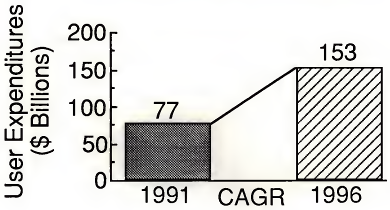
Western Europe, 1991-1996

Software and Services



INPUT

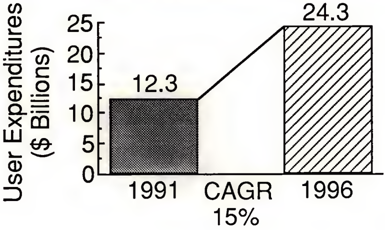
E-MF-1

Notes

10/9/91

Western Europe, 1991-1996

Turnkey Systems Market



INPUT

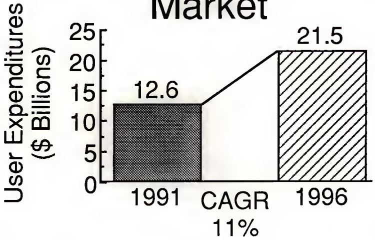
E-MF-2

Notes

10/9/91

Western Europe, 1991-1996

Systems Software Product Market



INPUT

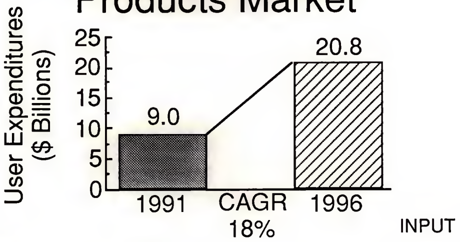
E-MF-3

Notes

10/9/91

Western Europe, 1991-1996

Applications Software Products Market



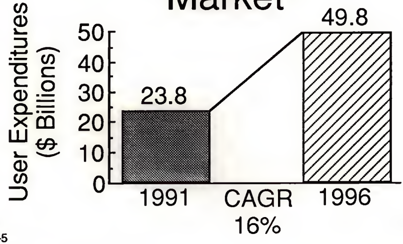
E-MF-4

Notes

10/9/91

Western Europe, 1991-1996

Professional Services Market



INPUT

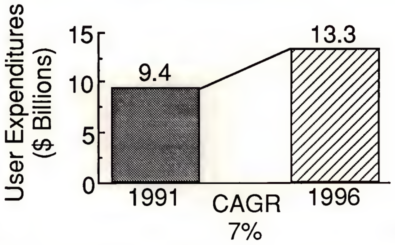
E-MF-5

Notes

10/9/91

Western Europe, 1991-1996

Processing Services Market



INPUT

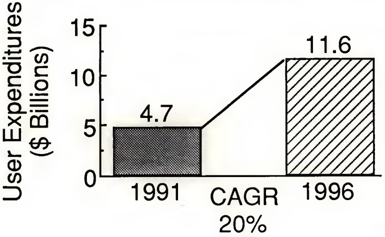
E-MF-6

Notes

10/9/91

Western Europe, 1991-1996

Network Services Market



INPUT

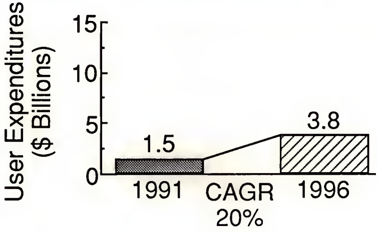
E-MF-7

Notes

10/9/91

Western Europe, 1991-1996

Systems Operations Market



INPUT

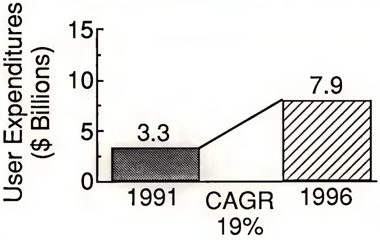
E-MF-8

Notes

10/9/91

Western Europe, 1991-1996

Systems Integration Market



INPUT

E-MF-9

Notes

10/9/91

Western Europe, 1991-1996

Processing Services Market

Subsector	1991 ($M)	CAGR (Percent)	1996 ($M)
Transaction Proc.	8,360	7	11,750
Utility Processing	275	4	330
Other Processing	735	11	1,240
Total	9,370	7	13,320

INPUT

E-MF-10

Notes

10/9/91

Western Europe, 1991-1996

Turnkey Systems Market

Subsector	1991 ($M)	CAGR (Percent)	1996 ($M)
System Equipment	6,280	11	10,490
Software and Other Charges	6,020	18	13,810
Total	12,300	15	24,300

INPUT

E-MF-12

Notes

10/9/91

Western Europe, 1991-1996

Appl. SW Products Market

Subsector	1991 ($M)	CAGR (Percent)	1996 ($M)
Mainframe	1,005	3	1,185
Minicomputer	2,890	14	5,560
Workstation/PC	5,090	23	14,070
Total	9,000	18	20,800

INPUT

E-MF-13

Notes

10/9/91

Western Europe, 1991-1996

Sys. SW Products Market

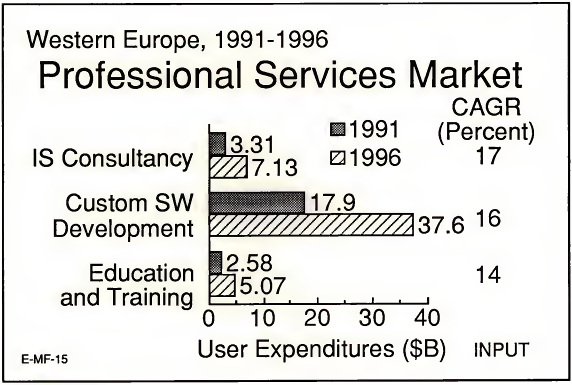
Subsector	1991 ($M)	CAGR (Percent)	1996 ($M)
Mainframe	6,170	4	7,390
Minicomputer	3,900	13	7,090
Workstation/PC	2,530	23	7,000
Total	12,600	11	21,500

INPUT

E-MF-14

Notes

10/9/91


Western Europe, 1991-1996
Professional Services Market
CAGR
(Percent)
1991
1996
IS Consultancy
3.31
7.13
17
Custom SW Development
17.9
37.6
16
Education and Training
2.58
5.07
14
0
10
20
30
40
User Expenditures ($B)
INPUT
E-MF-15

Notes

10/9/91

Software and Services, Western Europe—1990

Leading Vendors

Vendor	Rev. ($M)	Market Share (%)
IBM	4,900	7
Siemens-Nixdorf	1,690	3
CGS	1,650	3
Reuters	1,430	2
Digital	1,220	2

INPUT

E-MF-16

Notes

10/9/91

Software and Services, Western Europe—1990

Leading Independent Vendors

Vendor	Rev. ($M)	Market Share (%)
CGS	1,650	3
Reuters	1,430	2
Andersen	705	1
Microsoft	655	1
Finsiel	620	1

INPUT

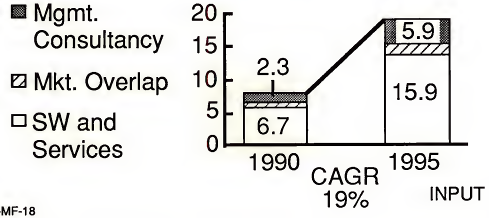
E-MF-17

Notes

10/9/91

U.K., 1990-1995

Consultancy and Software and Services Markets



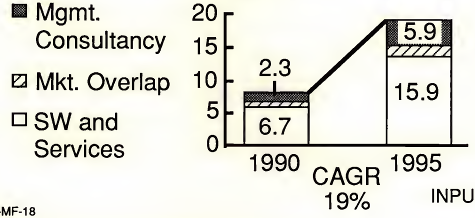
E-MF-18

Notes

5/10/91

U.K., 1990-1995

Consultancy and Software and Services Markets



INPUT

E-MF-18

Notes

5/10/91

Europe

Leading Vendors Software and Services

	1991 ($B)	1991 Ranking	1990 Ranking
IBM	5.3	1	1
Digital	1.7	2	5
Siemens-Nixdorf	1.7	3	2

INPUT

E-MF-19a

Notes

5/6/92

Europe

Leading Vendors Software and Services

	1991 ($B)	1991 Ranking	1990 Ranking
CAP Gemini Sogeti	1.7	4	3
Andersen Consulting	0.9	7	8
Groupe Bull	0.8	8	6

INPUT

E-MF-19b

Notes

5/6/92

Europe

Leading Independent Vendors Software and Services

	1991 ($B)	1991 Ranking	1990 Ranking
CAP Gemini Sogeti	1.7	1	1
Andersen Consulting	0.9	4	3
EDS	0.7	5	21

INPUT

E-MF-20a

Notes

5/6/92

Europe

Leading Independent Vendors Software and Services

	1991 ($B)	1991 Ranking	1990 Ranking
Sema Group	0.7	6	5
Finsiel	0.7	8	6
Sligos	0.8	9	8

INPUT

E-MF-20b

Notes

5/6/92

Information Services, Europe

Market Shares by Vendor Type

Vendor Type	1980 (%)	1991 (%)
Telecom	-	1
Software Products	9	13
Professional Services	18	38
Processing Services	31	3
Network Services	-	1

INPUT

E-MF-21

Notes

Information Services, Europe

Market Shares by Vendor Type

Vendor Type	1980 (%)	1991 (%)
Equipment Vendor	39	35
Independent Maint.	-	2
Product Distribution	-	1
Mgmt. Consultancy	3	7

INPUT

E-MF-22

Notes

5/6/92

Professional Services, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
Cap Gemini Sogeti	France	985
IBM	U.S.	950
Sema Group	France	420
Digital	U.S.	370
Andersen Consulting	U.S.	360

E-MF-23

INPUT

Notes

5/6/92

Professional Services, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
Volmac	Nether.	340
Finsiel	Italy	290
Olivetti Info. Sys.	Italy	250
Unisys	U.S.	210
Bull	France	205

INPUT

E-MF-24

Notes

5/6/92

Professional Services, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
AB Programator	Sweden	195
BSO	Nether.	175
Axime	France	165
ICL	U.K.	155
Price Waterhouse	U.S.	150

INPUT

E-MF-25

Notes

5/6/92

Systems Integration, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
Cap Gemini	France	330
IBM	U.S.	320
Andersen Consulting	U.S.	300
Siemens-Nixdorf	Germany	110
Logica	U.K.	90

INPUT

E-MF-26

Notes

5/6/92

Systems Integration, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
SD-Scicon	U.K.	90
Sema Group	France	85
ICL	U.K.	65
Unisys	U.S.	60
Bull	France	50

INPUT

E-MF-27

Notes

5/6/92

Systems Operations, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
Cap Gemini Sogeti	France	160
EDS	U.S.	120
SD-Scicon	U.K.	75
Finsiel	Italy	60
GSI	France	45

INPUT

E-MF-28

Notes

5/6/92

Systems Operations, Europe, 1990

Leading Vendors

Vendor	Origin	Sector ($M)
Sema Group	France	45
Data Sciences	U.K.	40
CSC	U.S.	35
AT&T Istel	U.S.	30
CISI	France	30

INPUT

E-MF-29

Notes

5/6/92

Competitive Factors

- Heritage and reputation
- Financial and management strength
- Market focus and customer base
- Products and services
- Strategic direction

INPUT

E-MF-30

Notes

5/6/92

Andersen Consulting

Heritage	Professional services
	Large body of IT skill
	Strong graduate development culture
Focus	Business integration
	Full service capability

INPUT

E-MF-31

Notes

5/6/92

Andersen Consulting

Strength	Major projects ability
	Proven methodologies
	Business—IT skill spread
	Board-level contacts
Direction	Systems management
	Multinationals and public sector
	Organic growth

INPUT

E-MF-32

Notes

5/6/92

EDS

Heritage	GM subsidiary
	Systems operations
	Acquired SD-Scicon/GFI
Focus	Systems management (SO + SI)
	UK, France, Benelux
	Key industry accounts

INPUT

E-MF-33

Notes

5/6/92

EDS

Strength	Networks and network management
	Huge data centres
	Management and technical skills
Direction	Large, long-term contracts
	Vertical app's management (e.g., auto and banking)

INPUT

E-MF-34

Notes

5/6/92

IBM

Heritage	Largest vendor worldwide
	Seeking margin from software and services
	Overmanned, loss-making
Focus	Customer solutions via SI
	Consultancy marketing
	Vendor partnerships

INPUT

E-MF-35

Notes

5/6/92

IBM

Strength	Reputation as "safe" buy
	Management controls
	Mainframe client base
	Product distribution channels

INPUT

E-MF-36a

Notes

5/6/92

IBM

Direction	S/W, services and prime contract for 'enterprise' customers
	Minority shares in key partners
	Pan-Europe vertical focus

INPUT

E-MF-36b

Notes

5/6/92

CGS

Heritage	\$2B European leader Professional IT services Autonomous consulting group
Focus	Acquisition of strong players Industry sector strategies Gemini Consultancy synergy Quality and CASE investment

INPUT

E-MF-37

Notes

5/6/92

CGS

Strength	Acquisition management Highly distributed business Europe-wide coverage Long experience of fixed price

INPUT

E-MF-38a

Notes

5/6/92

CGS

Direction

- Global player
- Professional business services
- "Responsibility" contracts
- Assessing small businesses

INPUT

E-MF-38b

Notes

5/6/92

Competitor Profile

Heritage	
Focus	
Strength	
Direction	

INPUT

E-MF-39

Notes

5/6/92