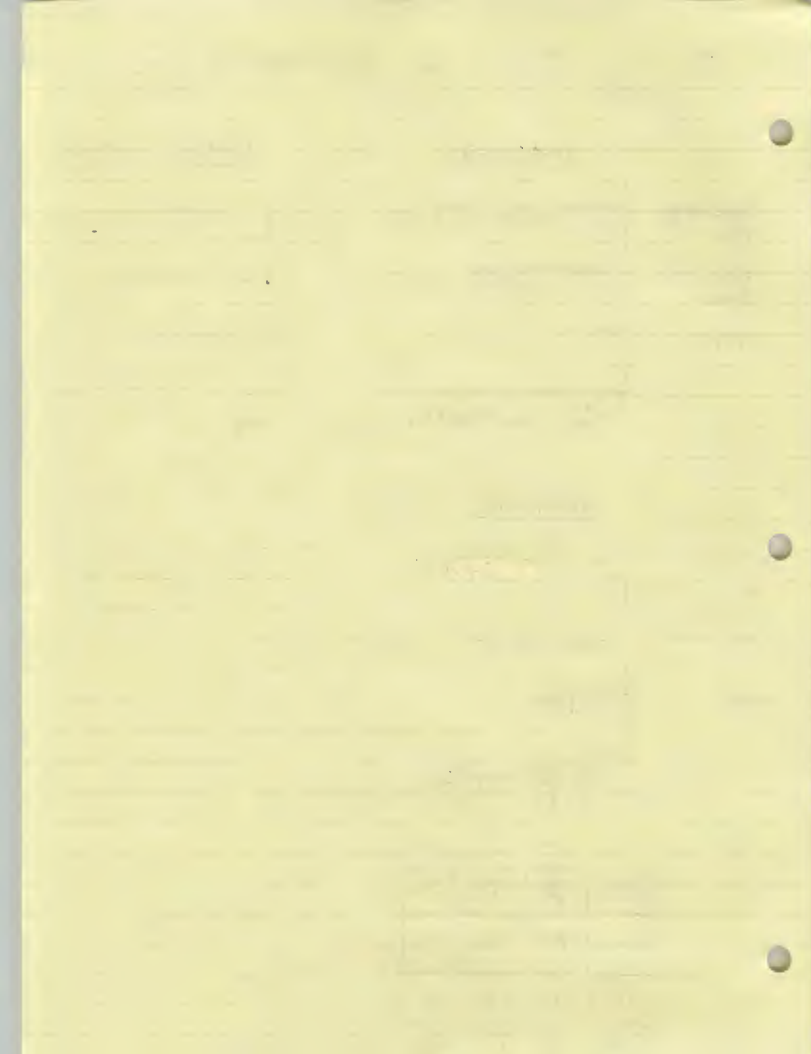
2c. continued ~ this is what they are moving to:

INTEGRATED:

Proprietary VAN users:
 75
 90% (9/12) are going to the
 <u>Public Internet</u>

 25
 10% (3/12) going to a <u>VPNetwork</u>.

Paper-based: 80% (8/10) Public Internet

 20% 2/10 to a VPN

VPN ? going to <u>Public Internet</u>.

PLANNING:

Proprietary VAN: 69% 31/45 → Public Internet
 31% 14/45 → VP Network

Paper-based 56% 13/23 → Public Internet
 44% 10/23 → VPN

VPN 70% 12/17 Public Int
 30% 5/17 VPN.

IV-7

Current Proprietary <u>VAN Users</u>:

Shift to Public Internet — 75% / 69%

Shift to VPN — 25% / 31%

%
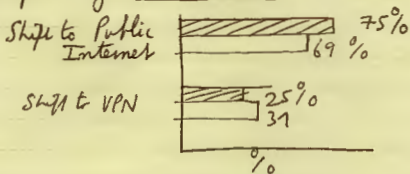
☒ INTEGRATED
☐ PLANNING

IV-8

Current <u>Paper-based</u> systems:

Shift to Public Internet. — 80% / 56%

Shift to VPN. — 20% / 44%
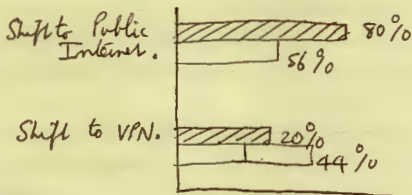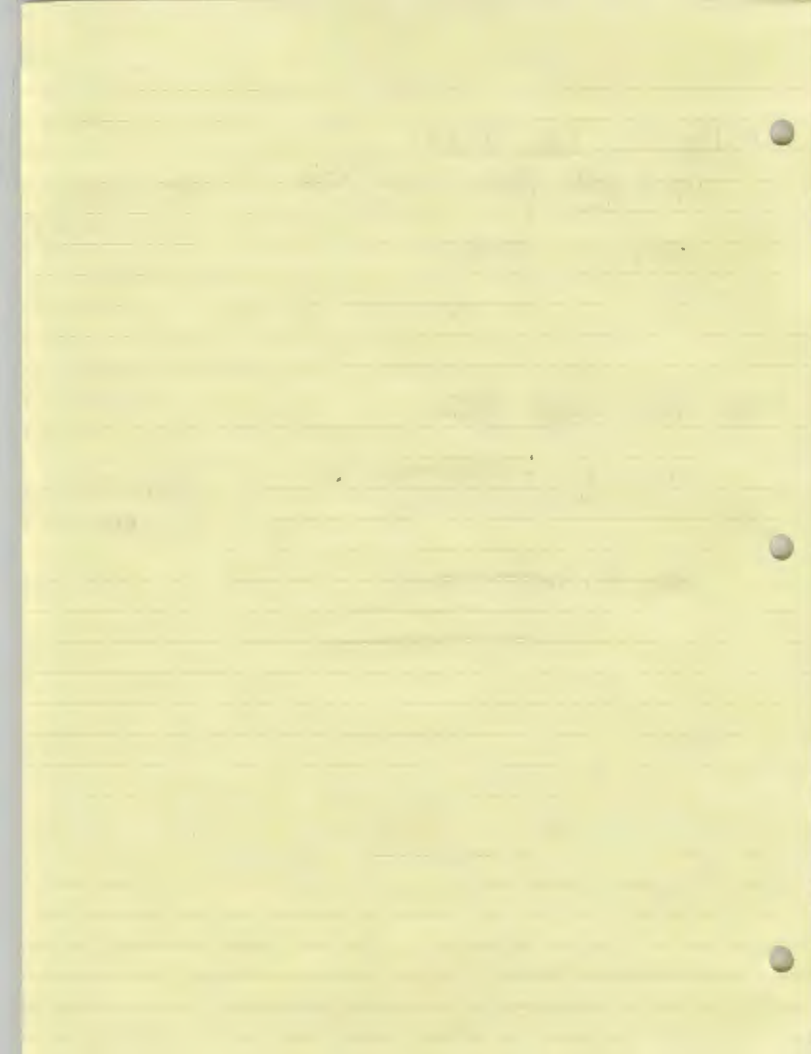
☒ INTEGRATED
☐ PLANNING

2c. Migration

For those that have already made the migration:

9 were paper-based and have migrated to

" 39%   8/9
          90% to Public Internet
          10% to an Extranet/VPN.

10 were using proprietary VANs
          90% to Public Internet
          10% to an Extranet.

4 were using Extranet/VPN
          75% to PI
          25% to En

		PI	Extranet
Paper	9	8	1
Prop VAN	10	9	1
~~Extranet~~ VPN	4	3	1
	23	20	3
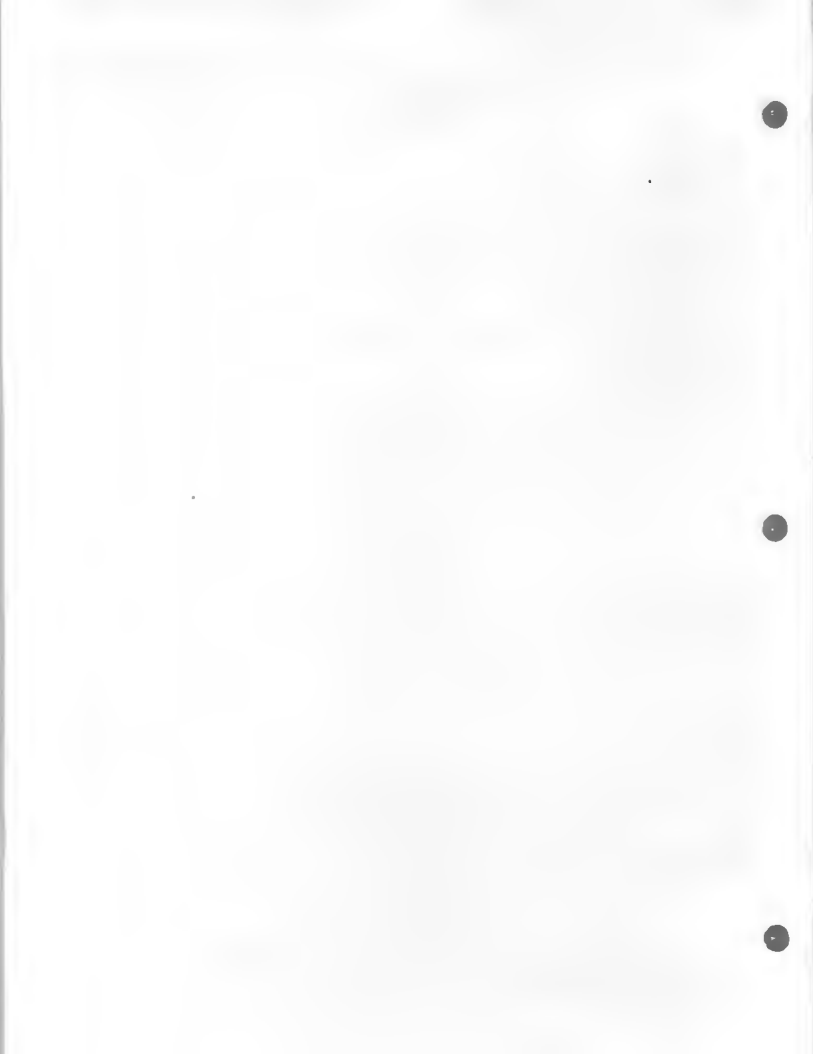
2c cont. for PLANNERS

INPUT

	PI	Extranet.
Paper	16	13	3
Prop VAN	39	31	8
VPN	11	8	3

66

$$\frac{66}{85}$$

B. IMPLEMENTATION ISSUES.

Q4.

An interesting issue is the implementation approach being taken by users.

Exhibit IV-X shows the overall summary.

Exhibits IV-X1 and -X2 show the separate analysis for the current users and those only at the planning stage respectively.

	Integrated.		Planning.			Σ	
EW	5	22%	15	19%	20	19%	
BY FUNCTION	8	35%	26	32%	34	33%	
BY PROCESS	10	43%	40	49%	50	48%	
	23		81		104		

QNUM	Q4 DETAILS / DESCRIPTION
1001	particular business process & then onto the next.
1002	Will probably focus on function to function by business line - then onto enterprise wide.
1003	
1004	
1005	
1006	Pilot program in use.
1007	
1008	
1009	All part of Internet & Intranet plan, a part of large corporate plan.
1010	
1011	We just have doing it like this.
1012	
1013	We put our product on line all at once.
1014	Our solution to focus on procurement process. Supplier selection requisition may include multiple functions.
1015	Focus in taking customer orders. We ID cutomers that would be beneficial to bring on electronically.

approach to Implementation

Q4.

QNUM	Q4 DETAILS / DESCRIPTION
1016	We hit sales and marketing first.
1017	
1018	DK
1019	
1020	Supply chain process & order to cash process: look at & decide what next.
1021	Again, we are getting acquainted.
1022	Dept. are based by process. Combo of the two. The ideal is that they all work together to get it out.
1023	Pilot program.

QNUM	Q4-B
2001	
2002	
2003	
2004	
2005	None at this time.
2006	
2007	A complete exposure.
2008	A pilot implementation
2009	
2010	
2011	By department.
2012	
2013	
2014	Not sure yet.
2015	Work w/ X.12 transaction, order to supplier, supplier/ customer then invoicing.
2016	We would modify process. We use capabilities around thinking that is possible.
2017	No details yet.
2018	Just starting to figure it out. Don't know just yet.
2019	Process one program at a time until it is done.

QNUM	Q4-B
2020	Business divisions into process
2021	We would do a pilot first.
2022	Not sure yet.
2023	
2024	Not decided yet.
2025	Too soon for any details
2026	Not decided yet.
2027	We would move our marketing people to put the process on line.
2028	We have to check out our current databases & start w/ the front end.
2029	Start w/pilot group willing to foot the bill, then we show other groups the benefits.
2030	We have one interface that goes out to wherever it need by & receive feedback.
2031	We do not know where we will start yet.
2032	Find a candidate process & evalueat it & if it looked good we would pile it in w/ other business partner.
2033	A mixture but mostly business by business. Everything will cater to its own market.
2034	Our system is currently efficient enough. So there was no problem with time (implementation).

QNUM	Q4-B
2035	Beginning in dept. orders & invoices, then next dept. We have email & some messaging already implemented.
2036	We just purchased Oracle Apps. & we plan to use the server & phas in everything.
2037	It would be modularized piece by piece. Not all of our business is suitable for Internet.
2038	Allow customers to come in through Internet & place orders with us. Our people would do the same with other companies.
2039	Dept. to division.
2040	Procure the screws, nuts, bolts, & washers. Go for wiring board first.
2041	Communications on a customer based level.
2042	It would be dept. oriented as a pilot.
2043	Not defined yet.
2044	
2045	Managable - resources that are available.
2046	
2047	One department at a time. Our semiconductor group is first in line.
2048	Start w/ our local sales forces then expand it to strategic business partners then smaller business
2049	Within Direct Marketing (Retail).
2050	Pilot only

QNUM	Q4-B
2051	Various dept. to submit what they want accomplished then each process will be applied.
2052	Self-explanatory.
2053	
2054	
2055	All sites connected.
2056	Once IS is ready, we will go for it.
2057	Electronic Catalog giving info about our company so people can cross reference our products.
2058	Procurement and new product development will be the first department involved.
2059	Basically linking all divisions to one enterprise.
2060	We have several businesses & will do it business by business.
2061	We would pilot a few things. Check out depts. first & see what they need.
2062	
2063	DK details yet-too soon to describe
2064	NA
2065	Division by division

QNUM	Q4-B
2066	NA
2067	Too many departments for all of them to switch to IC at the same time.
2068	They have 20-30 subsidiaries, all with different needs.
2069	Look at business opportunity. Create solution on a case by case basis.
2070	NA
2071	Spread over many years
2072	Division by division
2073	Case by case basis.
2074	First order entry system -other process will fall in line.
2075	NA
2076	Self explanitory.
2077	
2078	
2079	
2080	Will do whole corporation at once.
2081	
2082	
2083	No, just starting out.

QNUM	Q4-B
2084	Deal with other companies - if they're implementing or not.
2085	Division by division

Q 8(I) + Q7(P).

IMPORTANCE OF IC TO SPECIFIC BUSINESS PROCESSES

Customer Service — 4.2 / 4.0

Marketing — 3.9 / 3.8

Purchasing — 3.6 / 3.7

Sales — 3.5 / 3.9

In-bound Material Tracking — 3.3

= PLANNING
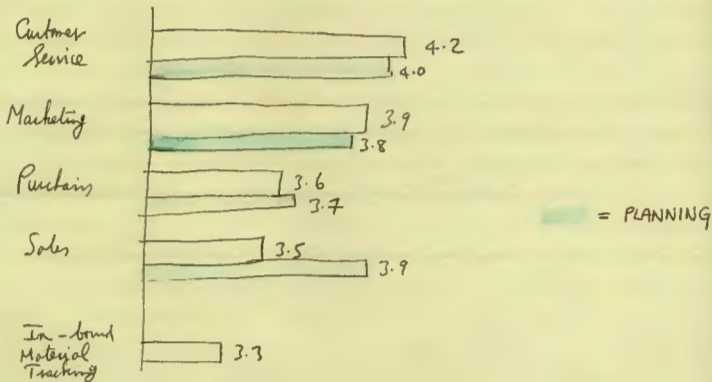
Q 8(P) Comments.

Need print-out

Q8P Comments.

QNUM	Q8
2001	We use a third party VAN to get to dealers. We will attempt to access them through the Internet.
2002	Moving from existing VAN. EDI would go over Internet instead of VAN.
2003	Don't know - too soon!
2004	Looking to add by end of year all of the rest of the business functions.
2005	Not adding new functions. Improving on what we have to offer our customers.
2006	Company will move over Internet. Marketing efforts main push. Security issues to be resolved first.
2007	Add inbound commerce to outbound commerce.
2008	We are taking a wait & see attitude.
2009	Yes.
2010	Yes, will be adding more & more as they see how each new function works.
2011	Probably keep adding functions.
2012	Probably will add other functions.
2013	All functions will be added.
2014	Perhaps will be expanded in the future.
2015	Add purchasing/accts payable.
2016	As we come to understand how to use we will start to employ it. You'll find visionary lunatics changing business. We will do a lot around it.
2017	Nothing further.
2018	Unknown.
2019	Open-ended right now, everything is still "kinda" in the air.
2020	Adding & amplifying to customers functions on 24 hr. basis.
2021	Yes, this would be a communications vehicle in purchasing & marketing.
2022	That is a possibility.
2023	We will add additional functions & services.
2024	Needed in sales & marketing & email also of value but not as critical.
2025	Long-term: 1) linking w/ customers; 2) share forecast & needs; 3) place orders & trade orders.
2026	The company doesn't have much sales area, we sell to the gov't. Production & purchasing the focus of our efforts.
2027	The world is not completely connected so until other large companies connect we will stick to the basics.

QNUM	Q8
2028	We would keep building & adding more functionality.
2029	Customer relations would be added & improved. The Internet would give us a lot more leeway w/ our customers.
2030	Purchasing, sales etc. will be added. Customer orders will be modified & easier to complete.
2031	We would make it suit all departments.
2032	We would add additional business functions only if it was practical & demonstrated to be secure.
2033	We would address both ends of our business. (Buying & selling) Easier to pick up vendors.
2034	Most of our advertising & marketing will be put on line in addition to other functions.
2035	Most definitely adding other functions. We have already been doing over 20 documents on EDI & I expect the same for Internet.
2036	If it is feasible, we will add functions. Anything that could be secured on the Internet, we will then use.
2037	Yes, we would put in orders to our partners & add invoice collecting.
2038	We would consider purchasing as our main addition.
2039	All end users must be able to gain access to information through the Internet.
2040	Designs functions to keep inventory & stocks for vendors.
2041	Definitely we would add as many as possible business functions as we could. It would run smoother over the Internet.
2042	A better infrastructure would permit us to do those things, such as add new business functions.
2043	We will start to see direct items which we can
2044	None I know of yet - too soon.
2045	Electronic drop boxes to suppliers for payment.
2046	DK yet.
2047	We would add more functionality to our Intenet setup. Too early to tell which business functions will be added.
2048	Catalogs, stock availability, order status, and order entry will be added.

QNUM	Q8
2049	We would expand customer service and sales and marketing and customer oriented stuff.
2050	With our largest vendors will do EDI using VAN; as security is established will go to Internet with small customers will use home page for tracking & orders.
2051	Probably will use something but too soon to really say what new area of business will apply. We have all our business functions being converted to Internet. Security major issue.
2052	Investigating
2053	Adding other business functions & will promote our products on Internet.
2054	Probably expanding & adding customer service.
2055	Expanding customers through Web page.
2056	Don't know what direction the company will go in after the implementation. It is too premature.
2057	SAP is going to be our driving system. We will have interfaces inbetween them.
2058	We just started our pilot project. First transaction should be done in first quarter of 1998.
2059	Yes continue to expand.
2060	We will do what makes sense on customer side first. Eventually it will be more important to purchasing.
2061	Purchasing, sales. We would take it as far as we could go and keep adding functions.
2062	To get marketing going & then add customer services pieces to that & then tracking analysis of data will follow.
2063	Don't really think any new functions will be added in the future
2064	DK yet.
2065	We are new at this. We will use internet as a tool to enhance relationships, streamline transactions and intertwine processes using market segment approach. We be used a lot for customer service.
2066	NA
2067	He has heard through the grapevine that most of the business functions will migrate to IC eventually, but he's on the sales side. Dealing only with the finished product, he was only going on heresay, when talking about the production side.
2068	He sees more and more of the subsidiaries moving towards the Internet. Interestingly, they have both large and small subs. with the smaller ones leading the charge.
2069	DK yet.

QNUM	Q8
2070	Probably other functions will be added.
2071	Keeps business running & better.
2072	Will be expanding it in the future.
2073	Will be expanded in the long term.
2074	Expertise technical experts. Instead of bandwidth, will be going straight to computer = on line training or service & technical support.
2075	Nothing in particular - growing a bit.
2076	No idea.
2077	Not sure yet.
2078	They are already fully networked within their company, now they need to integrate internal systems with external, customer accessible programs.
2079	Nothing drastic.
2080	We will be adding more functions to be able to do more electronically.
2081	We will do all of business via Internet eventually. All transactions will be done electronically.
2082	We will be getting into it, driven by customer demand.
2083	More web pages, make Internet for business purposes.
2084	EDI expanding purchasing function.
2085	We will use it as a driving factor for our business long term.

C.   Who Champions IC.

Need for champions ....
but who are they ?

Not
No CEOs

Other
Supply Chain Mngr
EDI etc

CIO / IS Manager	9
Network	1
Business Function	2
Senior EC Manager	1 (?)
	————

but who makes *decisions* for **IC**.

CEO	2
CIO	12
Net	1
Bus. Fctn.	1
	————
	16
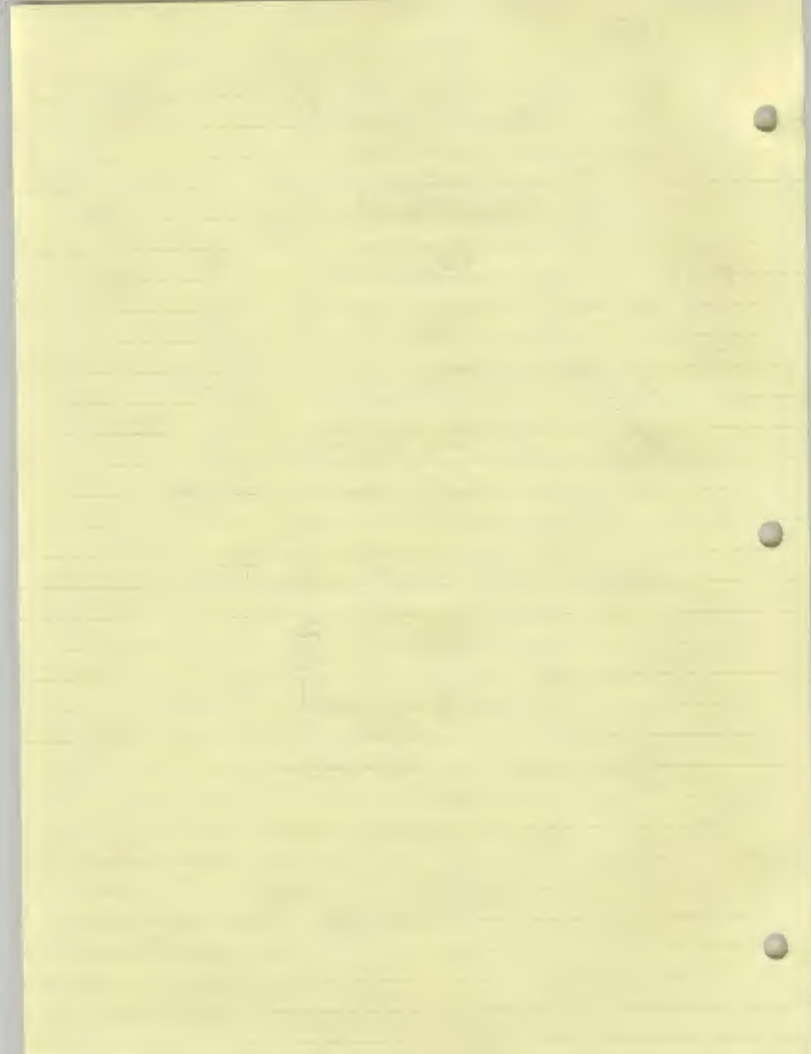
CH V.   OVERVIEW

~~VENDOR MAIN~~ IC PRODUCTS & SERVICES

B.   Q 5 a. User perception / opinion about
              leading vendors.

         +
         b. emerging vendors.

                              Integrators + Planners.

C.   Q 6 I   Criteria for Vendor Selection

A.   Q 7 I.   Products + Services Required.

     Q 10 I.   Products Used.

     Q 11 I.   Services Used.
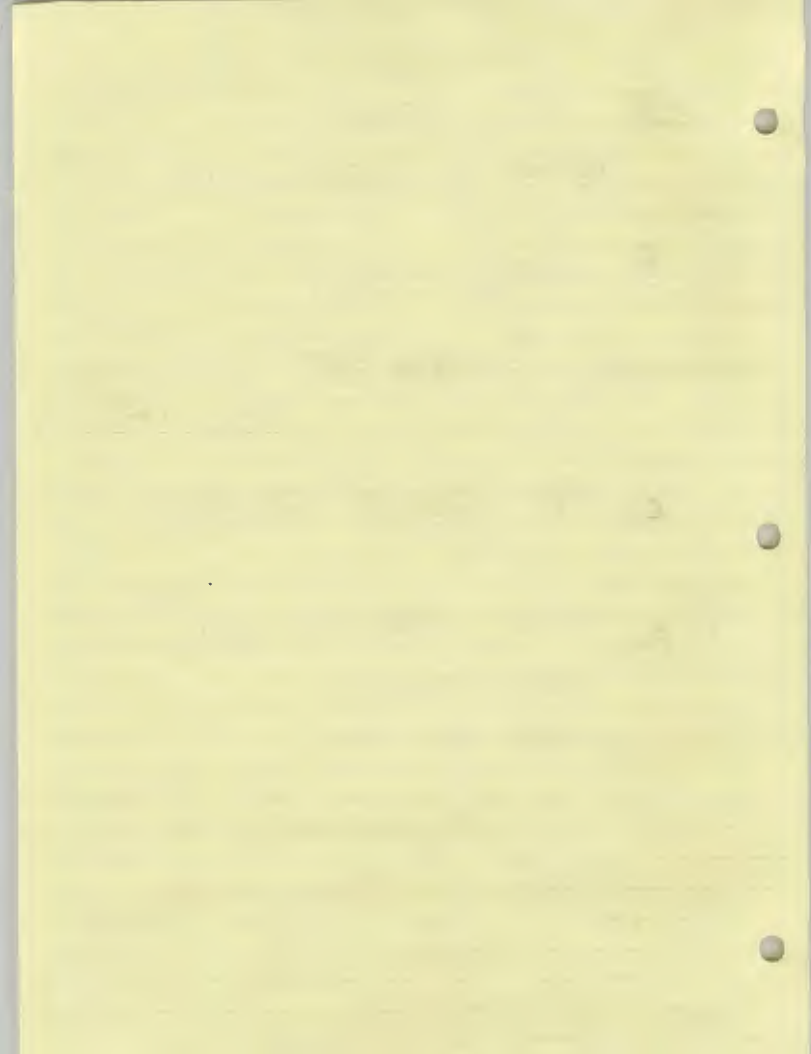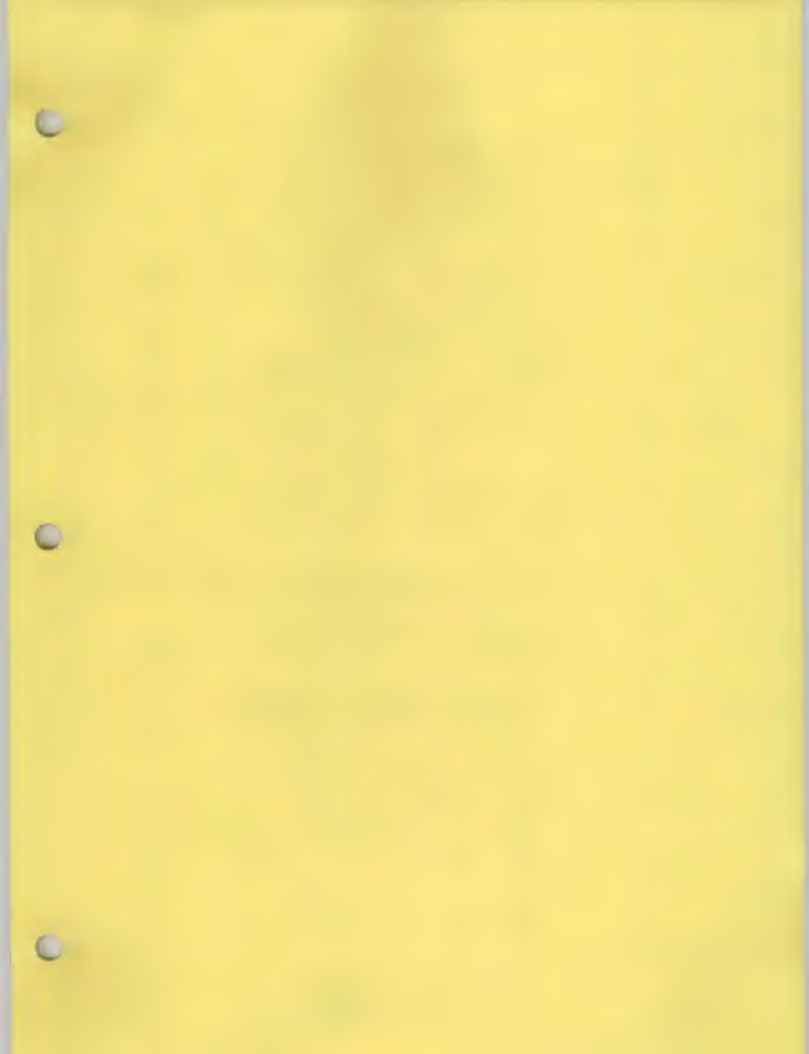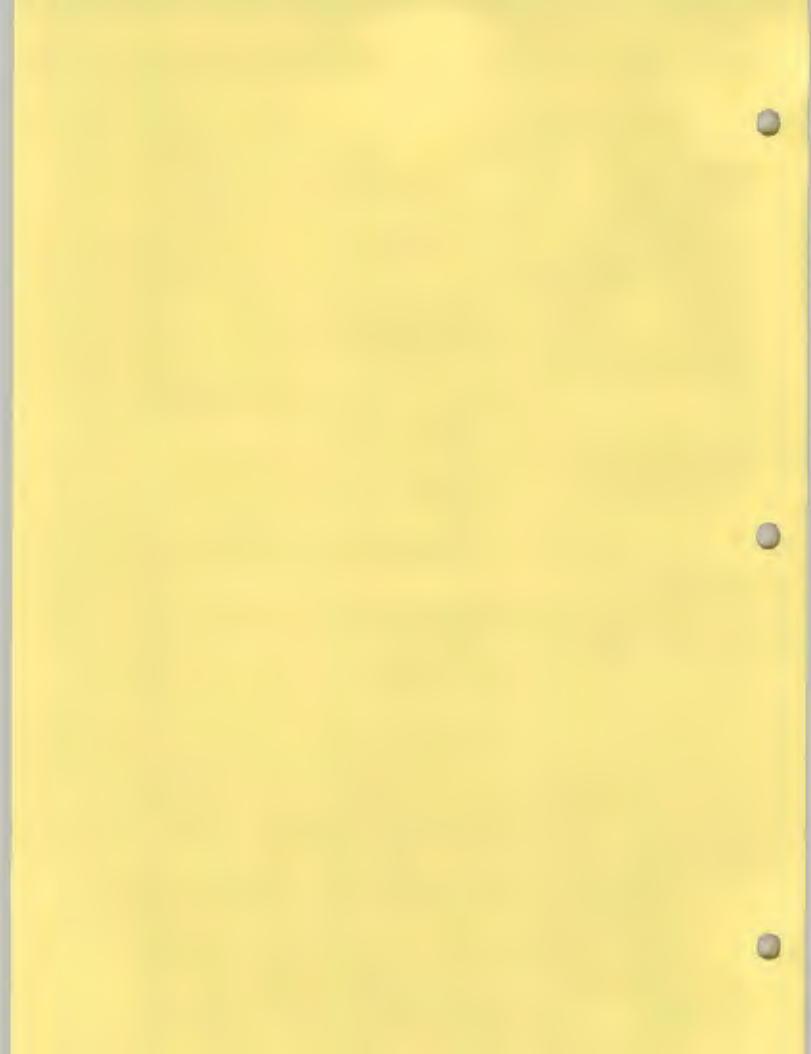
C. EXPENDITURE.
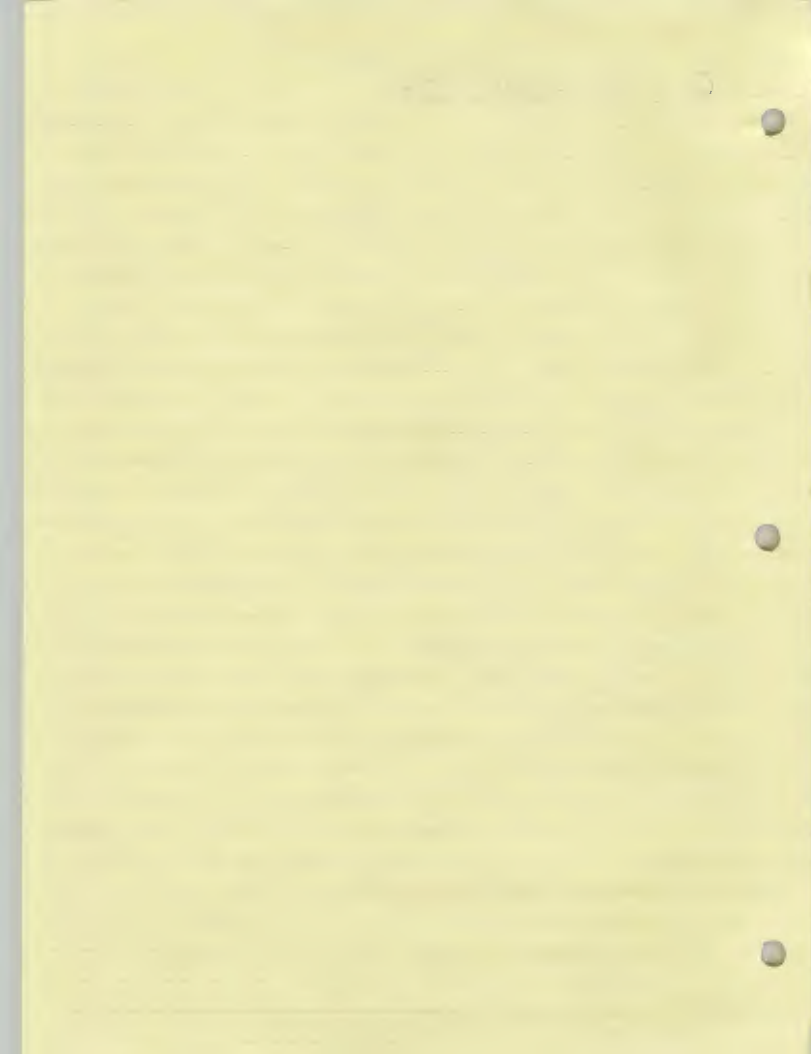
EXHIBIT III –

	C6	C5	C4	C3	C2	C1	Total
R5	1	4	2	1	0	2	10
R4	1	2	6	3	1	2	15
R3	3	8	1	3	0	2	17
R2	2	5	4	3	0	1	15
R1	1	2	1	0	0	1	5
Total	8	21	14	10	1	8	62

In category   C1   _____

              C3

              C4

              C5
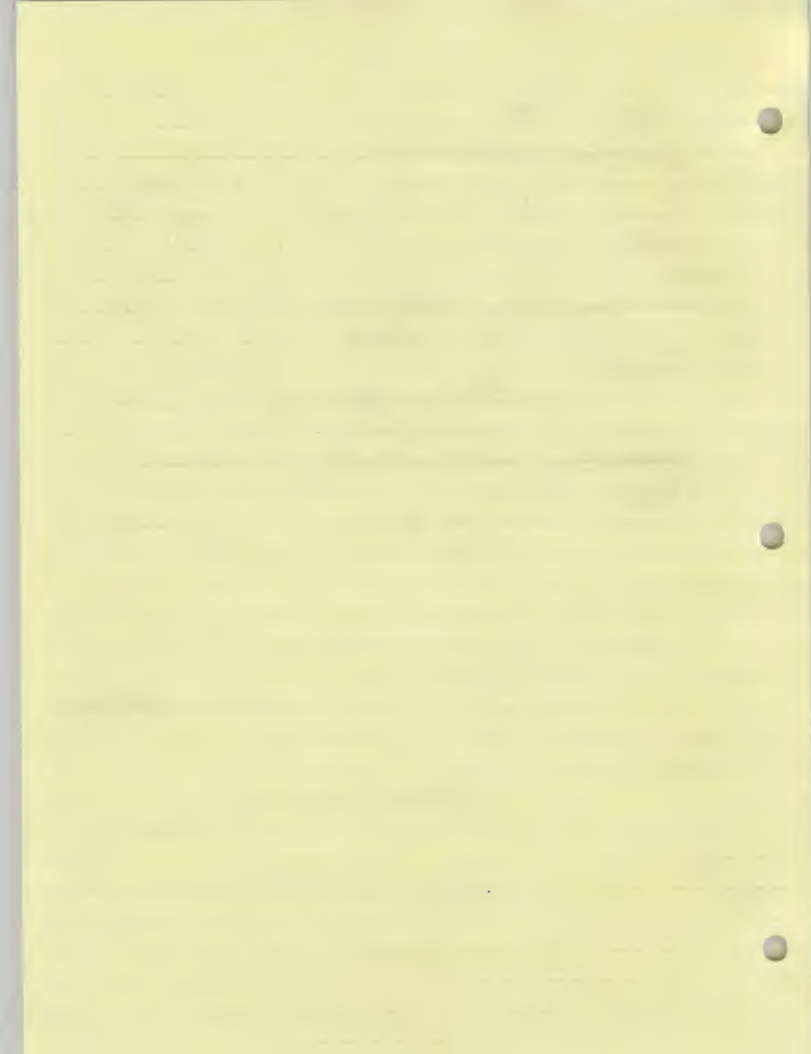
Q10a PLANNING (continued)

a R1 less than $25k   4 + 1 = 5
b R2 26 — 100k   14 + 3 = 17
c R3 101 — 250k   18 +   = 18
d R4 250 — 1M   14 + 1 = 15
e R5 > 1M   9 + 3 = 12
                                   ____
                                    67

$ millions Annual Revenue

	≤500	501 -1000	1001 -2000	2001 -5,000	5,001 -10,000	10001 +	
R1	1 / 1	11 / 2	1 / 1			12,200 / 1	5
R2	11 / 2	4444 / 5	1111 / 4	111 / 3		24,000 / 1	15
R3	111 / 3	4444 111 / 8	1 / 1	111 / 3		10,300 , 28,300 / 2	17
R4	1 / 1	11 / 2	4444 11 / 6	111 / 3	1 / 1	16,000 16,250 / 2	15
R5	1 / 1	1111 / 4	11 / 2	2 840 / 1		14,000 13,165 / 2	10
	8	4⟨ 21	14	10	1	8	62

- Calculate average + median categories.

For Exhibit III-7.

10 ~~20~~ @ 1½	~~150~~	15
15 ~~24~~ @ ½	~~120~~	7.5
17 ~~28~~ @ 0.15	~~42~~	2.55
15 ~~24~~ @ 0.05	~~42~~	0.75
5 ~~8~~ @ 0.02	~~216~~	0.1

$\boxed{62}$ ~~44~~   ~~32544~~ 25.9/62 = 0.4177

out

Average + median budgets
in comparison with whole IT budget ?
for Manufacturing

For Exhibit III-8.

8 @ 300k	2,400
21 @ 650	13,650
14 @ 1,300	18,200
10 @ 3,000	30,000
1 @ 7,000	7,000
8 @ 12,000	96,000

$167,250 / 62 = 2,697
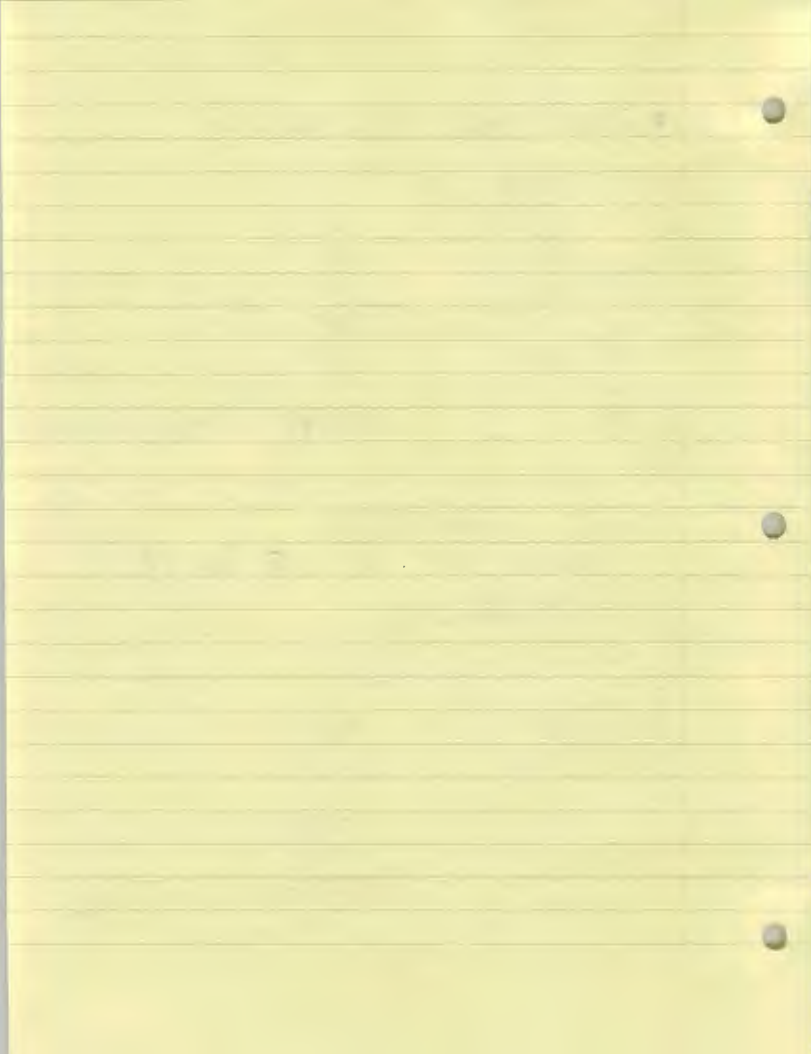
Q10a (PLANNING).

R1.	1111	4
R2.	4444 4444 1111	14
R3.	4444 1444 4444 111	18
R4.	4444 4444 1111	14
R5.	4444 1111	9
D/K	4444 4444 1111	14
Refused	1111	4

0·1	1	100,000 ✓	
0·05	1	50,000 ✓	
0·02	1	20,000 ✓	
0·5	1	500,000	
0·08	1	80,000 ✓	8
1·0	1	1,000,000 ✓	
2·5	1	2,500,000	
10	1	10,000,000	

—————

85
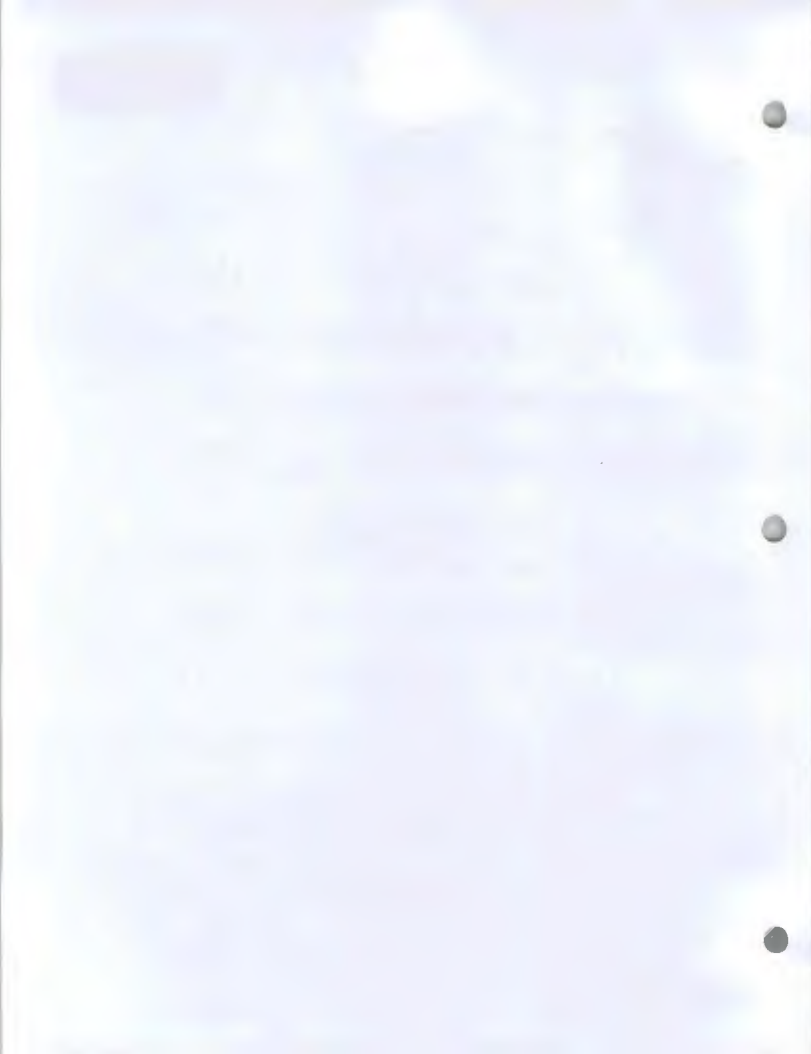
INPUT

millions $. →

	C6 A.	C5 B.	C4 C.	C3 D.	C2 E.	C1 F.		
	≤ 500 M	501 – 1000	1,001 – 2,000	2,001 – 5,000	5,001 – 10,000	10,001 +		
R1	4.4 [1]	2.7 [2]	1.2 [1]	0.2		0.2 [1]	5	8%
R2	16.7 [2]	10.0 [5]	4.4 [4]	1.9 [3]		0.3 [1]	15	24%
R3	44.4 [3]	26.7 [8]	11.8 [1]	5.0 [3]		0.7 [2] / 1.9	17	28%
R4	167⁰/₀¹	100 [2]	44.1 [6]	18.8 [3]	10.0 [1]	4.7 [2]	15	24%
R5	330 [1]	200 [4]	88 [2]	37.5 [1]	11 ✓	11.1 [2]	10	16%
Σ	8 / 13%	21 / 34%	14 / 22%	10 / 16%	1 / 2%	8 / 13%	62	

In the range ≤ 500 expenditure averaged out @:

1 @ 4.44   2 @ 16.7   3 @ 44.4   1 @ 167   1 @ 330

0.08%   **A.** = $\dfrac{668}{8}$ = 83.5

0.06%   **B.** $\dfrac{1269}{21}$ = 60

0.03%   **C.** $\dfrac{471}{14}$ = 33.7

0.01%   **D.** 110.8 = 11.1

0.01%   **E.**   10.0

0.004% **F.** $\dfrac{30}{8}$ = 3.75

EXHIBIT III -

DISTRIBUTION OF PLANNED IC IMPLEMENTATION
BUDGET CATEGORIES — FIRMS WITH ANNUAL
REVENUES BETWEEN $ B AND $ B.

OF
FIRMS

R1   R2   R3   R4   R5

KEY: R1   less than $25k
        R2   between $25k and $100k
        R3   between $100k and $250k
        R4   between $250k and $1M
        R5   Greater than $1M.

PCL XL error
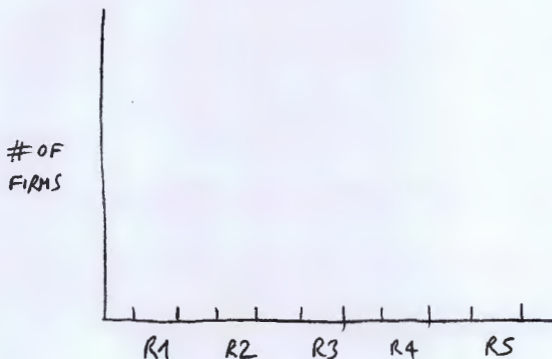
SubSystem: KERNEL
Error: IllegalStreamReader
Operator: 0x0
Position: 0

EXHIBIT III - '

DISTRIBUTION OF PLANNED IC IMPLEMENTATION
BUDGET CATEGORIES — FIRMS WITH ANNUAL
REVENUES BETWEEN $ B AND $ B.

OF
FIRMS

R1   R2   R3   R4   R5
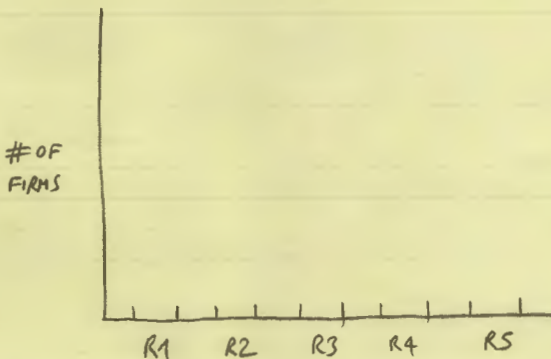
KEY: R1   less than $25k
        R2   between $25k and $100k
        R3   between $100k and $250k
        R4   between $250k and $1M
        R5   Greater than $1M.

Q10a. ANALYSIS.

\#
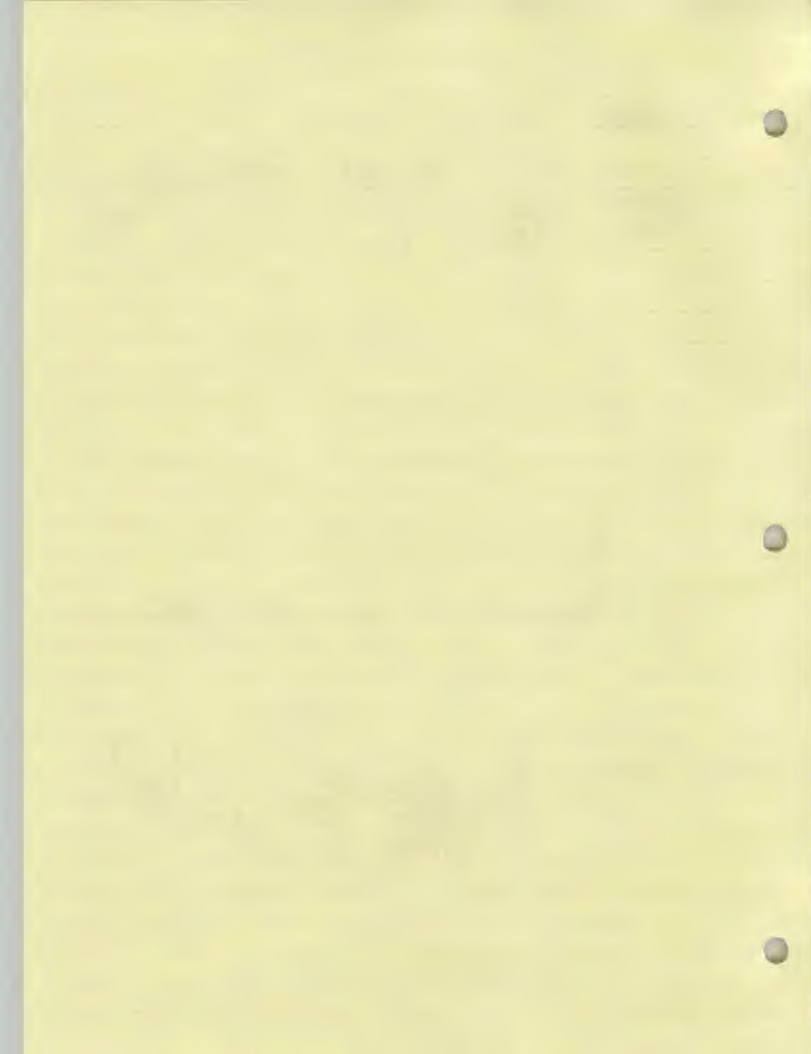
R1

1. $\dfrac{\$20k}{450k}$ = 4.44%

2. $\dfrac{\$20k}{750k}$ = 2.67%

1. $\dfrac{\$20k}{1,700k}$ = 1.18%

1. $\dfrac{\$20k}{12,200}$ = 0.16%

denominators Million not k.

R2.

$$\#$$

2 @ $\dfrac{\$75k}{450k}$ = 16.7%

5 @ $\dfrac{75k}{750k}$ = 10.0%

4 @ $\dfrac{75k}{1,700}$ = 4.4%

3 @ $\dfrac{75k}{4,000}$ = 1.9%

1 @ $\dfrac{75k}{24,000}$ = 0.3%

INPUT

#

R3.

$3 @ \dfrac{200k}{450k} = 44.4\%$

$8 @ \dfrac{200k}{750k} = 26.7\%$

$1 @ \dfrac{200k}{1,700} = 11.8\%$

$3 @ \dfrac{200k}{4,000} = 5.0\%$

$1 @ \dfrac{200k}{10,300} = 1.9\%$

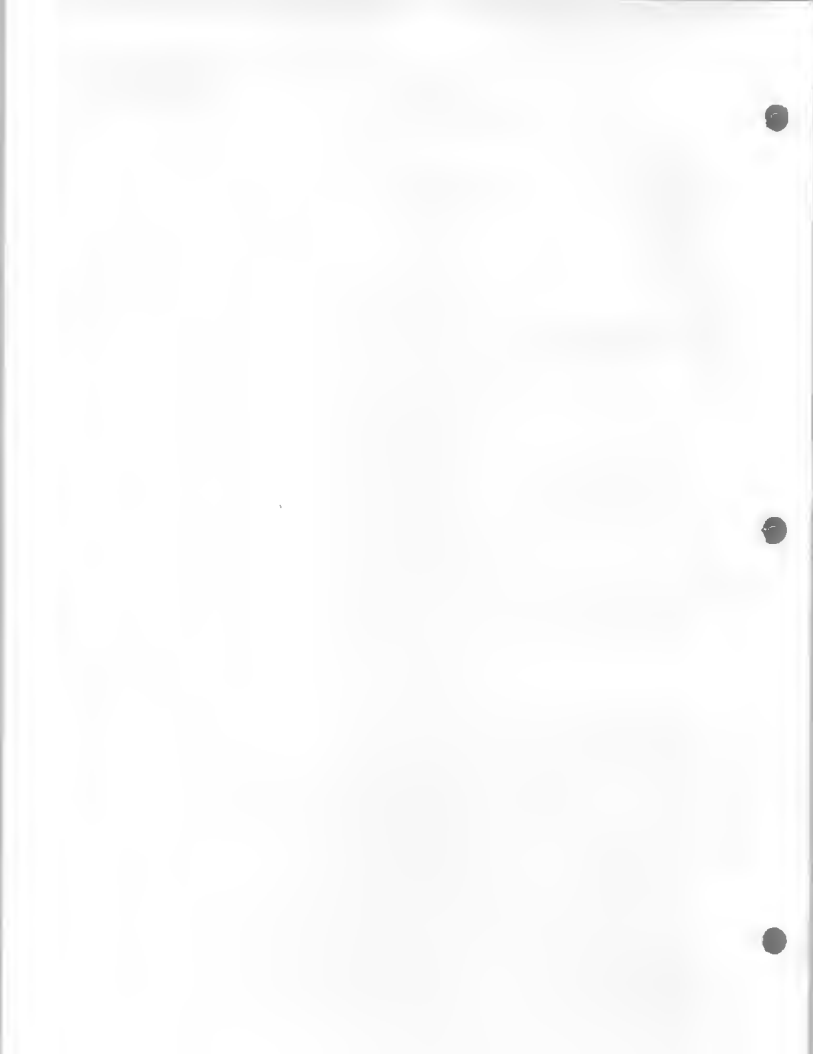$1 @ \dfrac{200k}{28,300} = 0.7\%$

Q 10a. ANALYSIS.

INPUT

#

R4. 1 @ $\dfrac{750k}{450k}$ = 167%

2 @ $\dfrac{750}{750}$ = 100%

6 @ $\dfrac{750}{1,700}$ = 44.1%

3 @ $\dfrac{750}{4,000}$ = 18.8%

1 @ $\dfrac{750}{7,500}$ = 10.0%

2 @ $\dfrac{750}{16,000}$ = 4.7%

Q 10a   ANALYSIS.

R5.

\#
1@ $\dfrac{1,500k}{450k}$ =   330%

4@ $\dfrac{1,500}{750}$ =   200%

2@ $\dfrac{1,500}{1,700}$ =   88%

1@ $\dfrac{1,500}{4,000}$ =   37.5%

2@ $\dfrac{1,500}{13,500}$ =   11.1%.

Amount spent on Operations.

Q 10 †. C6 C5   C4   C3   C2

   A.   B.   C.   D.   E.   F. C1

$ millions Annual Revenues.

	≤ 500	501 – 1,000	1,001 – 2,000	2,001 – 5,000	5,001 – 10,000	10,001 +	
R1	1 1 4.4%	4444 5 2.7	111 3 1.2	11 2 0.5		10,300 2 12,200 0.2	13
R2	1111 16.7 4	1444 1111 9 10.0	4444 5 4.4	1111 4 1.9	1 1 0.2	16,000 1 0.3	24
R3	 44.4	1111 4 26.7	111 3 11.8	111 3 5.0		28,300 1 0.7	11
R4		11 2 100	1 1 44	 18.8		14,000 1 5.4	4
R5		11 2 200				13,165 1 11.4	3
	5	22	12	9	1	6	55

A. $\dfrac{71.2}{5}$ = 14.24 %

B. $\dfrac{810.3}{22}$ = 36.83%
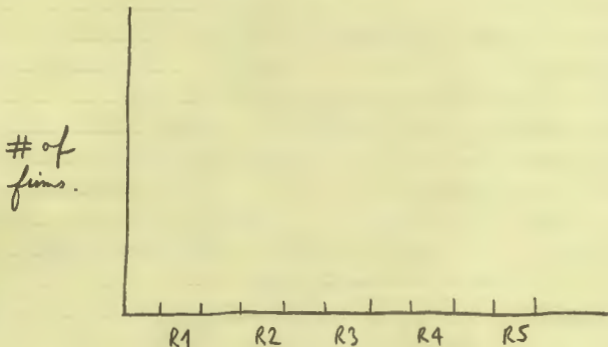
C. $\dfrac{105}{12}$ = 8.75 %

D. $\dfrac{23.1}{9}$ = 2.57%

E.   0.2

F. $\dfrac{18.2}{6}$ = 3.0%

EXHIBIT III — 1:

DISTRIBUTION OF PLANNED Ic OPERATIONAL
BUDGET CATEGORIES — FIRMS WITH ANNUAL
REVENUES
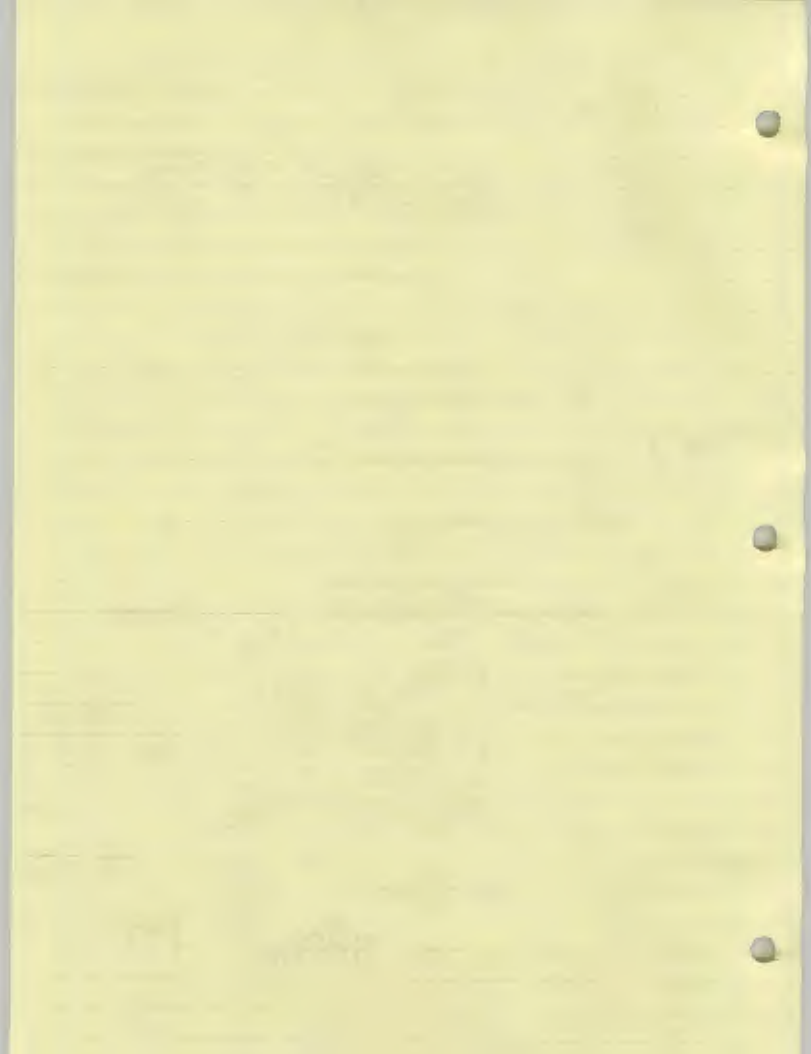

KEY:

R1	less than $25k	13	260
R2	between $25k and $100k	24	1,200
R3	between $100k and $250k	11	1,650
R4	between $250k and $1M	4	2,000
R5	greater than $1M.	3	3,600
		55	8,710

say $150k pa $158

Put in absolute amounts.

EXHIBIT III — 7

ANTICIPATED IMPLEMENTATION EXPENDITURE
FOR INTERNET COMMERCE.

> 10

ANNUAL
REVENUE
BAND
$ B

5 - 10

2 - 5

1 - 2

0·5 - 1

< 0·5

% or