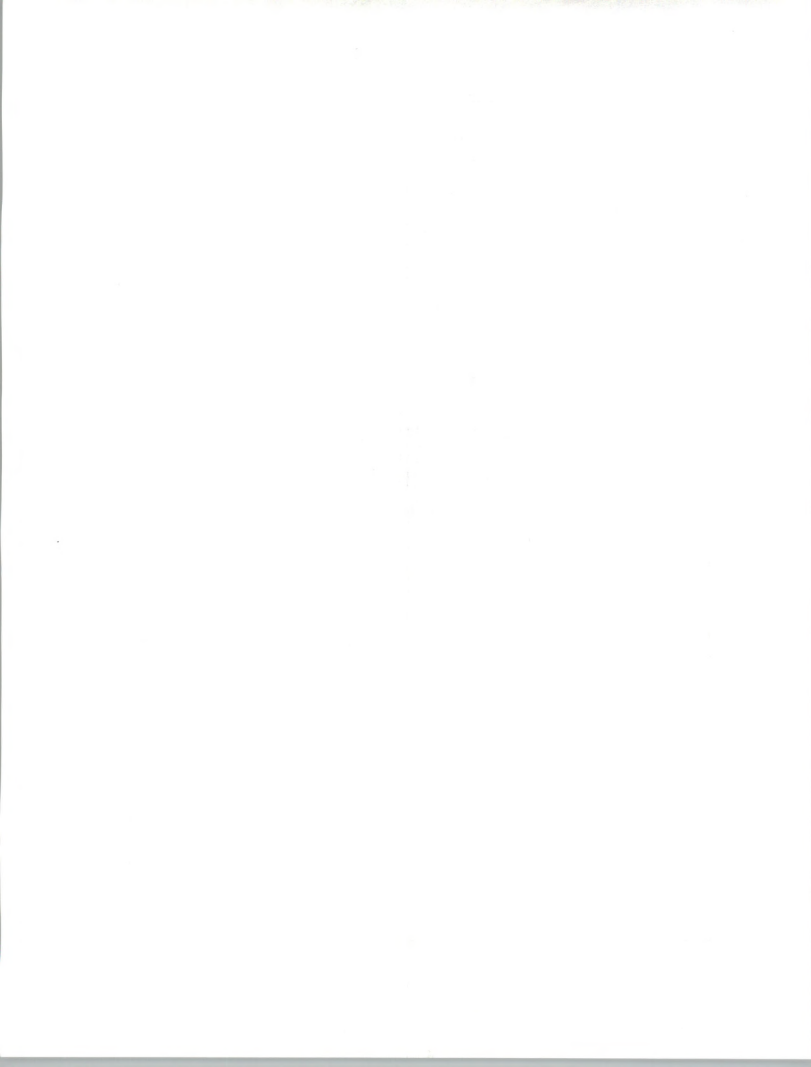


European Markets

Robert Goodwin
Director, Vendor Research
INPUT



Information Services Outlook

The Next 10 Years

- The Services Market in Europe—1988
- Five-Year Forecast
 - Key Trends and Success Factors
- Strategic Factors
 - In for the Long Haul

INPUT

NOTES:

JJ88-PL-1•1



Network Services Market

- Western Europe 1988

	Percent
Network Management	4
Enhanced Services	8
Videotex	23
Insurance	6
E-Mail	27
EDI	6
EFT	26

INPUT

NOTES:

JJ88-PL-2A,B



Five-Year Forecast
1988 - 1993

European Information
Services

INPUT

NOTES:

JJ88-PL-3-1



The Information Services Market 1987/1988

Definitions

- Delivery Modes
 - Turnkey Systems
 - Systems Integration

INPUT

NOTES:

JJ88-PL-4



European Information Systems Market 1988

Sector	\$B	Annual Growth Rate (Percent)
Hardware and Maintenance Services	57	9
Software Products	13	25
Professional Services	11	23
Processing Services	7	9
Total	88	13

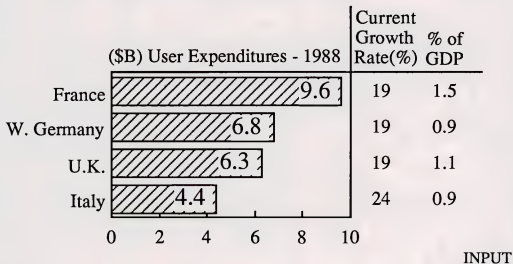
INPUT

NOTES:

JJ88-PL-5



Country Market Analysis Information Services Industry



NOTES:

JJ88-PL-5-1



Services Industry Structure

Size of Service Organisation (\$M)	Number
Greater than 100	35
5-100	400
Less than 5	12,500
Total	13,000

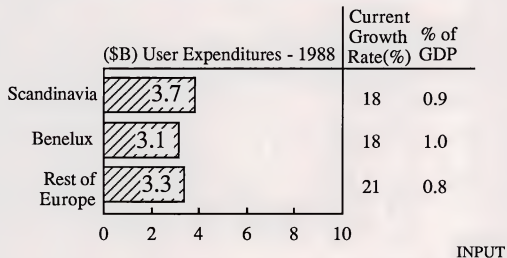
INPUT

NOTES:

JJ88-PL-6



Country Market Analysis Information Services Industry



NOTES:

JJ88-PL-6*1



Information Services Industry Participants



INPUT

NOTES:

JJ88-PL-8



Leading European Independent Services Organisations

Vendor	Worldwide Revenues 1987 (\$M)
CAP Gemini Sogeti	680
SD-Scicon	427
SEMA Group	408
Finsiel	407
Sligos	228

INPUT

NOTES:

JJ88-PL-9a



Leading European Independent Services Organisations

Vendor	Worldwide Revenues 1987 (\$M)
GSI	225
Datev	200
CISI	188
Thorn Software	186
Telesystemes	160

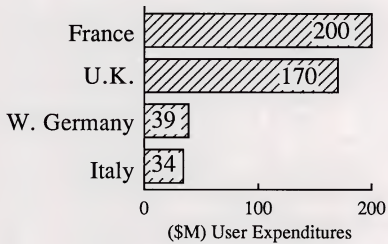
INPUT

NOTES:

JJ88-PL-9b



Network Services—1988



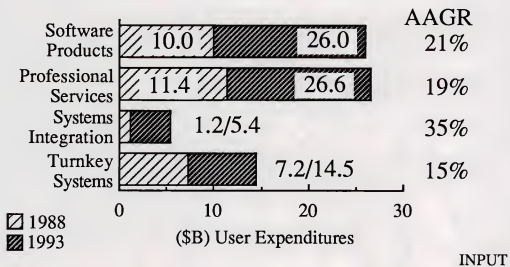
INPUT

NOTES:

JJ88-PL-7-1



Western Europe Information Services Industry



NOTES:

JJ88-PL-11-1



Network Services —Industry Participants

PTT's
Independent Network Operators
Niche Players

INPUT

NOTES:

JJ88-PL-12



Network Services— Key Sectors

- Finance
- Transportation
- Retail
- Distribution

INPUT

NOTES:

JJ88-PL-13



Professional Services —European Sector Structure (Percent)

Custom System Development	72
Consultancy	12
Education and Training	11
Systems Integration	5

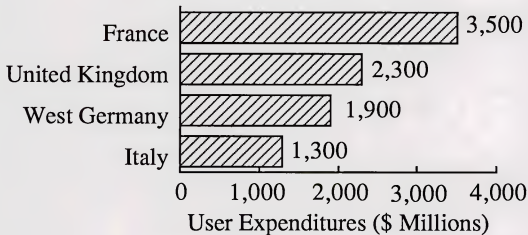
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NOTES:

JJ88-PL-14



Professional Services



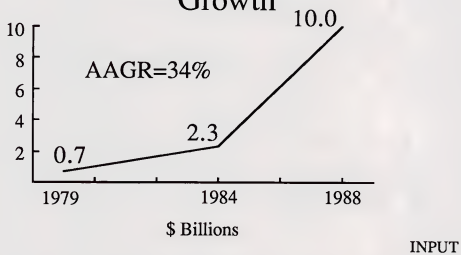
INPUT

NOTES:

JJ88-PL-15*1



Software Products European Market Growth

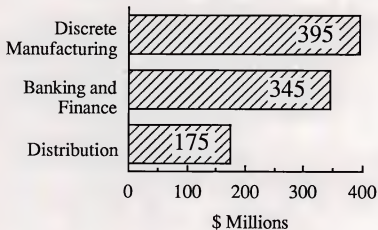


NOTES:

JJ88-PL-16



Industry-Specific Software Products —West European Market 1988



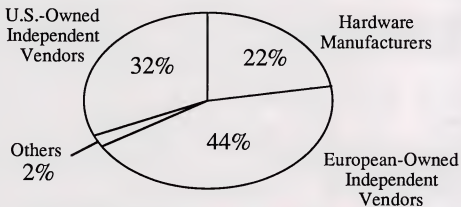
INPUT

NOTES:

JJ88-PL-17



Applications Software Market Vendor Analysis—Western Europe



1987 Total User Expenditures = \$3.1 Billion

INPUT

NOTES:

JJ88-PL-36



The Information Services Market 1987/1988

Definitions

- Hardware
- Software
- Professional Services
- Processing Services

INPUT

NOTES:

JJ88-PL-3



Five-Year Scenario

- Market Forecast
- Partnerships
- Custom/Standard
- The Training Challenge
- Maintenance/Support
- Marketing Channels

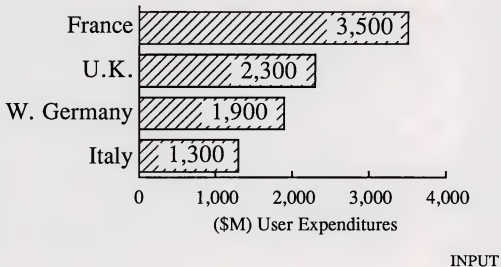
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NOTES:

JJ88-PL-4-1



Professional Services

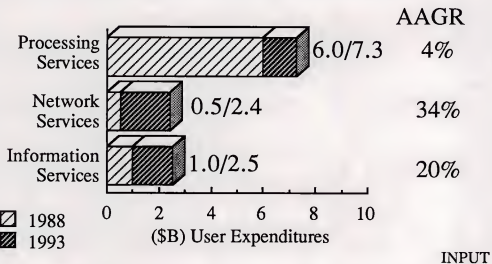


NOTES:

JJ88-PL-8-1



Western Europe Information Services Industry



NOTES:

JJ88-PL-10-1



Market Structure

Processing Services

Network Services

Network
Management

Enhanced
Services

Application
Services

Information Services

INPUT

NOTES:

JJ88-PL-11



Vendor Partnerships

- Software House Partnerships
- Hardware/Software Companies
- Vendor/Client Agreements

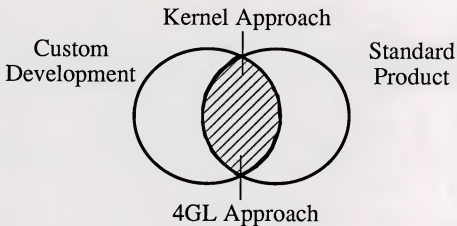
INPUT

NOTES:

JJ88-PL-38



Standard Product-Custom Development Convergence



INPUT

NOTES:

JJ88-PL-39



Education and Training Western European Issues

- Reluctance to Train
- Training Budgets
- Qualifications
- The Skills Shortage

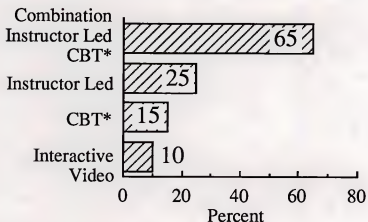
INPUT

NOTES:

JJ88-PL-18



European IS Users —Most Favoured Training Methods



*Computer-Based Training

INPUT

NOTES:

JJ88-PL-19



Sources of IS Training —Western Europe

Training Source	Users (Percent)	
	Hardware	Software
Hardware Manufacturer	20	5
Independent Services Co.	10	30
Other	1	4

INPUT

NOTES:

JJ88-PL-20



The Skills Shortage Driving Forces

- The Planning and Operation of New Systems
- Technology Change
- The Demographic Profile
- Staff Turnover

INPUT

NOTES:

JJ88-PL-21



Support Issues

- Support/Maintenance
- Training
- Upgrade/Enhancement

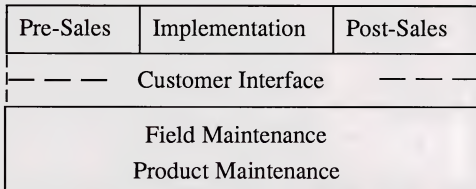
INPUT

NOTES:

JJ88-PL-25



Support Area



INPUT

NOTES:

JJ88-PL-26



The User's View

- Overall Satisfaction Moderate
- Most Problems Service-Related
- Unbundling Opposed

INPUT

NOTES:

JJ88-PL-27



Pricing/Support Strategy

- Combined Pricing Mechanism
- Unbundle Functionality
- Bundle Support/Maintenance

INPUT

NOTES:

JJ88-PL-28



Pricing/Support Environment

- Bundling/Unbundling
- Vendor Challenge
 - User Confusion
 - Regain Initiative

INPUT

NOTES:

JJ88-PL-29



Channel Decisions

- Turnkey
- Systems Integration

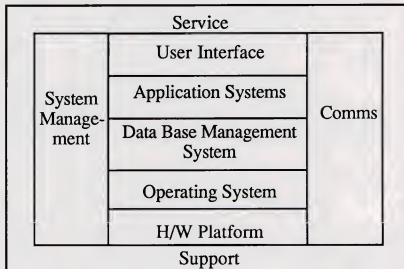
INPUT

NOTES:

JJ88-PL-30



Vendor Offering



INPUT

NOTES:

JJ88-PL-31



Systems Integration

"The Provision of a Total Solution
to a Multidisciplinary Information
Systems Requirement"

INPUT

NOTES:

JJ88-PL-32



Systems Integration—A Model

(Percent)

Hardware	35
Software Products	5
Software Development	40
Project Management/Consultancy	15
Other Services	5
Total	100

INPUT

NOTES:

JJ88-PL-33



European SI Market Characteristics

- Emergent Stage
- User Awareness
 - Technical
 - Commercial
- Joint Ventures

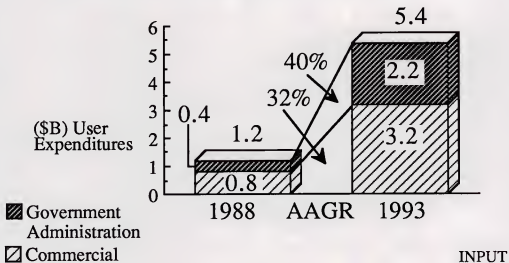
INPUT

NOTES:

JJ88-PL-34



Western Europe Systems Integration Market



NOTES:

JJ88-PL-12•1



Strategic Factors 1988-1998

European Information Services

INPUT

NOTES:

JJ88-PL-40



Western European Information Services 1988-1998

Continuing Growth Opportunities

- Technological Development
- Technology Convergence
- CASE

INPUT

NOTES:

JJ88-PL-41



Industry Trends

- Systems Becoming More Complex
- Increasing User Demand for Resources and Solutions
- Boundary between Business/Systems Disappearing

INPUT

NOTES:

JJ88-PL-42



Western European Information Services 1988-1998

Industry Rationalisation

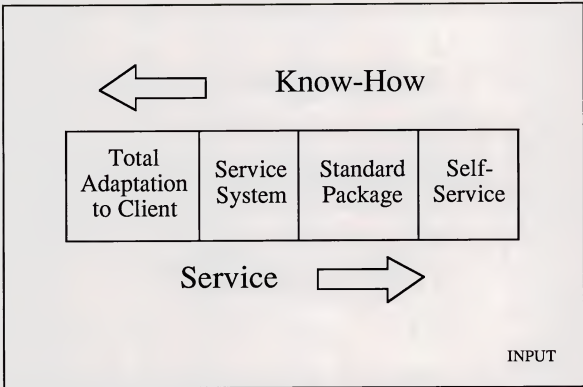
- Delivery Mode
 - Develop/Control
- Client Industry Knowledge
- New Competitors
- Big or Boutique

INPUT

NOTES:

JJ88-PL-43



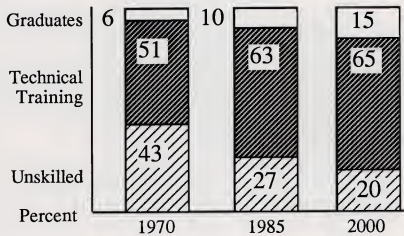


NOTES:

JJ88-PL-44



West German Working Population



INPUT

NOTES:

JJ88-PL-45



Strategy Recommendations

Emphasise

- Professional Services
- Garner
 - Technological Expertise
 - Implementation Expertise
 - Control and Responsibility

INPUT

NOTES:

JJ88-PL-46



Strategy Recommendations

- Continue to Emphasise Profitability
- Clearly Justify Big/Medium/Small

INPUT

NOTES:

JJ88-PL-47



③

SLIDE ORDER FOR JCC.

JJ88 - ~~PL-0~~ Replaced w/ Bob Grodum

PL-1.1 (Information Services Outlook
- The Next 10 Years)

- PL-3

- PL-4

- PL-5

- PL-6

PL-5.1

PL-6.1

- PL-8

- PL-9a

- PL-9b

PL-7.1

- PL-11

PL-2A, B.

- PL-12

- PL-13

- PL-14

- PL-15.1 (N.B. Slide insert - see attached)

- PL-16

- PL-17

- PL-36

PL-3.1

PL-4.1

PL-8.1

- PL-38

{ PL-10.1
PL-11.1.

- PL-39

- PL-18

- PL-19

- PL-20

- PL-21

- PL-25

- PL-26

- PL-27

④

(continued).

JJ88 P1.-28

~~PL-29~~~~PL-30~~~~PL-31~~~~PL-32~~~~PL-33~~~~PL-34~~

PL-12.1

~~PL-40~~~~PL-41~~~~PL-42~~~~PL-43~~~~PL-45~~

PL-44

~~PL-46~~~~PL-47~~



(2)

Calvin,

You have just sent me a bunch of slides
with codes JJ88-PL-0

- 1
- 2A,B
- 3
etc
- 12

Unfortunately these code numbers have already
been used. Please renumber as follows:

<u>Your #</u>	<u>New #</u>
JJ88-PL-0	OK -7.1
- PL-1	- 2.1
JJ88-PL-2	OK
- PL-2A,B	-5.1
- PL-5	-6.1
- PL-6	-7.1
- PL-7	-3.1
- PL-3	-4.1
- PL-4	-8.1
- PL-8	
(Note PL-9 is identical to PL-8)	10?
PL-10	-10.1
PL-11	-11.1
PL-12	-12.1

- You do not appear to have prepared slide PL-15.1 which I have included below. + correction for PL-12.1.
 - Attached is the full slide order for the JCC.
- Trust all is clear. Regards Peter.





European Markets

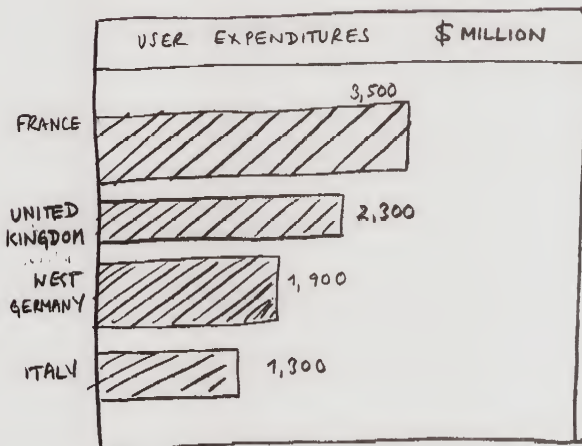
Peter Lines
European Director, Research
INPUT

European Markets

European Union
European Central Bank
1999

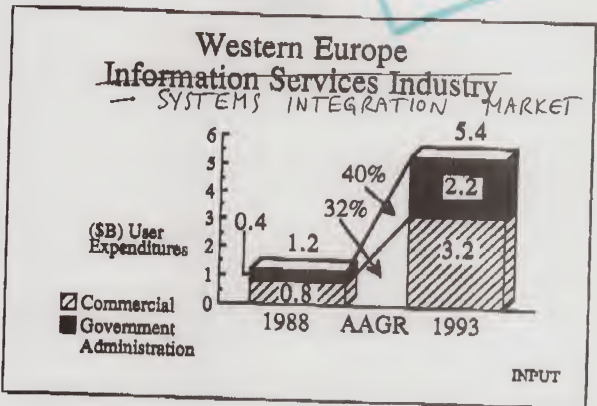
⑤

PROFESSIONAL SERVICES



my

6



NOTES:

JJ88-PL-12-1

2.

INFORMATION SERVICES OUTLOOK
- THE NEXT 10 YEARS

- THE SERVICES MARKET IN EUROPE
- 1988
- FIVE
~~THREE~~-YEAR FORECAST
- KEY TRENDS AND SUCCESS FACTORS
- STRATEGIC FACTORS
IN FOR
- THE LONG HAUL



NETWORK SERVICES MARKET
- WESTERN EUROPE 1988

NETWORK MANAGEMENT	4%
ENHANCED SERVICES	8%
VIDEOTELEX	23%
INSURANCE	6%
E-MAIL	27%
EDI	6%
EFT	26%

11.1

2A, 2B





FIVE YEAR FORECAST
~~CURRENT TRENDS~~
- 1988 - 1993

EUROPEAN INFORMATION SERVICES





FIVE
~~YEAR~~ YEAR SCENARIO

- MARKET FORECAST
- PARTNERSHIPS
- CUSTOM / STANDARD
- THE TRAINING CHALLENGE
- MAINTENANCE / SUPPORT
- MARKETING CHANNELS

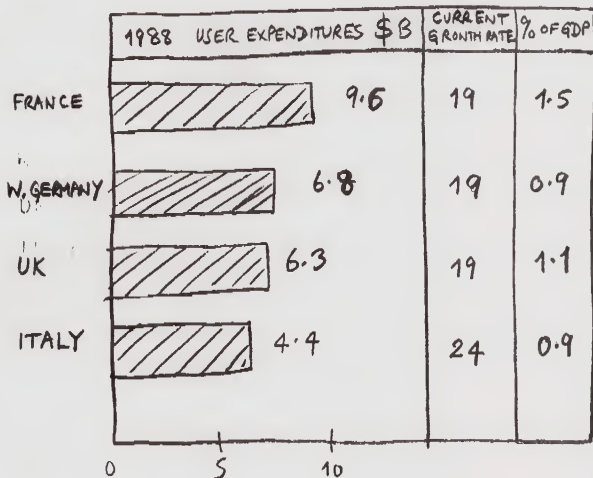
20.1

4



COUNTRY MARKET ANALYSIS

- INFORMATION SERVICES INDUSTRY



7.1

5



COUNTRY MARKET ANALYSIS

- INFORMATION SERVICES INDUSTRY

	1988 USER EXPENDITURES \$B	CURRENT GROWTH RATE	% OF GDP
SCANDINAVIA	3.7	18%	0.9
BENELUX	3.1	18%	1.0
REST OF EUROPE	3.3	21%	0.8

7.2

6

THE
ANTHROPOLOGY OF THE
INDIAN ARCHipelAGO

EDITED BY
H. H. COLEMAN

Volume 10, Part 1, 1980

Published by the
Royal Anthropological Institute

London, 1980

Price £12.00

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Printed in Great Britain

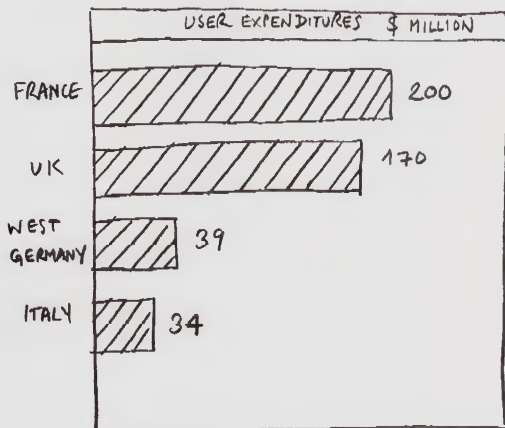
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NETWORK SERVICES 1988

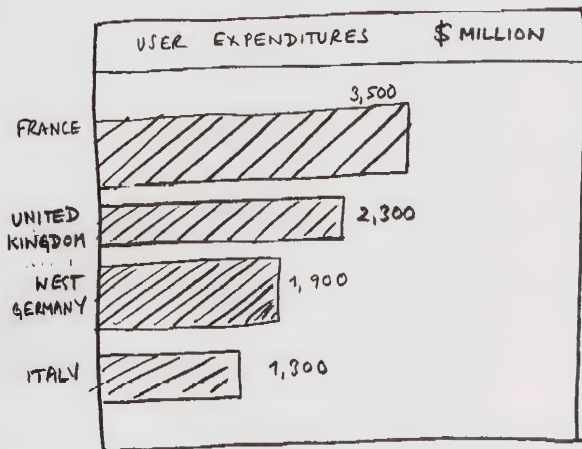


10.1

9



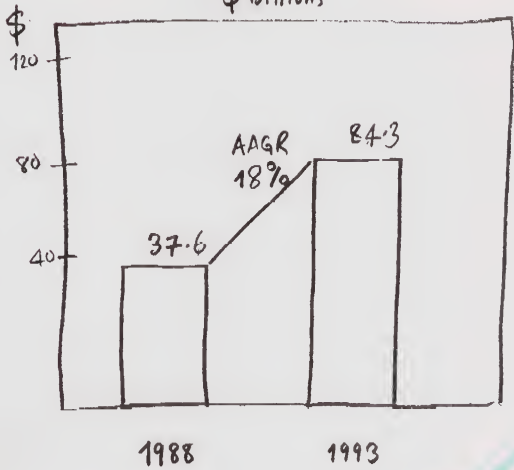
PROFESSIONAL SERVICES





INFORMATION SERVICES INDUSTRY - WESTERN EUROPE 1988-1993

\$ Billions

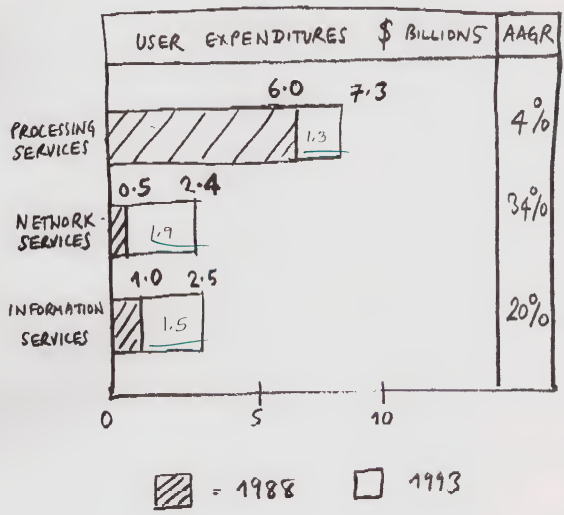


20.2





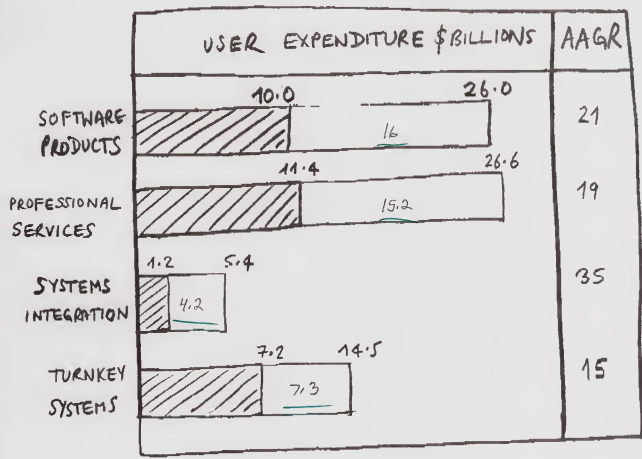
WESTERN EUROPE - INFORMATION SERVICES INDUSTRY



20.3



WESTERN EUROPE
- INFORMATION SERVICES INDUSTRY



▨ = 1988

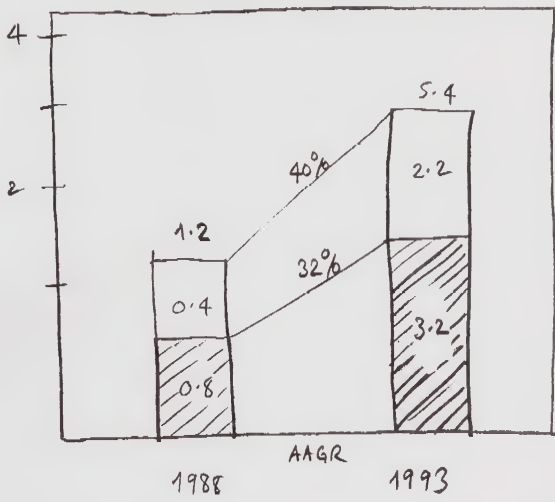
□ = 1993

20.4

11



SYSTEMS INTEGRATION
 - WEST EUROPEAN MARKET
 (\$ Billions)



 COMMERCIAL
  GOVERNMENT ADMINISTRATION

21.6

12

