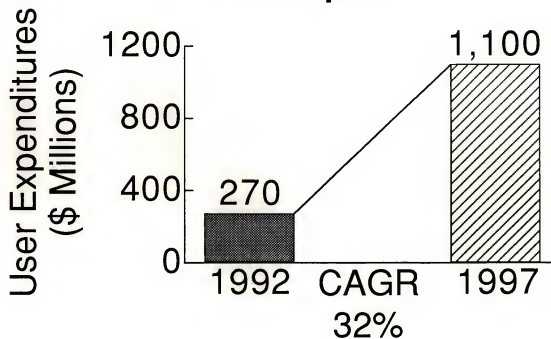


Outsourcing Desktop Services In Europe

E-OU-2
4/20/92



Desktop Services Market Europe

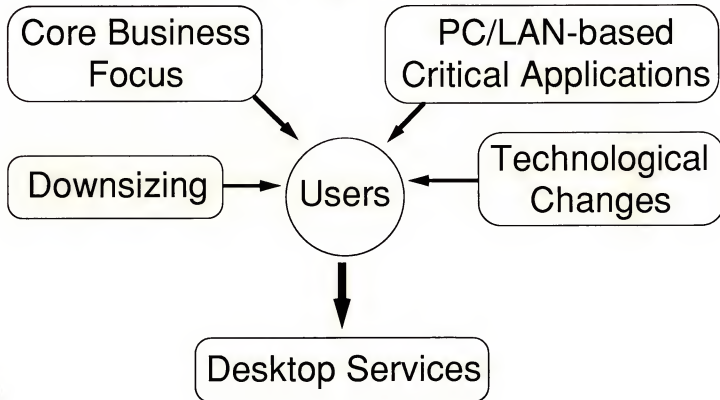


E-OU-3
4/20/92



Desktop Services, Europe

Driving Forces



E-OJ-4
4/20/92



Desktop Services, Europe

The Decision Process

Size of Organization	In-House Capability Level	Source of decision to outsource
Large organizations	High	Senior executives
Medium-sized organizations	Low	IS management

E-OU-5
5/19/92



Desktop Services, Europe

Major Country Markets, 1992

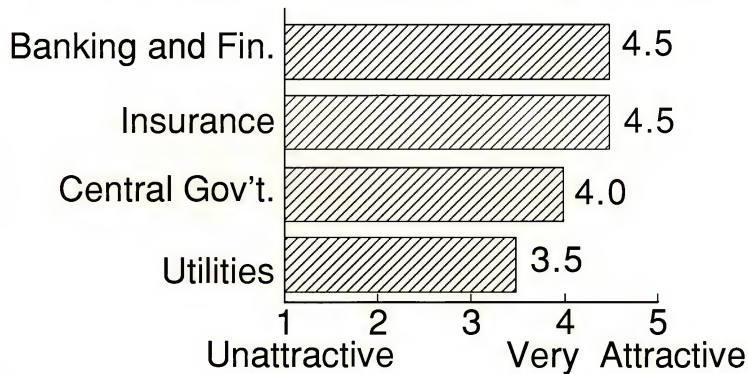
Country	1992 Revenues (\$ Millions)
United Kingdom	120
Germany	40
France	30
Netherlands	25

E-OU-6
4/20/92



Desktop Services, Europe

Attractiveness of Industry Sectors

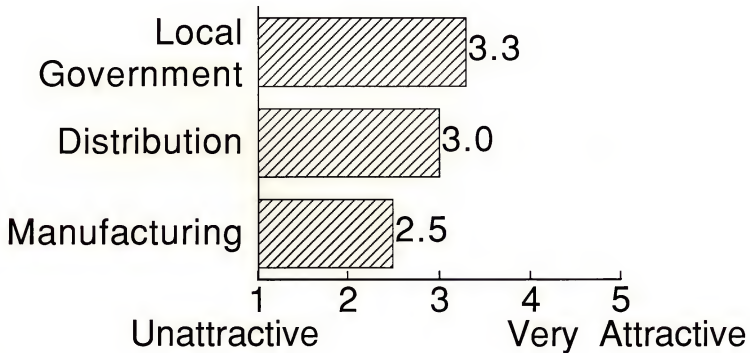


E-OU-7a
4/20/92



Desktop Services, Europe

Attractiveness of Industry Sectors

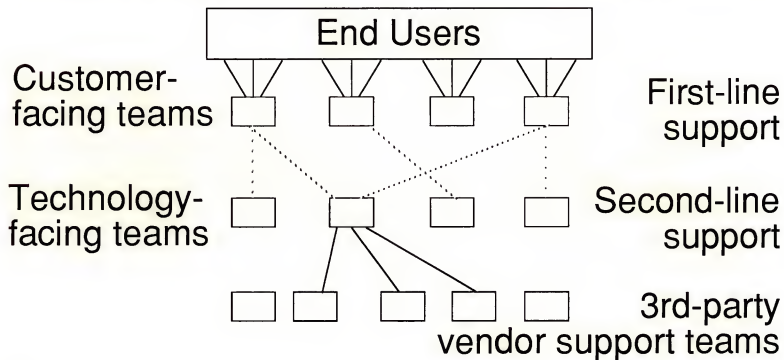


E-OU-7b
4/20/92



Desktop Services, Europe

Delivery of Help Desk Services



E-OU-8
4/20/92



Desktop Services, Europe

Pricing Mechanisms

- Cost of on-site support plus mark-up
- Monthly usage of remote help desk
- Volume discounts

E-OU-9
4/20/92



P&P: Service Offerings

- Contract managed support
- Dealer to Times Top 100
- Frequently take on user IS personnel
- Open relationship
- Tailored service

E-OU-10
4/20/92

INPUT

INPUT



Delivery Capability: ICG

Service Element	Level of Capability
Purchasing consulting	High
Equipment purchase	High
Equipment maintenance	High
LAN/equipment installation	High
LAN management	High

E-OU-11a
5/19/92



Delivery Capability: ICG

Service Element	Level of Capability
Help desk services	
- Systems software	High
- Applications SW products	High
Second-line technical support	High

E-OU-11b
5/19/92



Desktop Services, Europe

Strategies: Professional Services Vendors

- Only targeting desktop services as part of wider offering
- Concentrating on network implementation and management

E-OU-16
4/20/92

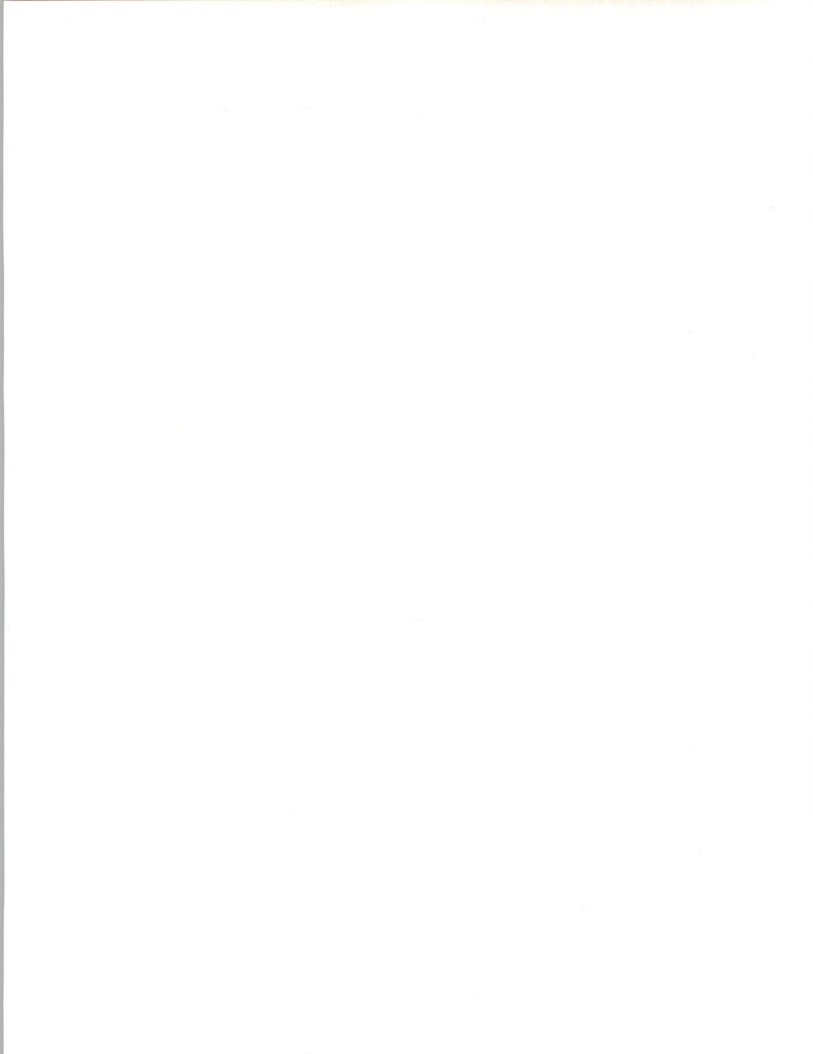


Desktop Services, Europe

Professional Services Vendors

Strengths	Weaknesses
<ul style="list-style-type: none">• Networking capability	Lack of supply cap.
<ul style="list-style-type: none">• Synergy with systems operations	Lack of depth and breadth of software product knowledge
<ul style="list-style-type: none">• Access to large accts.	Lack of ambition

E-OU-17
4/20/92



Desktop Services, Europe

Dealer/Distributor Strategies

- Develop pan-European capability
- One-stop shopping
- Partnerships for proprietary capability
- Major opportunity to enter high-margin services business
- Targeting system development

E-OU-18
4/20/92



Desktop Services, Europe

Personal Computer Dealers

Strengths	Weaknesses
<ul style="list-style-type: none">• Full desktop services capability• Breadth and depth of product knowledge• Vendor independence	<ul style="list-style-type: none">• Lack of mainframe and midrange capability• Pan-European capabilities still embryonic

E-OU-19
4/20/92



Desktop Services, Europe

Key Trends

- Outsourcing ITTs increasingly request desktop services
- Desktop services also emerging as standalone service

E-OU-20a
4/20/92



Desktop Services, Europe

Key Trends

- Downsizing producing substantial market growth
- Could become dominant form of infrastructure management

E-OU-20b
4/20/92



Desktop Services, Europe

Vendor Challenges

- Independence of supply
- Full-service capability
- Breadth of software product support capability
- Up-to-date technical skills
- Pan-European coverage

E-OU-21
4/20/92



ICG Service Offerings

- Help Desk
- International account management
- Consulting services
- PC integration services

E-OJ-22
5/19/92



ICG: Strengths and Weaknesses

Strengths	Weaknesses
Pan-European coverage	Lack industry-specific expertise
Equipment supply	Lack mainframe expertise
Breadth and depth of support capability	SO customer base

E-CU-23
5/19/92



Service Offering: Sema Group

- Based on LAN expertise
- Support limited application range
- Prefer remote help desk

E-OU-24
5/19/92



Desktop Services, Europe

Delivery Capability: Sema Group

Service Element	Level of Cap.
Purchasing consultancy	Medium
Equipment purchase	Medium*
Equipment maintenance	Medium-High*
LAN/equipment installation	High
LAN management	High

*Via partner

E-CU-25
5/19/92



Desktop Services, Europe

Delivery Capability: Sema Group

Service Element	Level of Cap.
Help desk services	
-Systems software	High
-Applications software products	Medium
Second-line technical support	High

E-OU-26
5/19/92



Strengths and Weaknesses: Sema Group

Strengths	Weaknesses
LAN skills Willingness to support ASPs	Lack breadth of PC application support capability

E-OU-27
5/19/92



Overview of Outsourcing Market in Europe

E-OU-28
5/20/92



Outsourcing, Europe

Identification of Prospects

Low

Level of In-house
IS Capability

Changing Co. Struct.	Remote Subsid.
Changing Business Focus	New Acquisition
Stable Well-Focused Org.	Change of CEO

Quality of Relat. Between IS & Clients

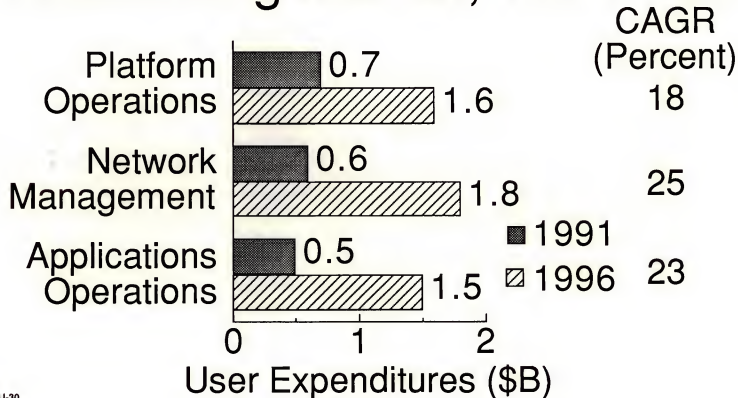
High

Low

E-OU-29
5/20/92



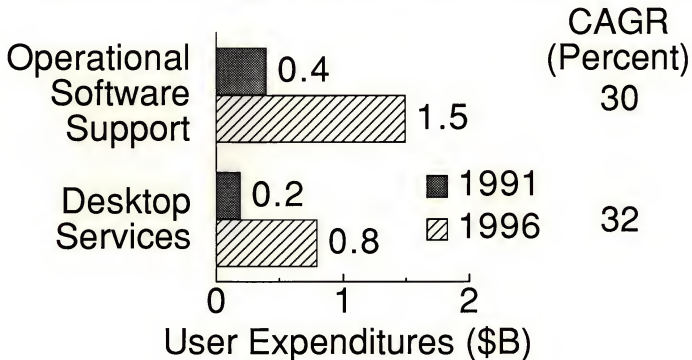
Europe Outsourcing Market, 1991-1996



E-OU-30
5/20/92



Europe Outsourcing Market, 1991-1996



E-OJ-31
5/20/92



Outsourcing, Europe

Principal Reasons for Platform Operations

Factor	Degree of Imp.
Easier planning of IS costs	High
Complexity of technology	High
Difficulty in recruiting staff	Medium
Change in technology used	Medium

E-OU-32
6/8/93



Outsourcing, Europe

Principal Reasons for Platform Operations

Factor	Degree of Imp.
Easier planning of IS costs	High
Complexity of technology	High
Difficulty in recruiting staff	Med.
Change in technology used	Med.

E-OU-32
5/20/92



Network Management Outsourcing Drivers

- Increasing reliance on the network—globalisation of business
- Increasing complexity of networking technology
- Increasing volatility of the public network infrastructure

E-OJ-33
5/20/92

Operational Software Support Outsourcing Drivers

- Dependence on aging application systems
- Resource management difficulties
- Software staff discontent

E-OU-34
5/20/92



Operational Software Support Outsourcing Drivers

- New business demands on staff
- Holding action during transition
- User discontent with quality of service

E-OU-35
5/20/92



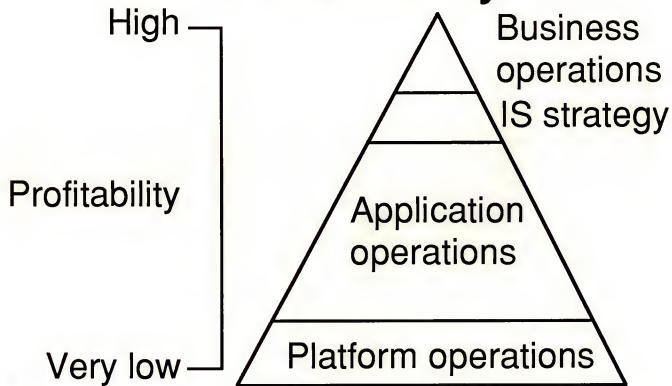
Operational Software Support Conclusions

- Untapped market opportunity
- Total user spend ~ \$44 billion
- Less than 1% is outsourced
- Primary need—IS management skills

E-OU-36
5/20/92

Outsourcing, Europe

Profitability



E-OU-38
5/20/92

INPUT

Outsourcing, Europe

Leading Vendors, 1990

Rank	Company	Est. Rev. (\$M)
1	CGS/Hoskyns	145
2	EDS	132
3	AT&T Istel	78
4	GSI	64
5	SD-Scicon	59

E-OU-39
5/20/92

Outsourcing Product Lines Hoskyns

- Midrange
- Mainframe
- Application management
- Desktop services

E-OU-40
5/20/92

AT&T Istel

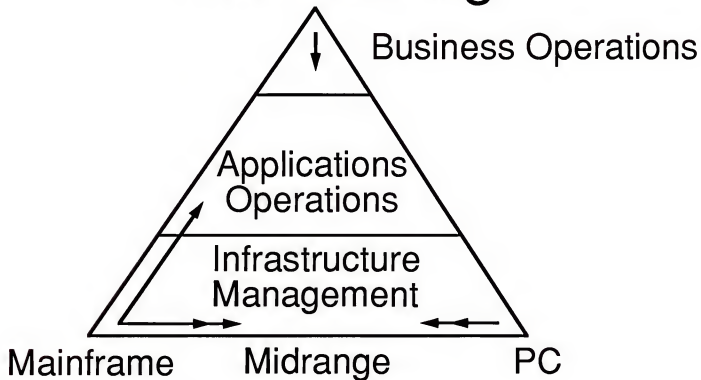
Breakdown by Service Type Outsourcing Customer Base

Service	(%) of Contracts
FM and efficiency mgmt.	55
Service management	35
Change management	5
Information systems mgmt.	5

E-OU-41
5/20/92



Evolution of European Outsourcing



E-OJ-42
6/8/93



Downsizing

What Is Its Meaning?

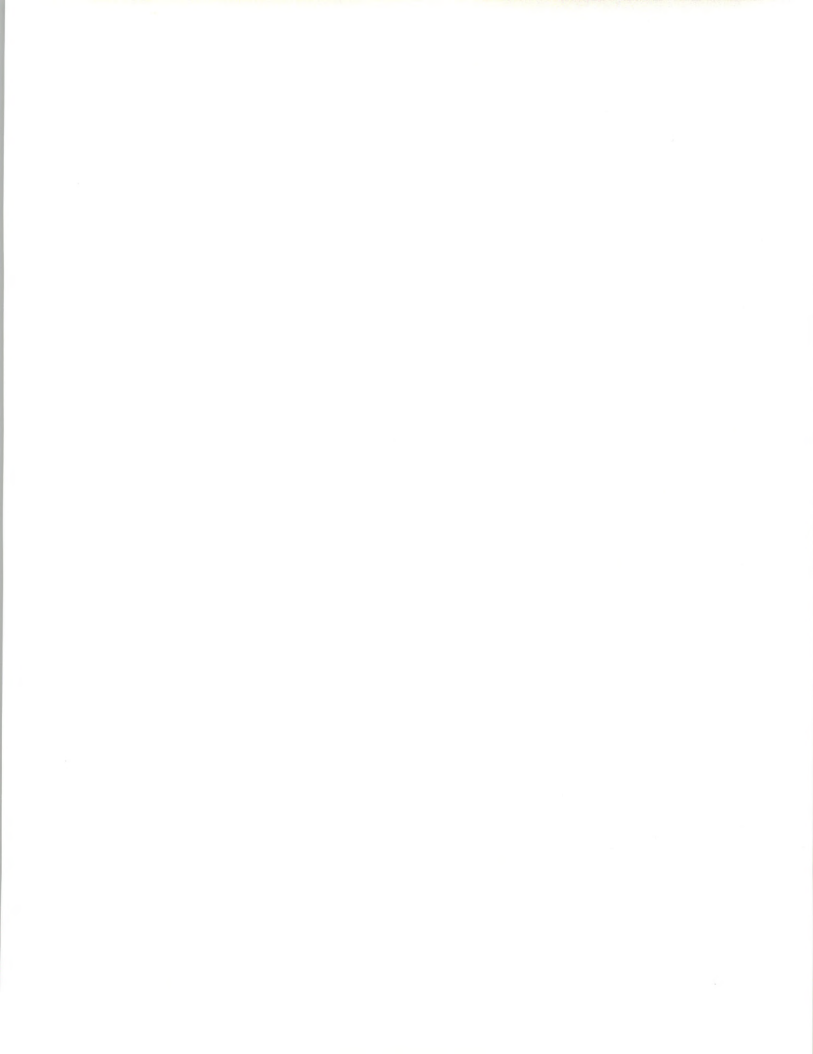
- Something new
- Something old
- Downsizing = Upsizing
- Downsizing = Smartsizing = Upsizing
Rightsizing

E-CU-43
5/28/92

Hoskyns—Application Management Contracts

Company	Contract Details
ICI Agrochemicals	Transfer of 57 personnel
PowerGen	Support for non-strategic systems
Prudential Holborn	Maintenance/enhancement

E-OU-44
6/23/92



Data Sciences: Strategy

- Develop existing client base
- Target applications development for medium-sized organisations
- Partner Computeraid for desktop services

E-OU-45
6/23/92

Data Sciences Outsourcing Contracts

Client	Contract Details
Sedgwick	Potentially 2,000 PCs
Sphere Drake	Downsizing to PC LAN
National Grid	UNIX-based network

E-OU-46
6/23/92



Andersen Consulting Outsourcing Strategy

- Low emphasis on platform operations
- Target application management
- Target business process services

E-OU-47
6/23/92



Andersen Consulting—Examples of Outsourcing Contracts

Company	Contract Details
Thames Water	Transition management
Stock Exchange	Platform operations
Yorkshire RHA	Transition management

E-OU-48
6/23/92

TeleCom Capita Outsourcing Activities

- Purchased Royal Institute of Public Administration
- Takeover of local government revenue collection
- Collects community charge for 23 councils

E-OU-49
6/23/92



Desktop Services, Europe

P&P: Strengths

- Targeting Times Top 100
- Vendor independence
- Breadth and depth of PC knowledge

E-OU-50
6/23/92



Desktop Services, Europe

P&P: Weaknesses

- Lack of proprietary systems operations capability
- European coverage
- Lack of industry expertise

E-OU-51
6/23/92



Digital U.K. Outsourcing Revenues

Service Category	Annual Revenues (£M)
Systems operations	7
Network management	6
Desktop services	5
Total	18

E-OU-52
6/23/92



Digital—Outsourcing Target Markets

- Finance sector
- Utilities
- Retail sector

E-OI-53
6/23/92



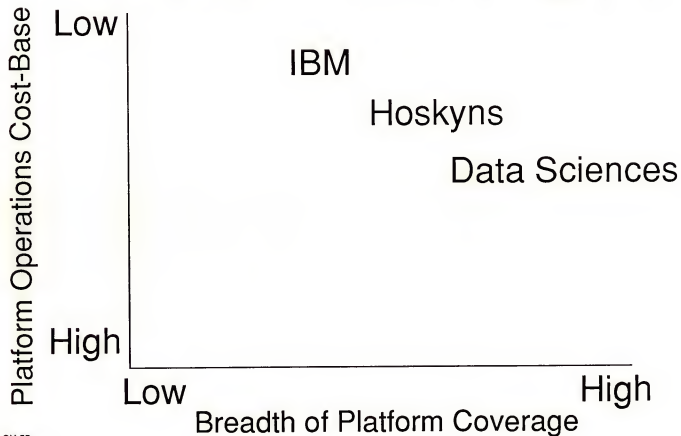
Axone: Outsourcing Strategy

- High growth from transition management services
- Developing multivendor platform operations
- Application management on midrange platforms

E-OU-54
6/23/92



Vendor Positioning (1)

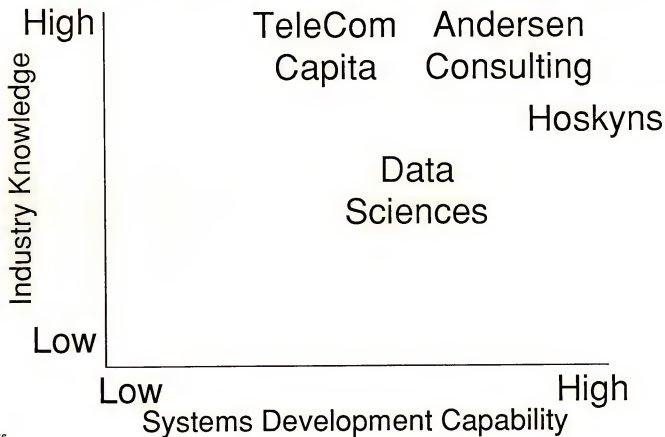


E-OU-55
6/23/92

INPUT



Vendor Positioning (2)



E-OU-56
6/23/92

INPUT



Outsourcing Vendor Strategies

E-OU-57
6/23/92

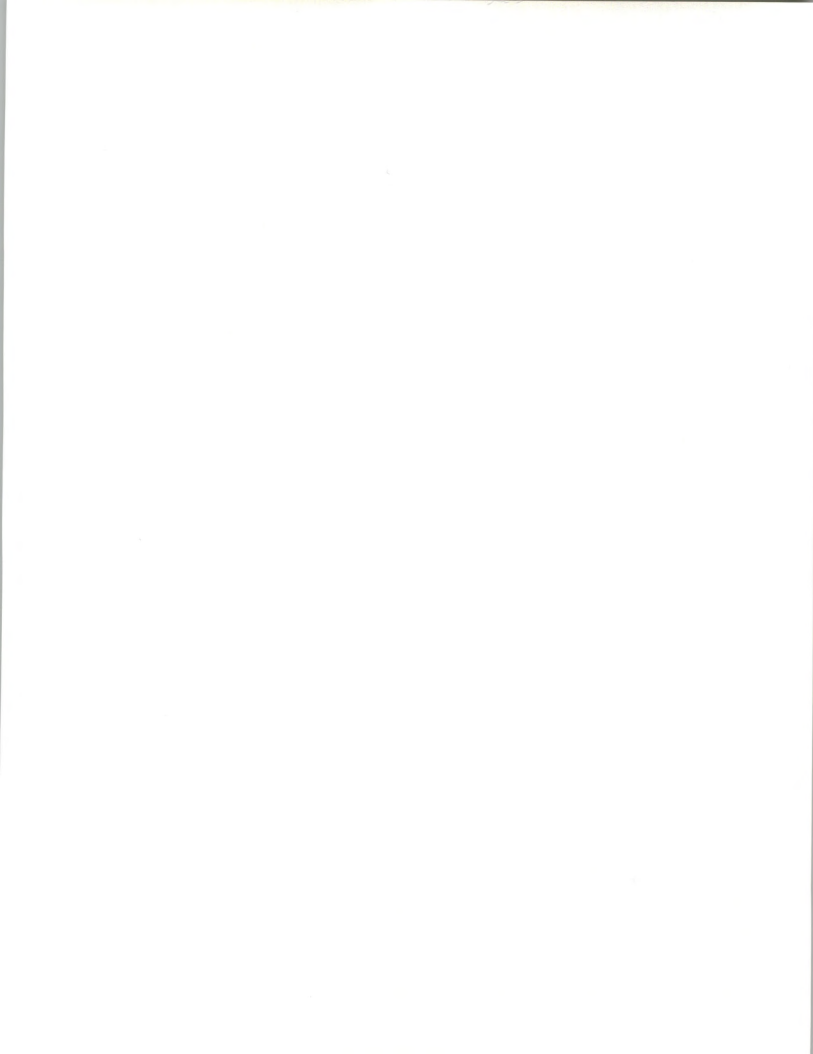


Software and Services, Europe

Key User Demands

- Value for money
- Cost reduction
- Effectiveness

E-OU-58
9/1/92



Software and Services, Europe

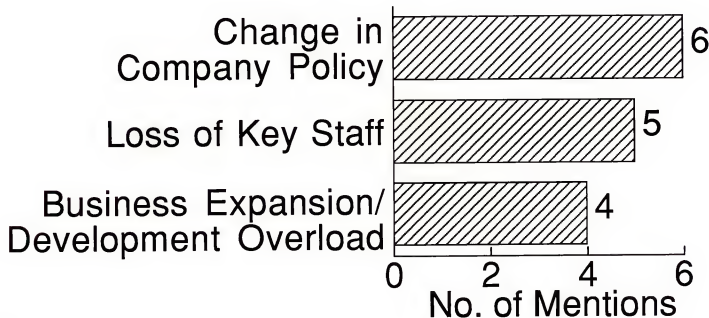
Seeking Cost Reductions for IT

- Downsizing
- Outsourcing
- 80% solutions

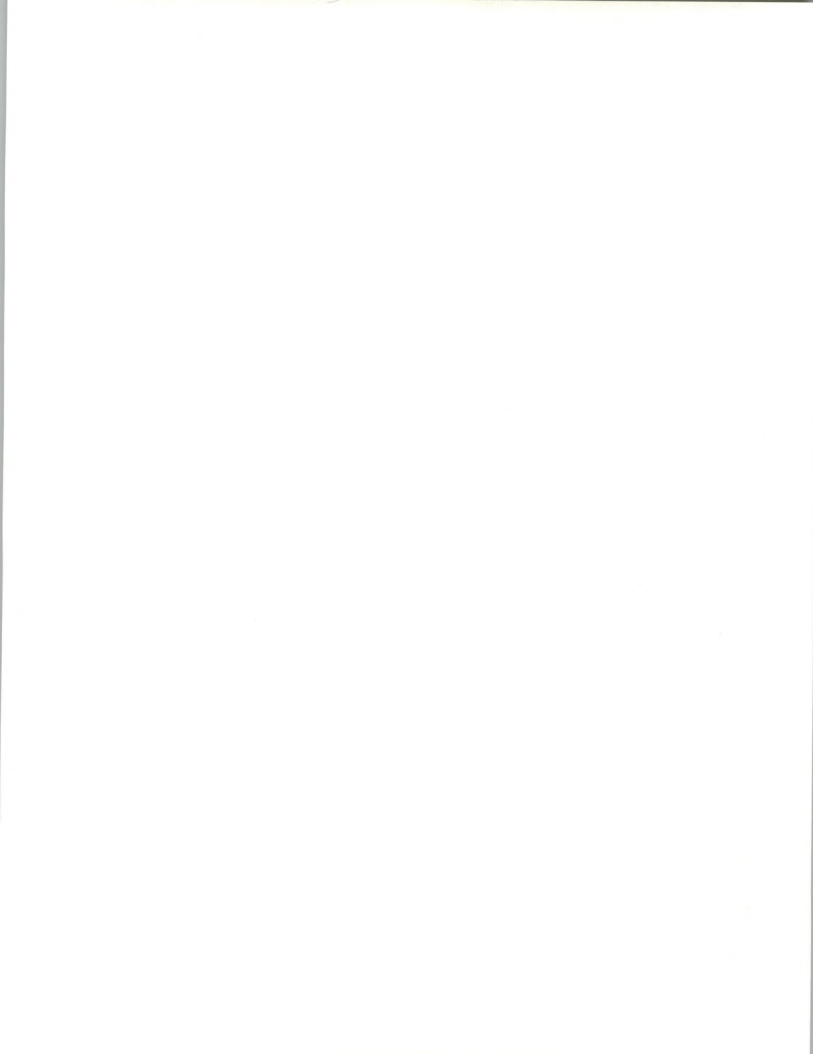
E-OU-59
9/1/92



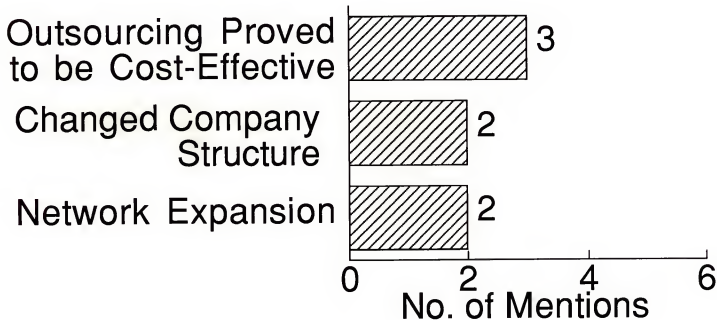
Circumstances for Adoption of Outsourcing IS Managers, Europe



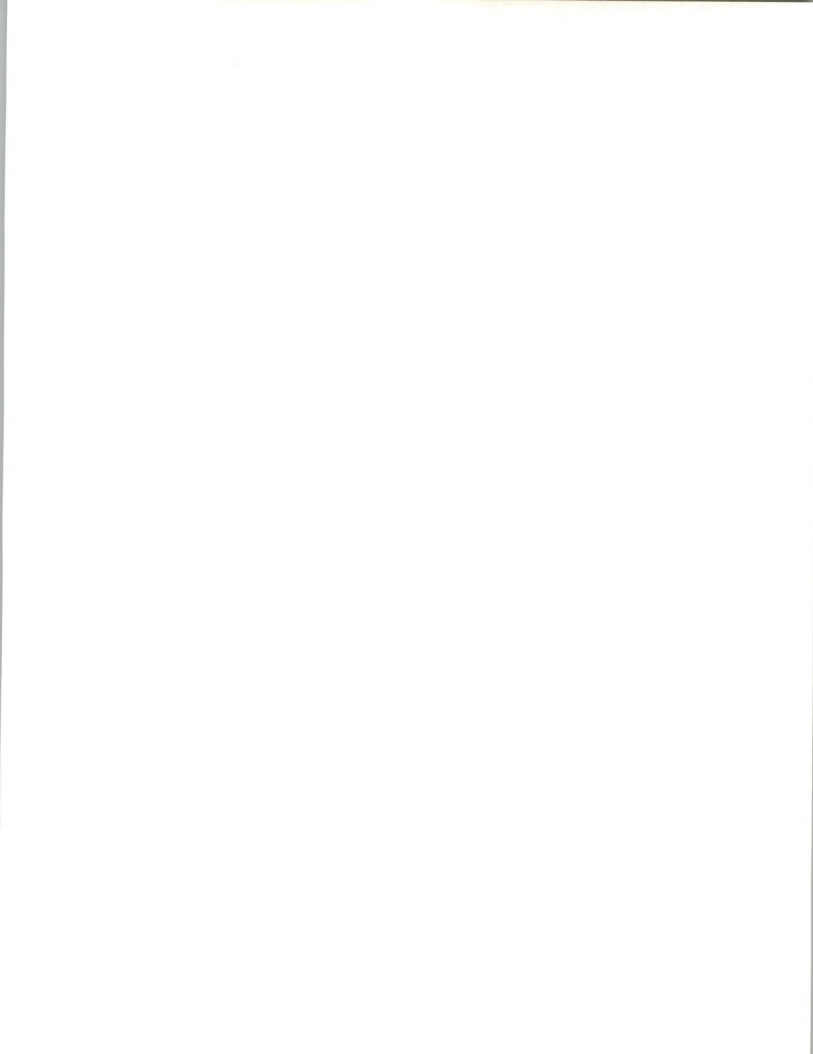
E-OU-61
9/1/92



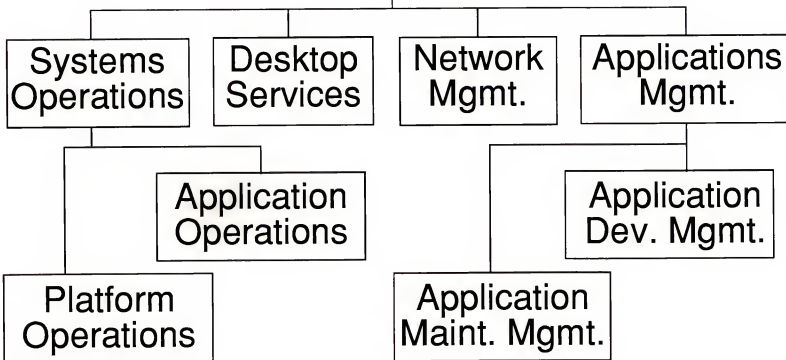
Circumstances for Adoption of Outsourcing IS Managers, Europe



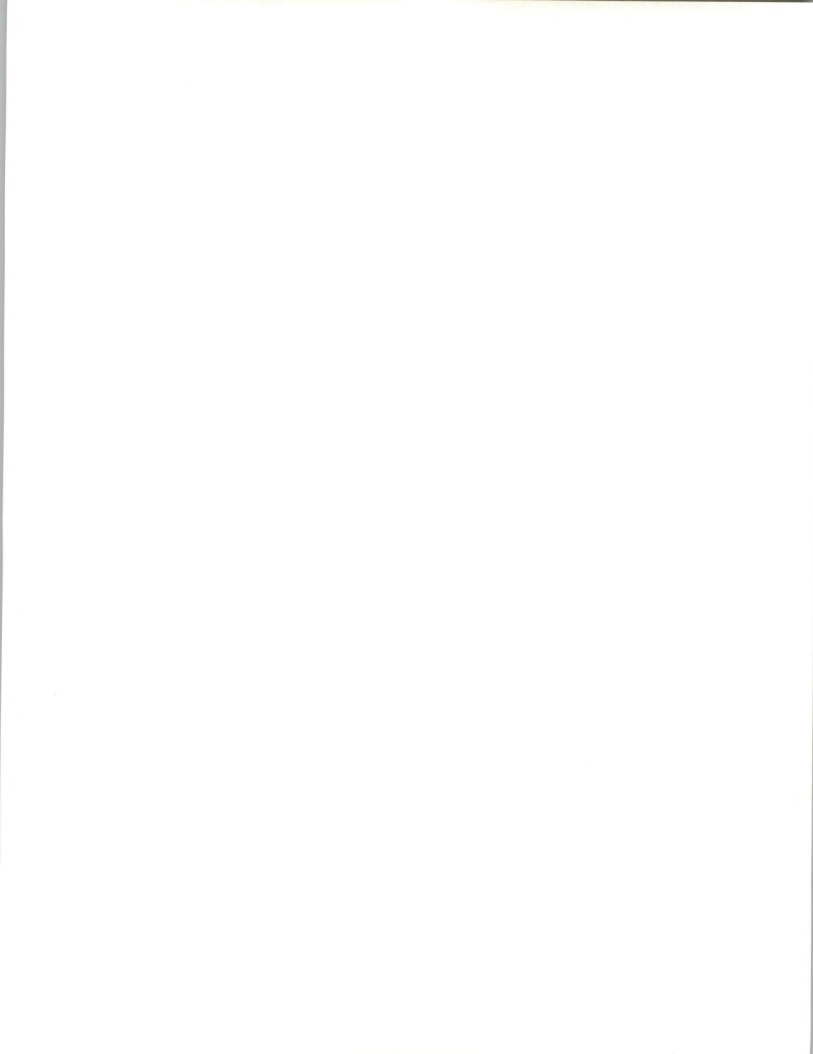
E-OJ-62
9/1/92



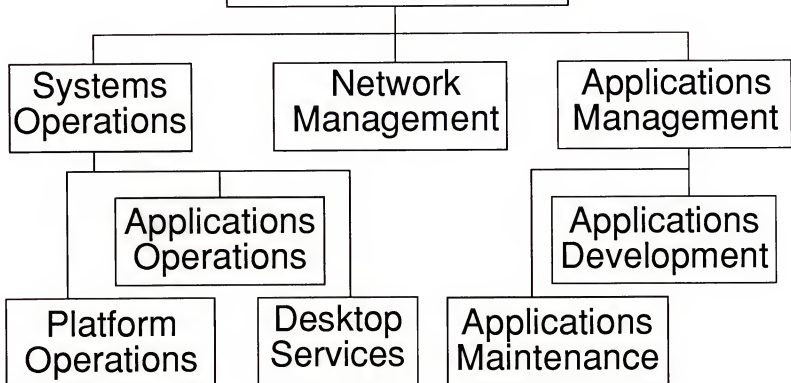
Outsourcing



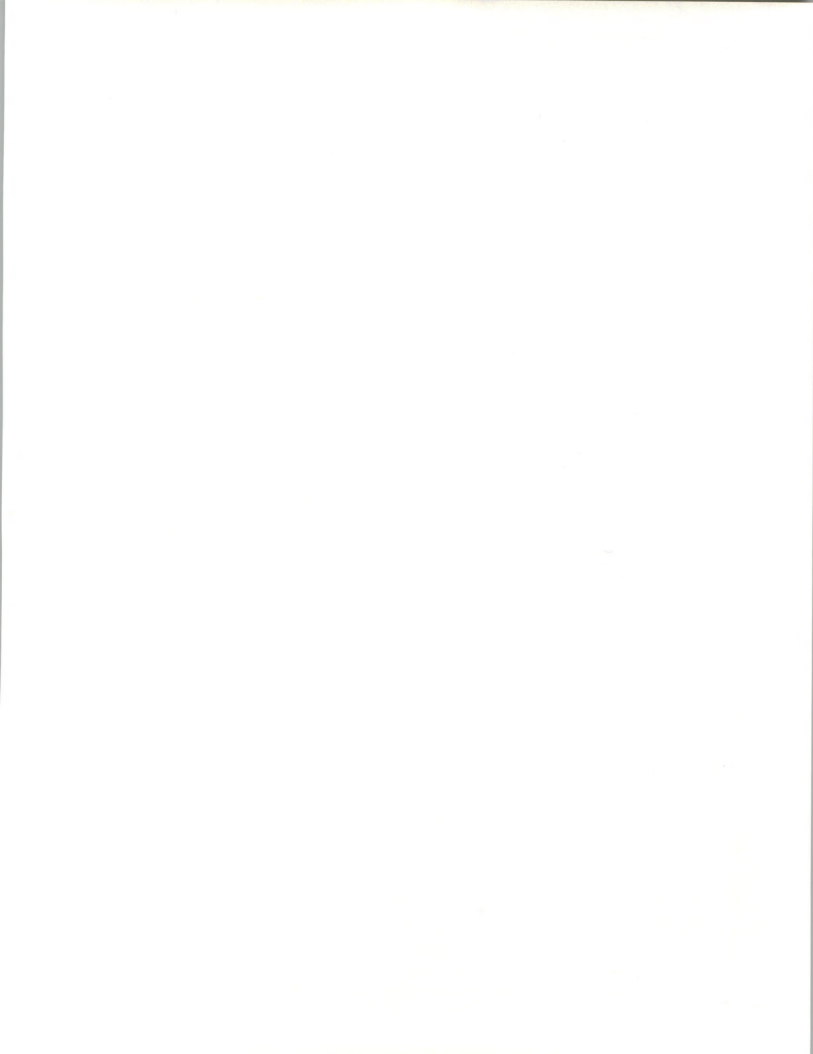
E-OJ-65
12/21/92



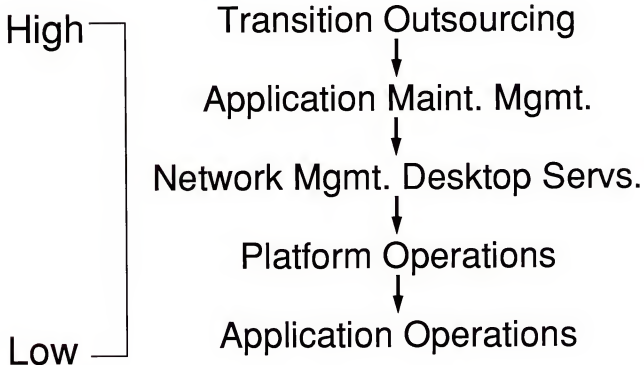
Outsourcing



E-OU-65
6/8/93

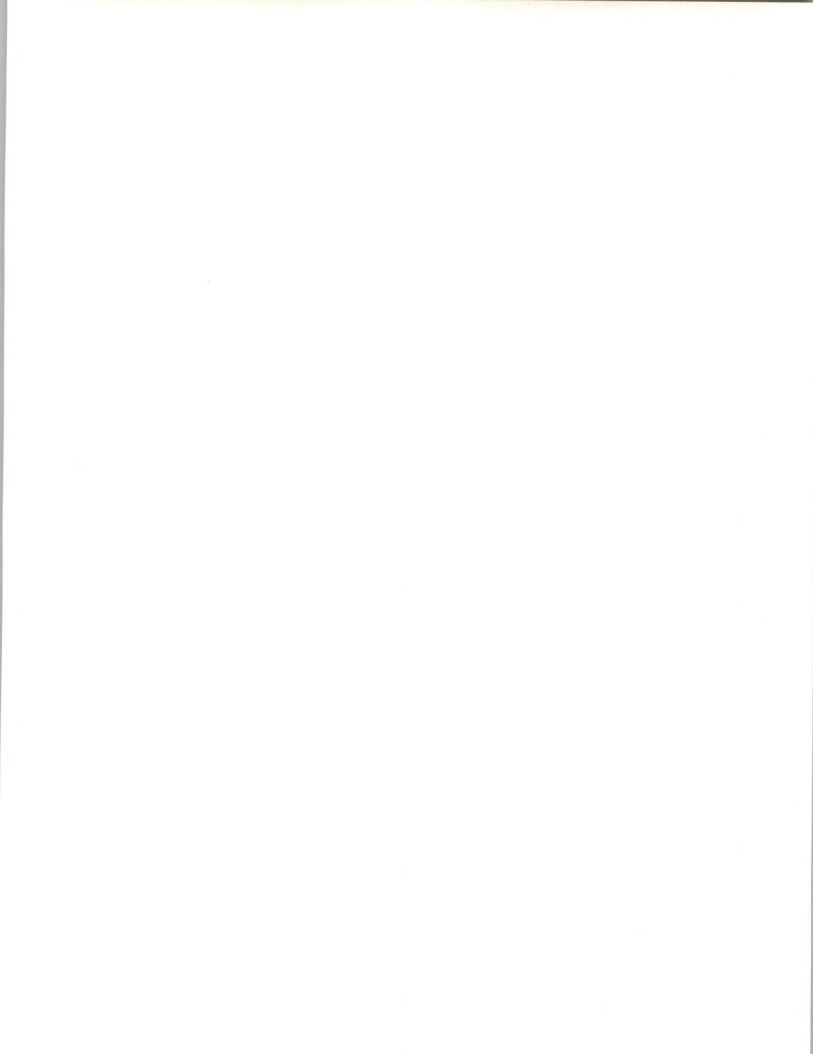


User Propensity to Outsource

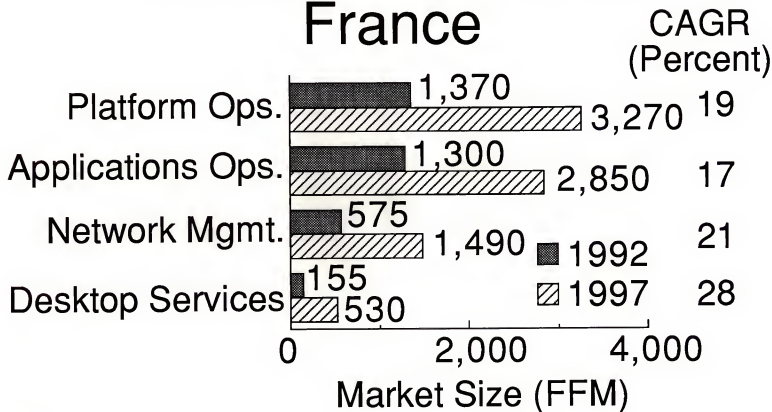


E-OU-66
12/21/92

INPUT

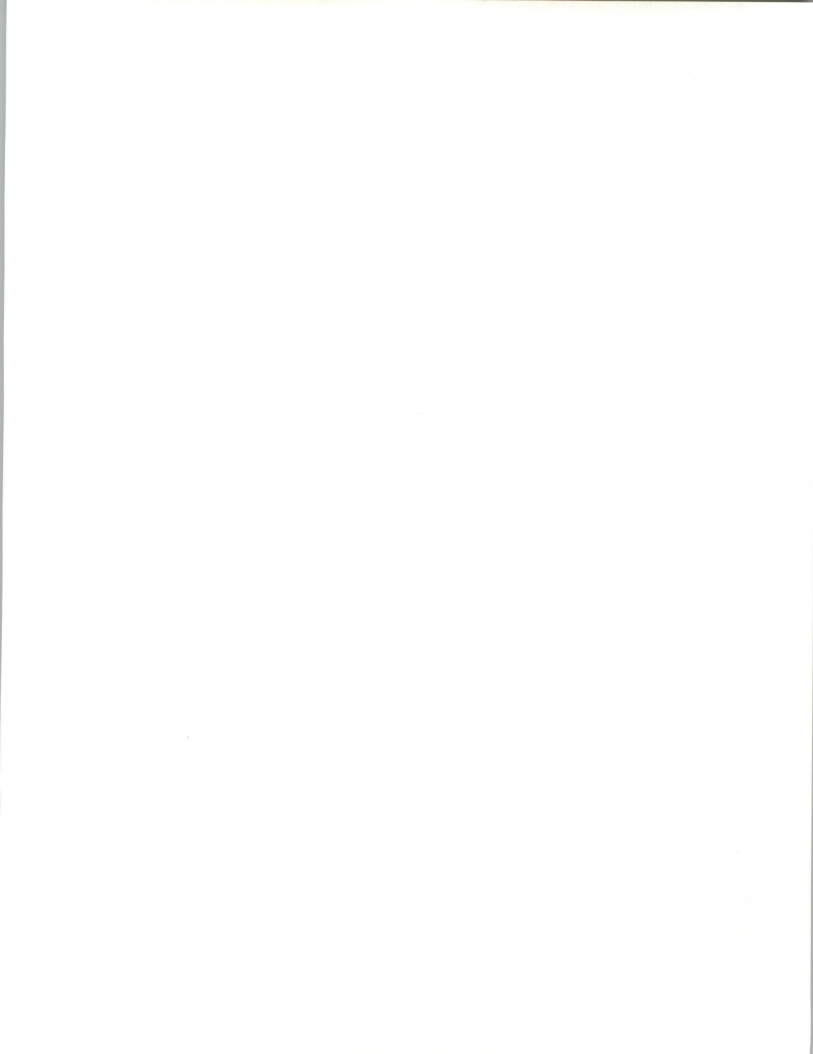


Outsourcing Market France



E-OU-67
12/21/92

INPUT



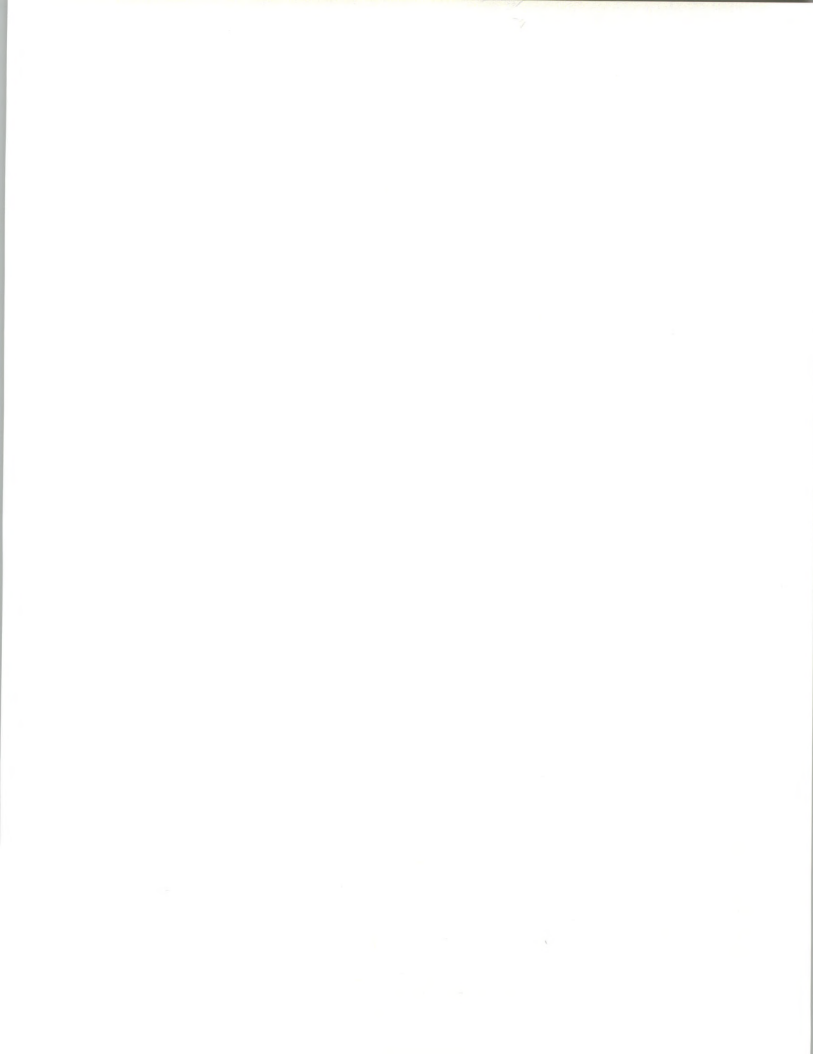
France, 1991

Outsourcing Revs. by Industry

Sector	Revs. (FFM)	Prop. (%)
Manufacturing	1,000	35
Distribution	500	18
Public	480	17
Financial Services	400	14
Other	470	16

E-OU-68
12/21/92

INPUT

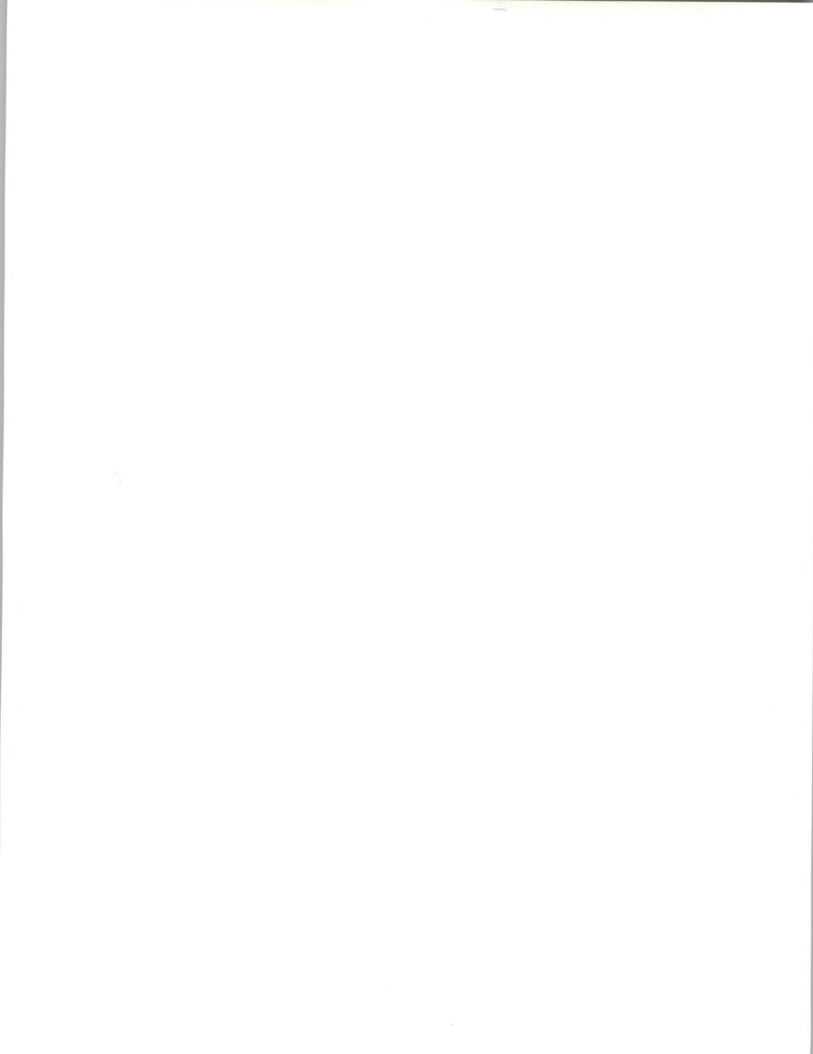


Europe, 1991

Leading Outsourcing Vendors

Vendor	Revs. (\$M)	Share (%)
EDS	270	12
CGS	230	10
Sema	100	4
GSI	90	4
AT&T Istel	80	3

E-OU-69
12/21/92



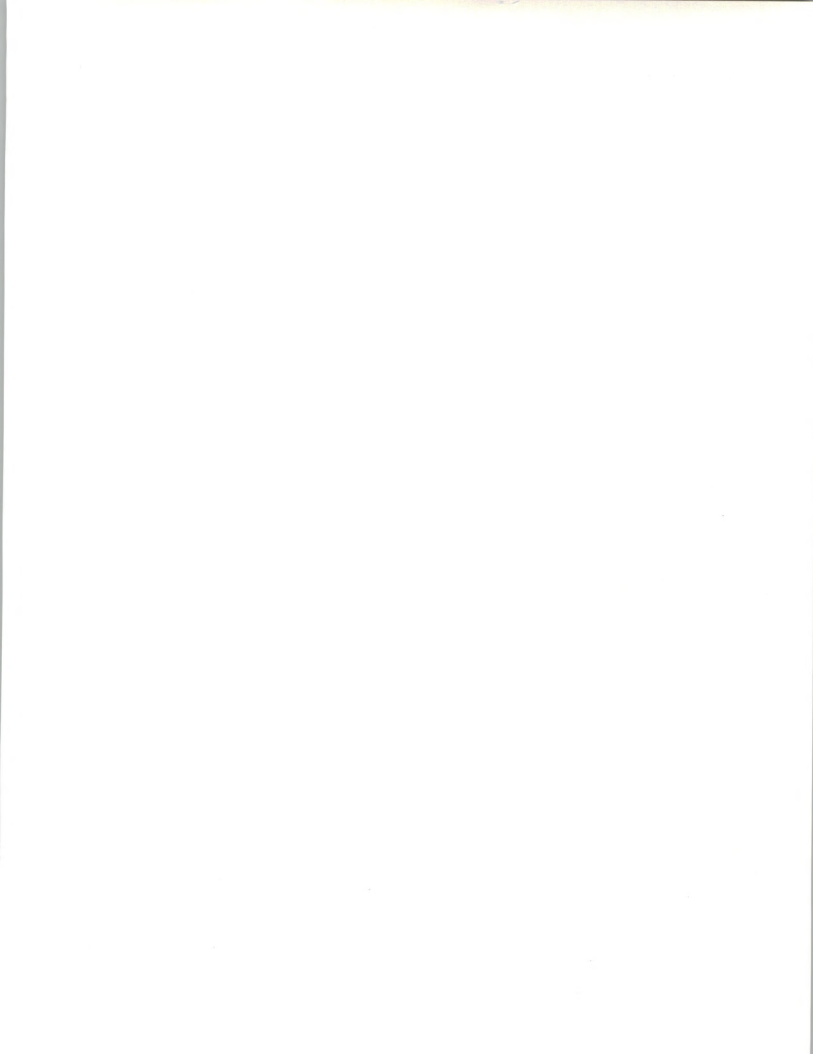
France, 1991

Leading Outsourcing Vendors

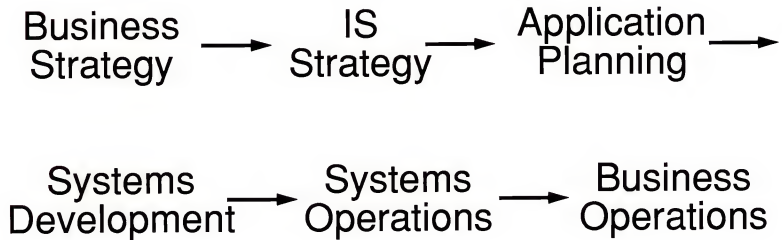
Vendor	Revs. (FFM)	Share (%)
EDS-GFI	550	19
GSI	330	12
Télésystèmes	270	9
Axone	180	6
CISI	175	6

E-OU-70
12/21/92

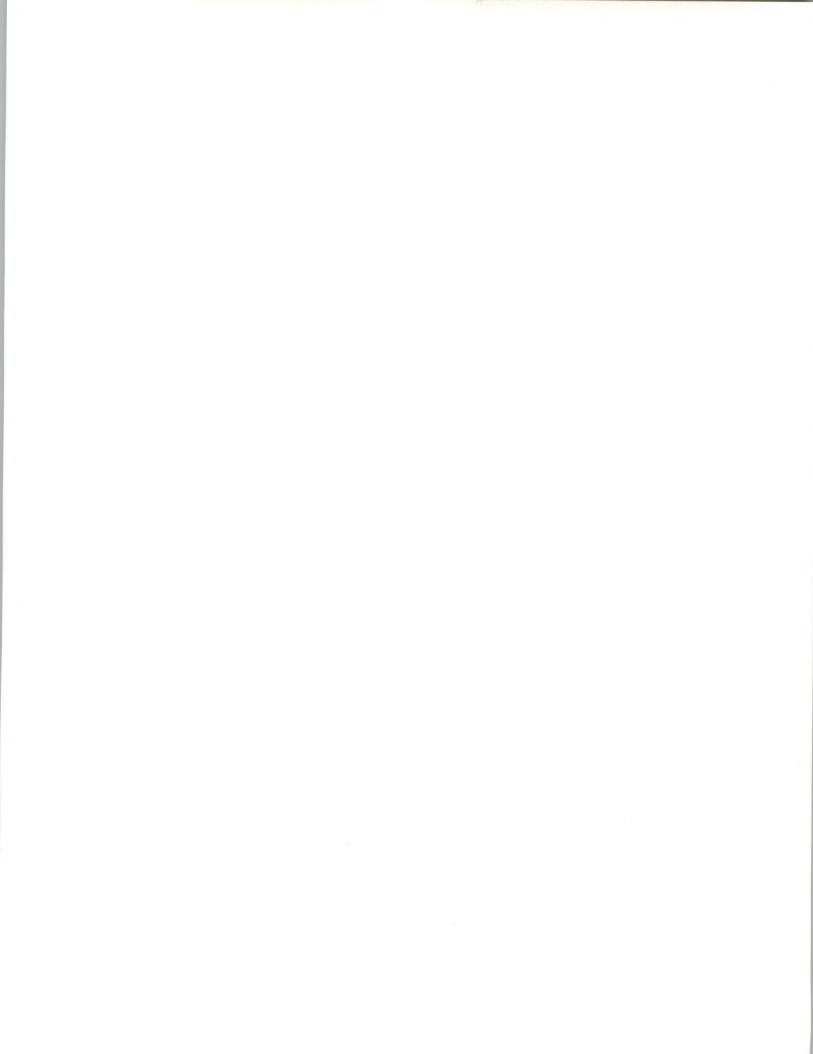
INPUT



The CSC Value Chain

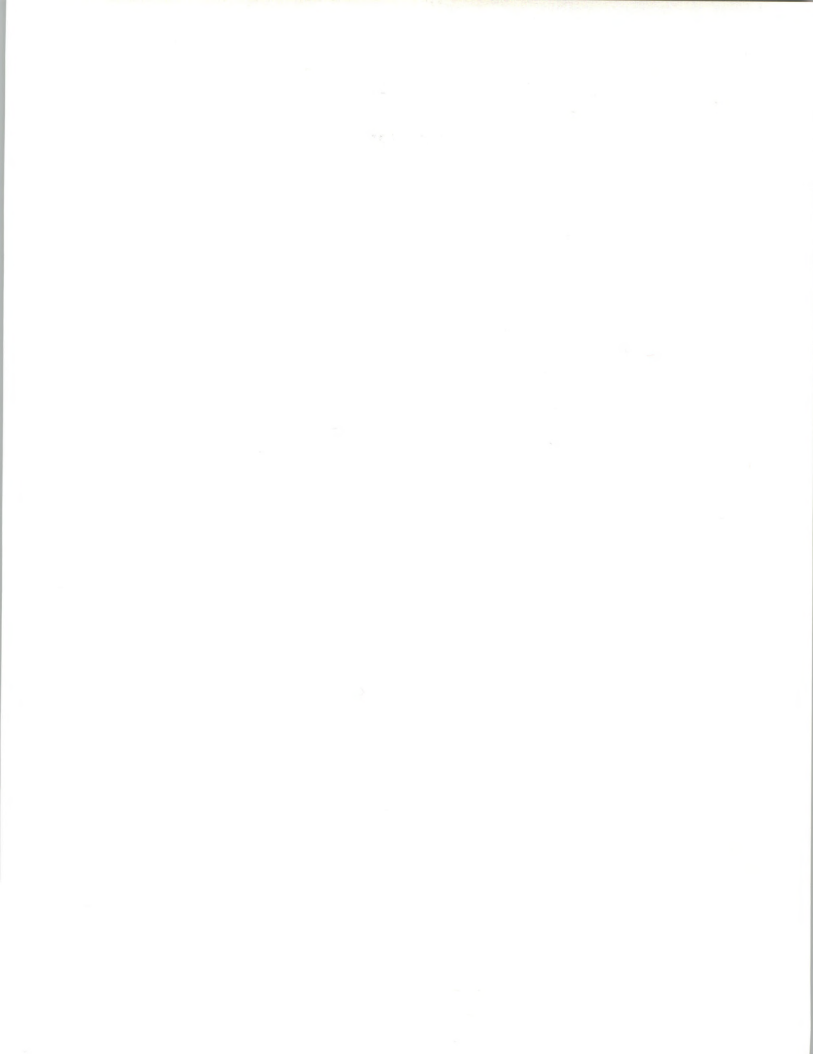


E-OU-71
12/21/92

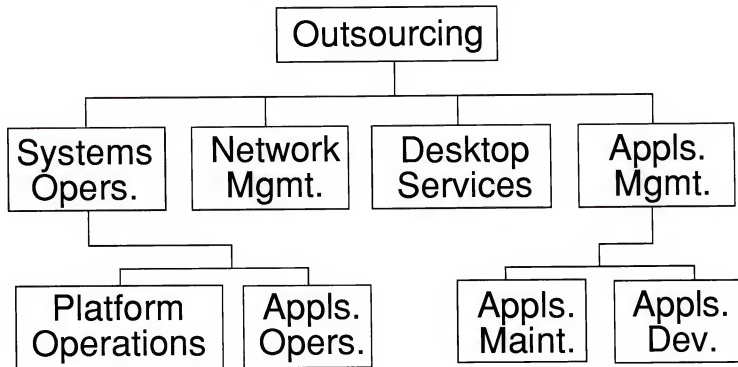


Applications Maintenance Management

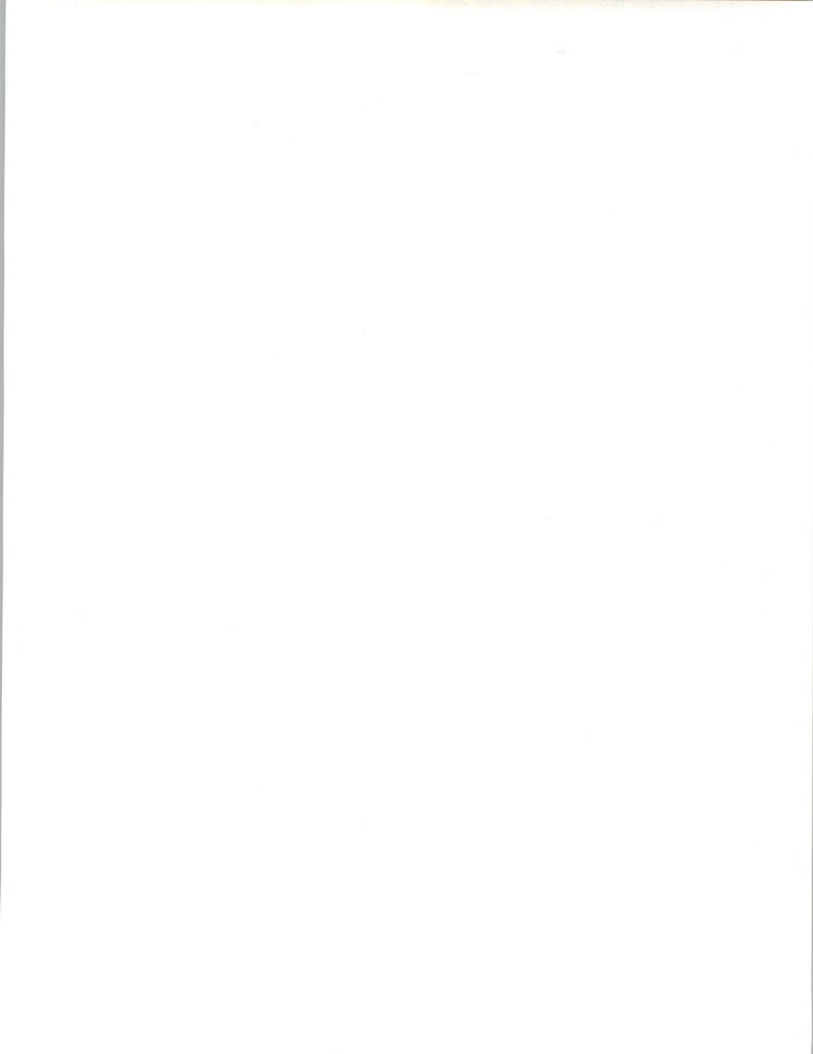
E-OU-72
2/11/93



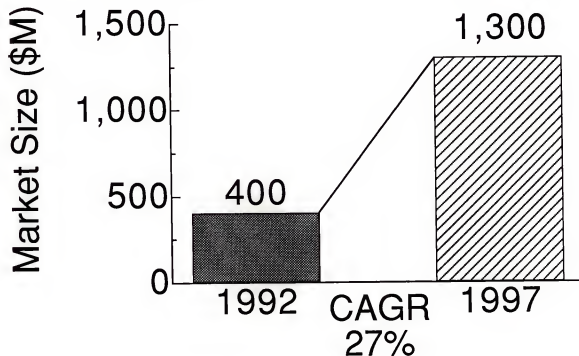
Scope of Outsourcing



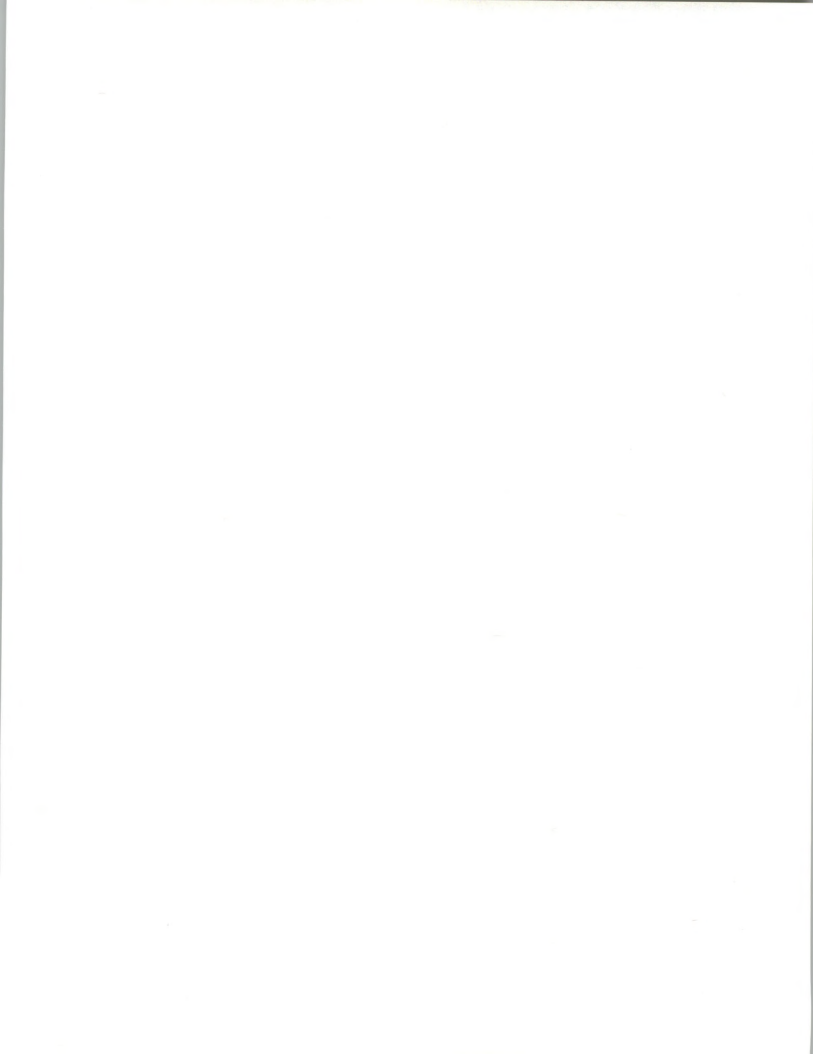
E-OJ-73
2/11/93



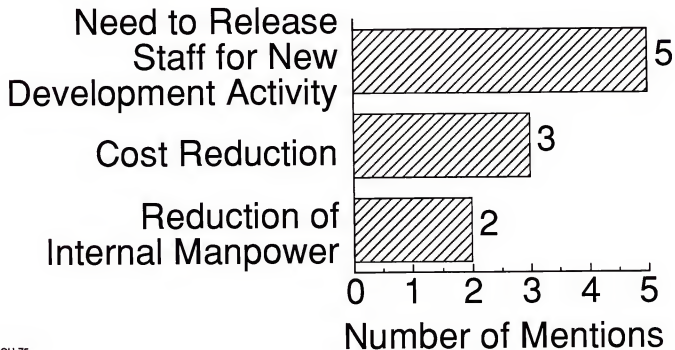
Applications Maintenance Management, Europe



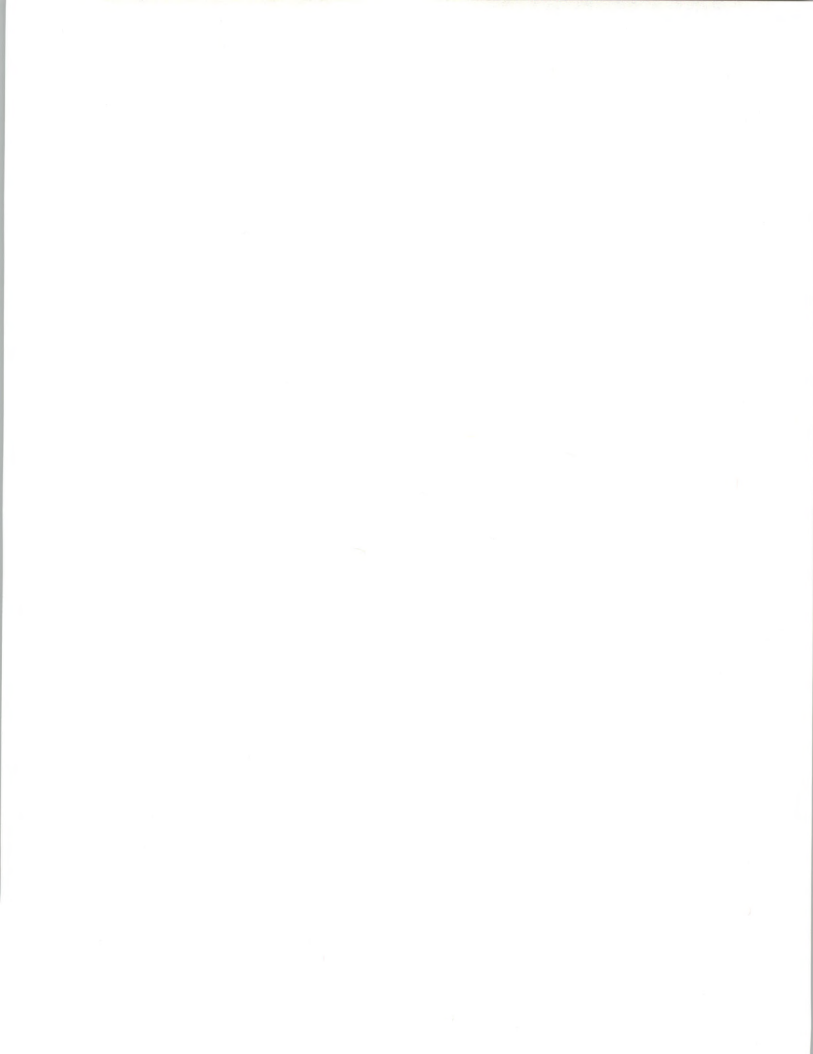
E-OU-74
2/11/93



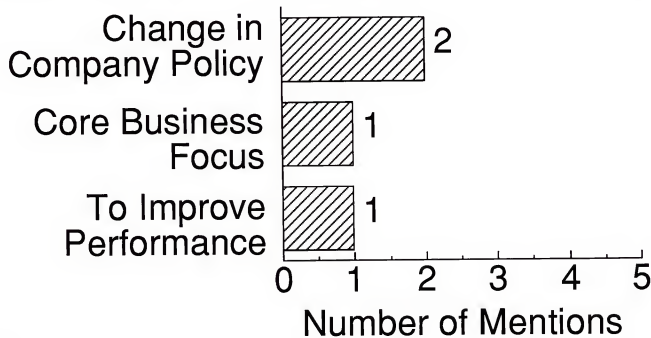
Reasons for Adopting Application Maintenance Mgmt.



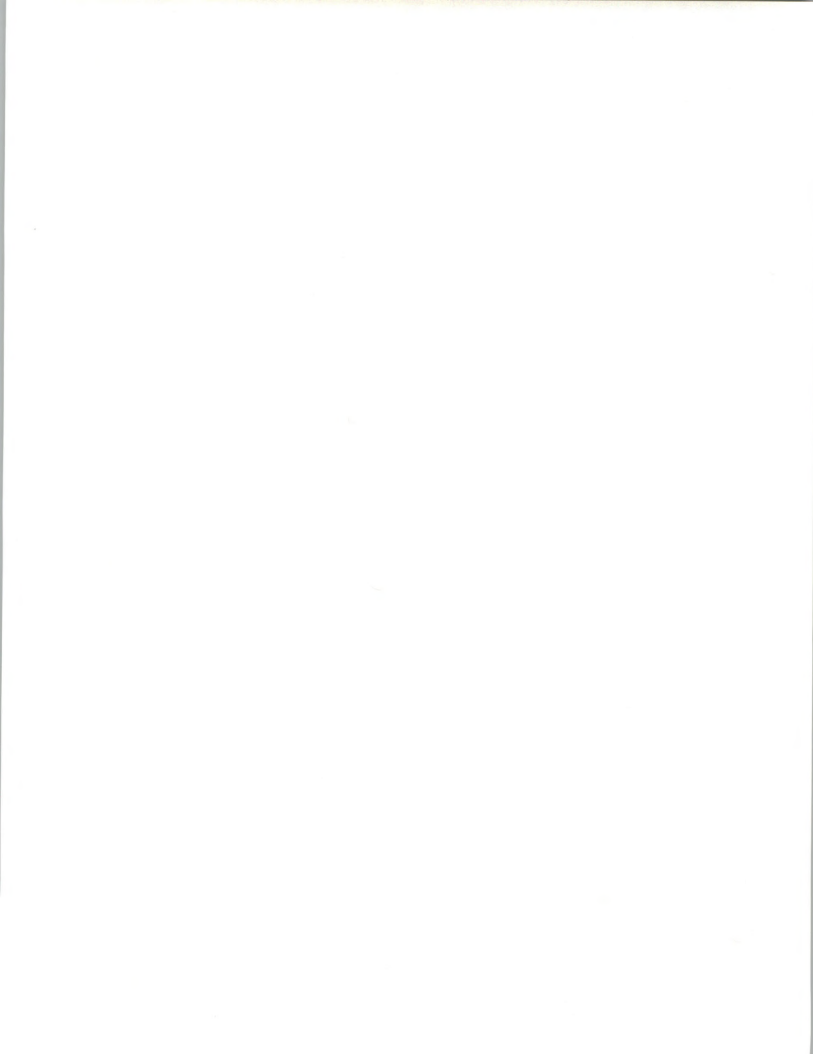
E-OU-75
2/11/93



Reasons for Adopting Application Maintenance Mgmt.



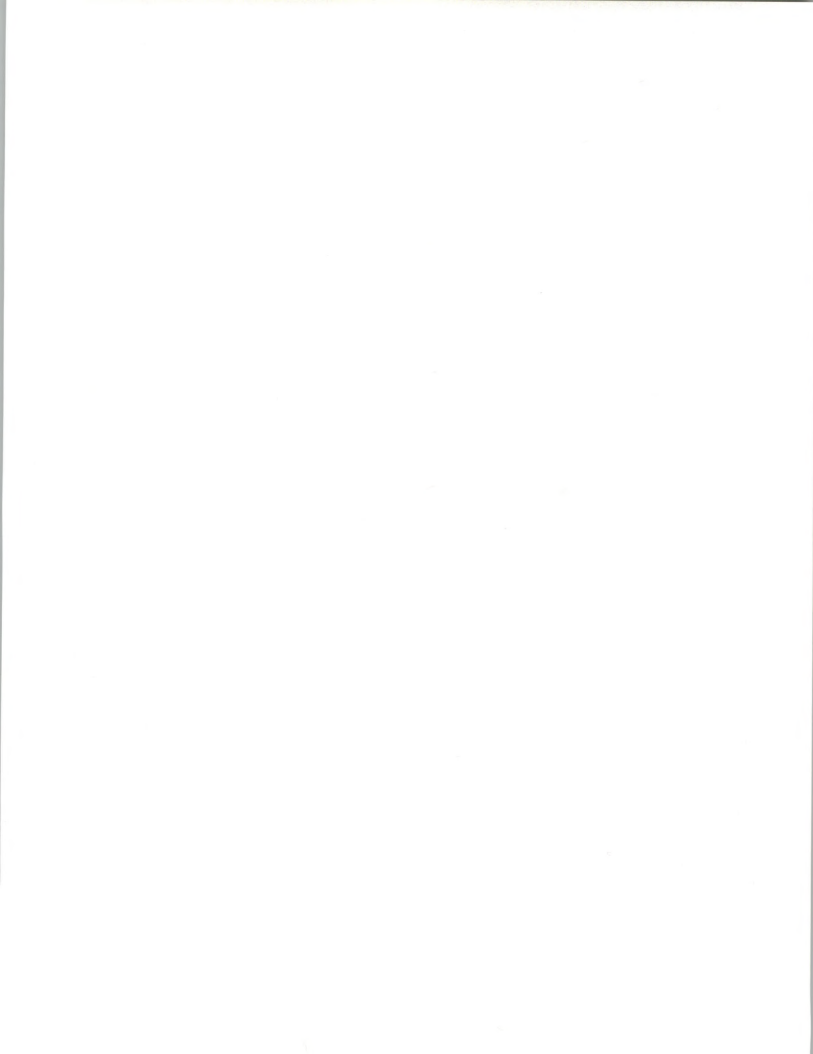
E-OU-76
2/11/93



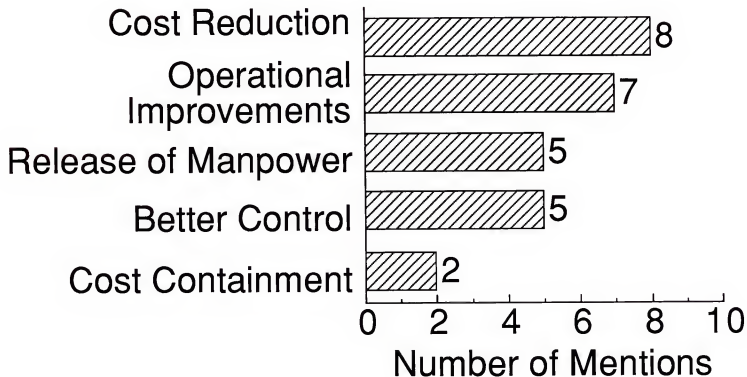
Profile of Typical Application Maintenance Mgmt. Contract

- Value \$2 million over three years
- Covers all commercial applications
- Cobol predominant language used
- Users highly satisfied

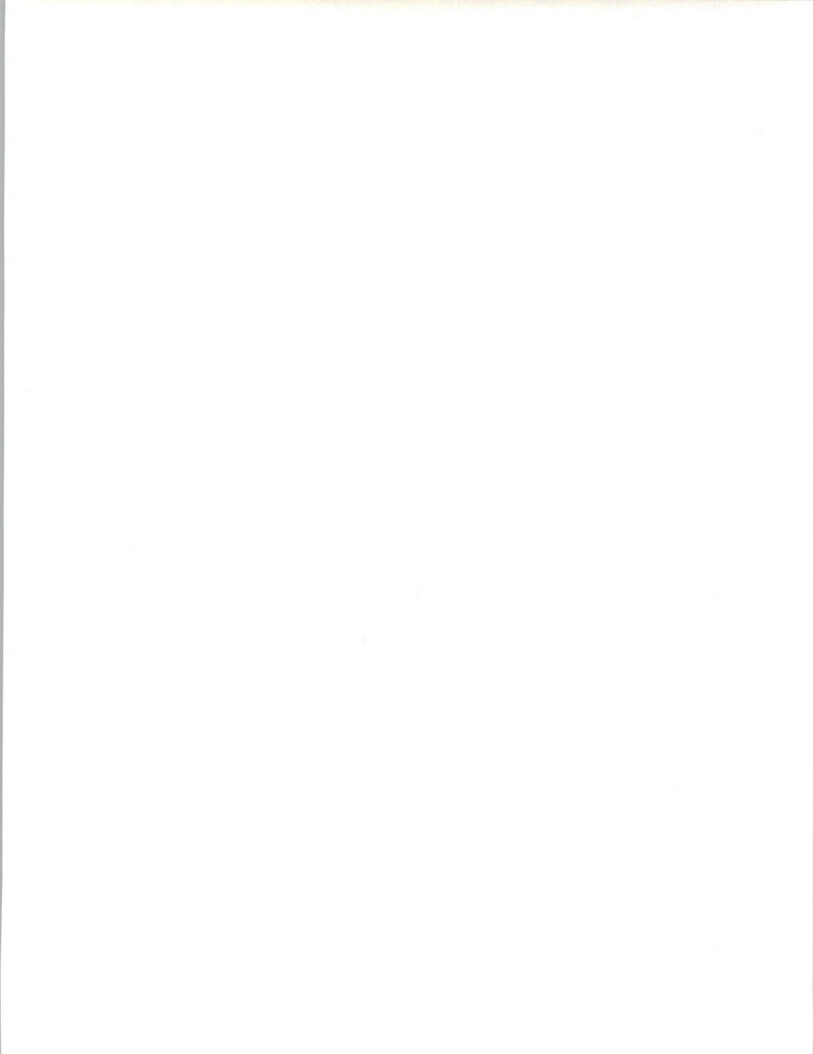
E-OU-77
2/11/93



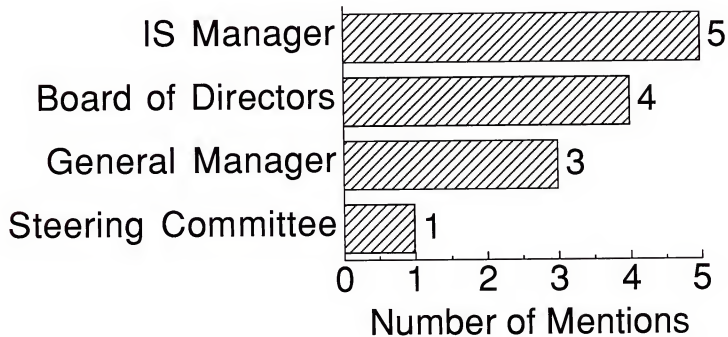
Benefits Achieved



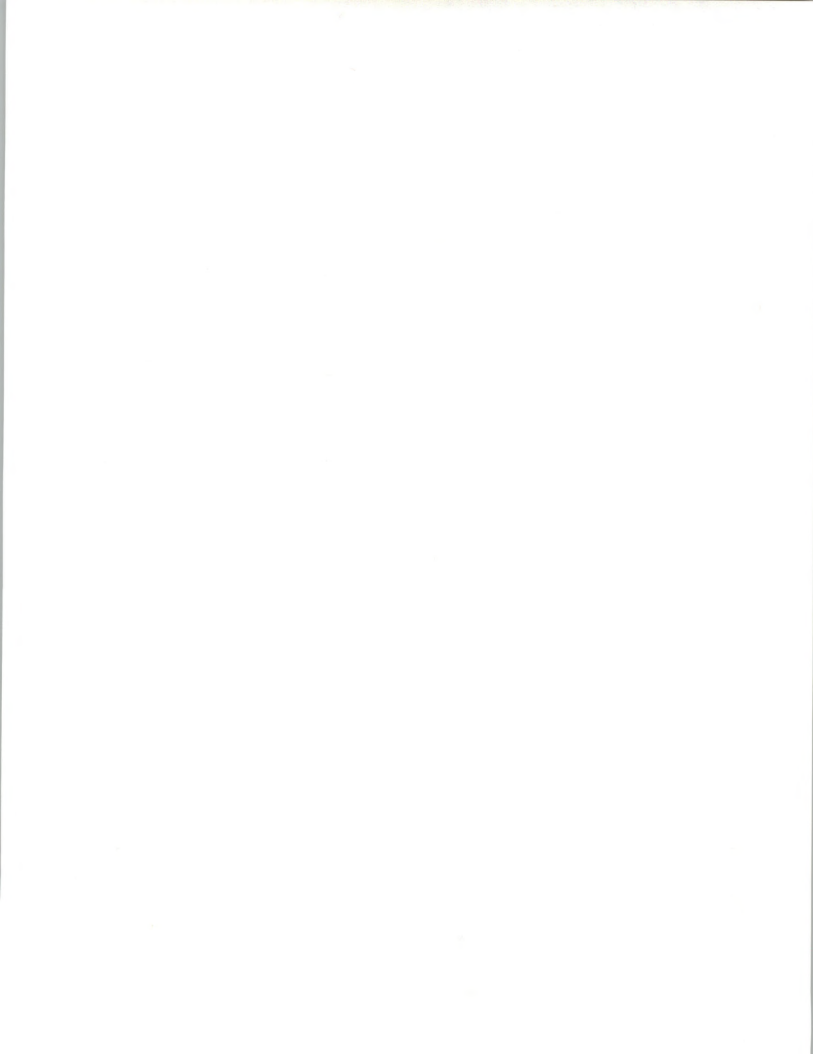
E-OU-78
2/11/93



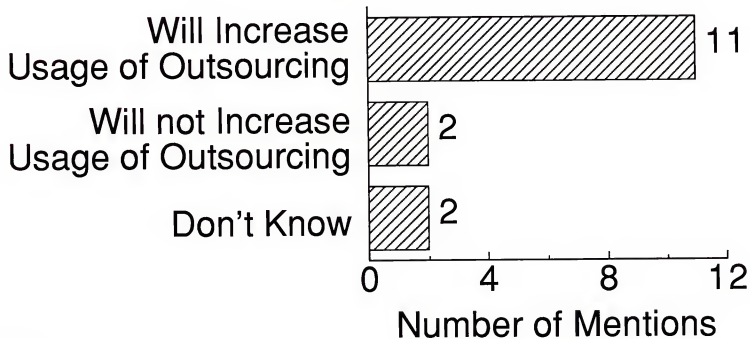
Key Decision Makers



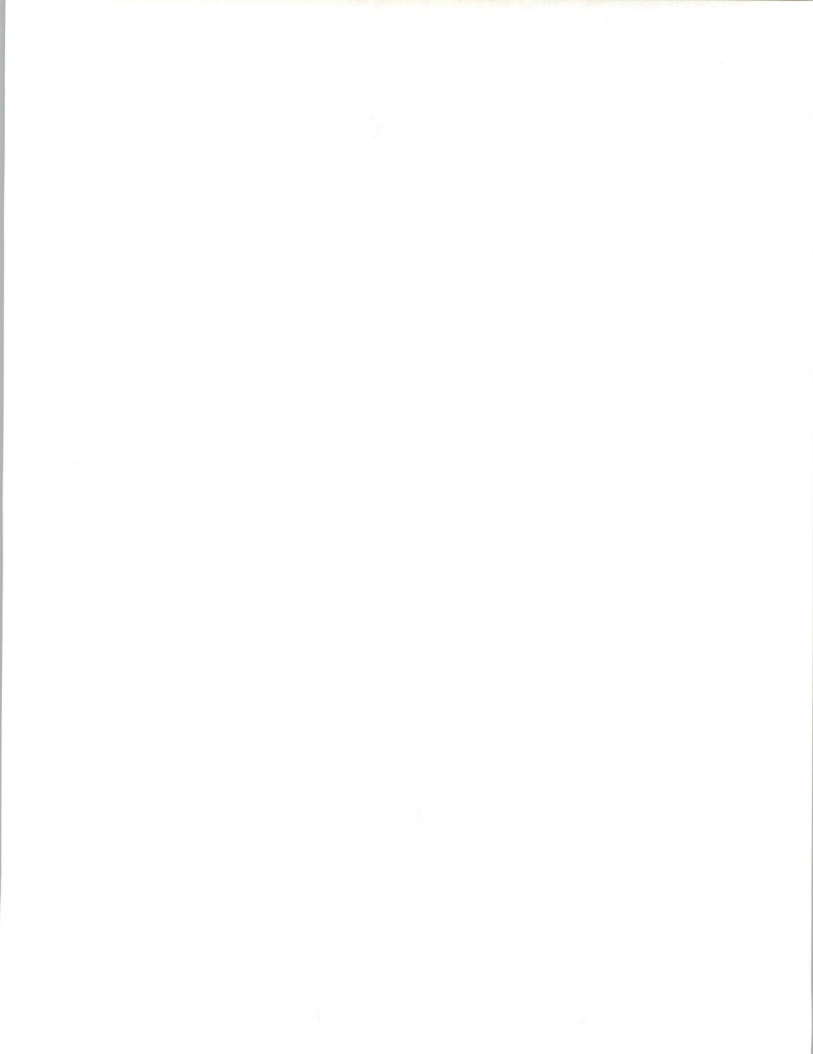
E-OU-79
2/11/93



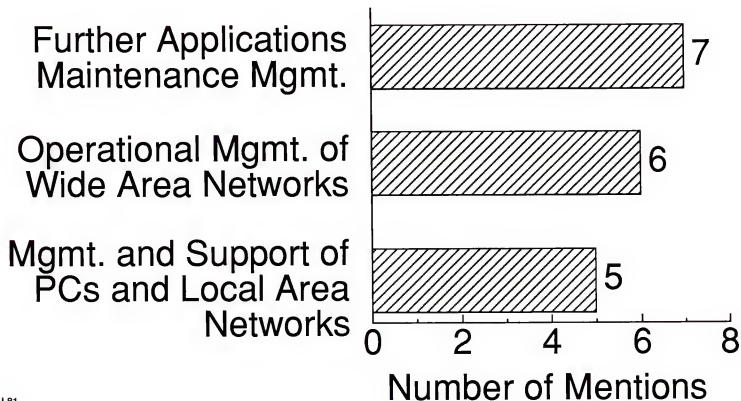
Future Outsourcing Intentions



E-OJ-80
2/11/93



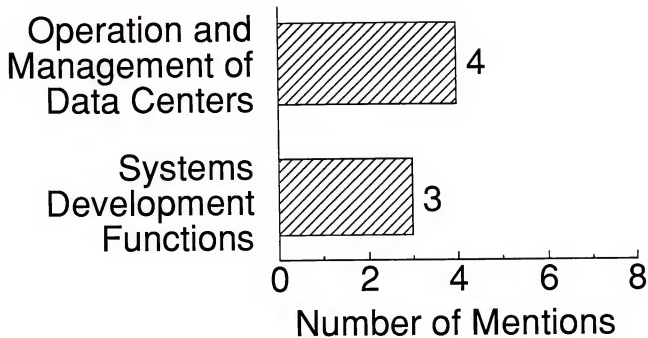
Future Outsourcing Intentions



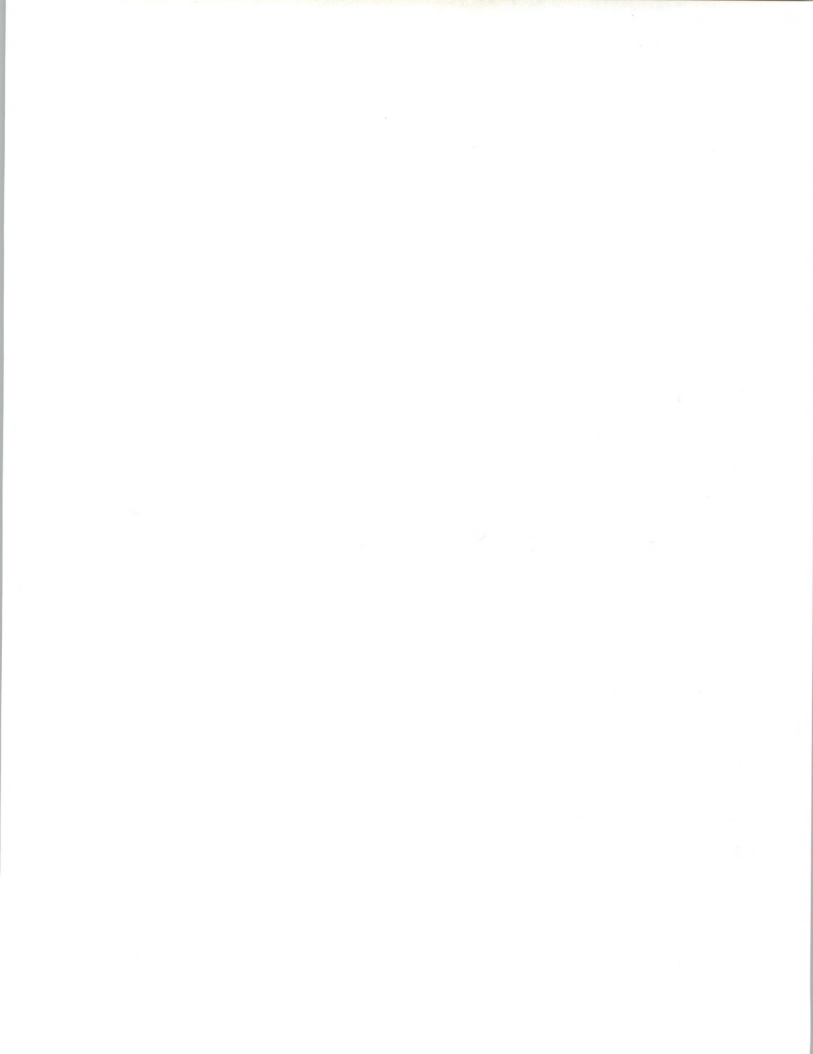
E-OU-81
2/11/93



Future Outsourcing Intentions



E-OU-82
2/11/93



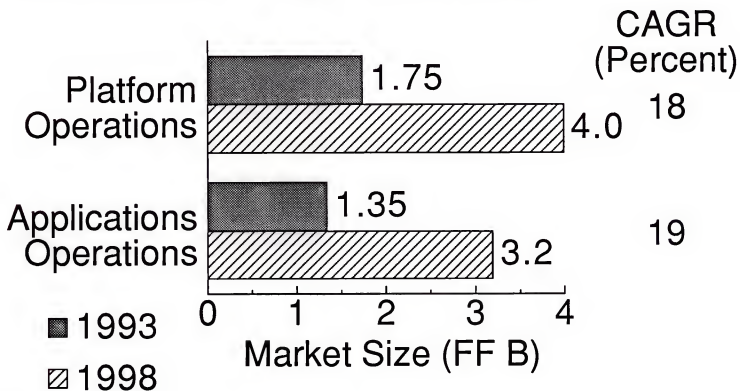
Outsourcing Growth Opportunities

E-OJ-83
6/8/93

INPUT



Outsourcing Market, France



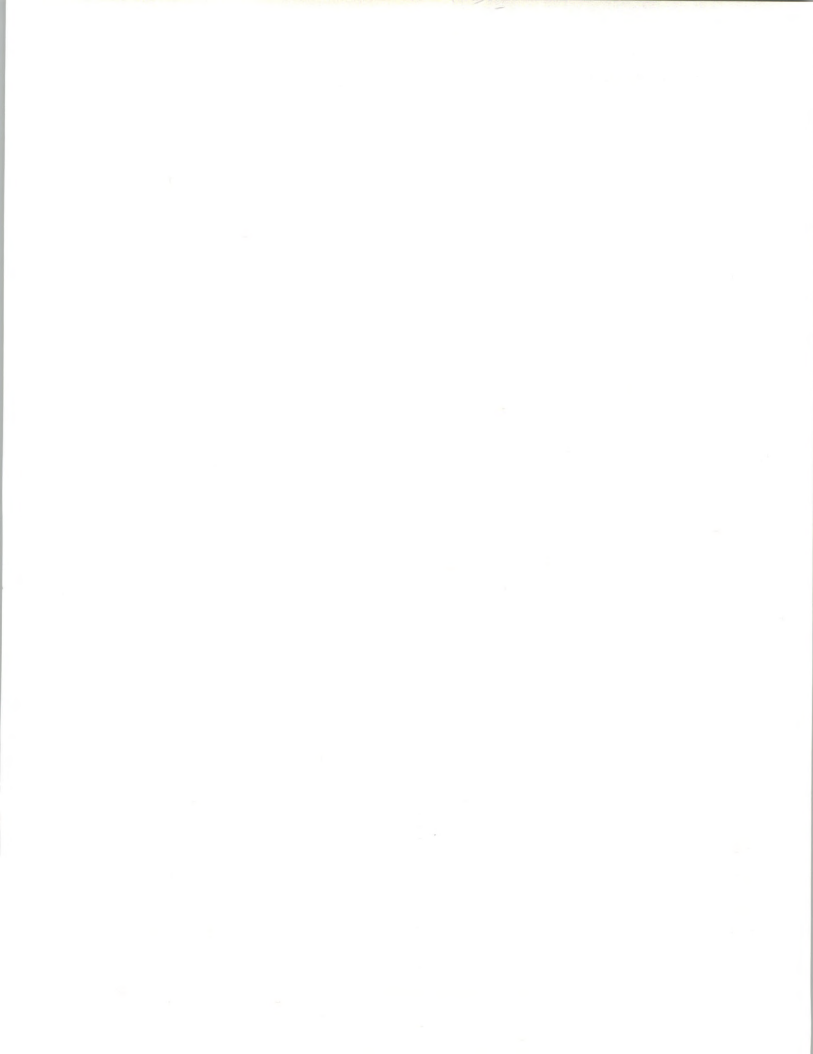
E-OU-84
6/8/93



Major Outsourcing Contracts, 1992-1993

Client	Vendor	Contract Value (\$M)	Number of Years
East Midlands Electricity	Perot Systems	600	12
Europcar	Perot Systems	400	10

E-OU-66
6/8/93

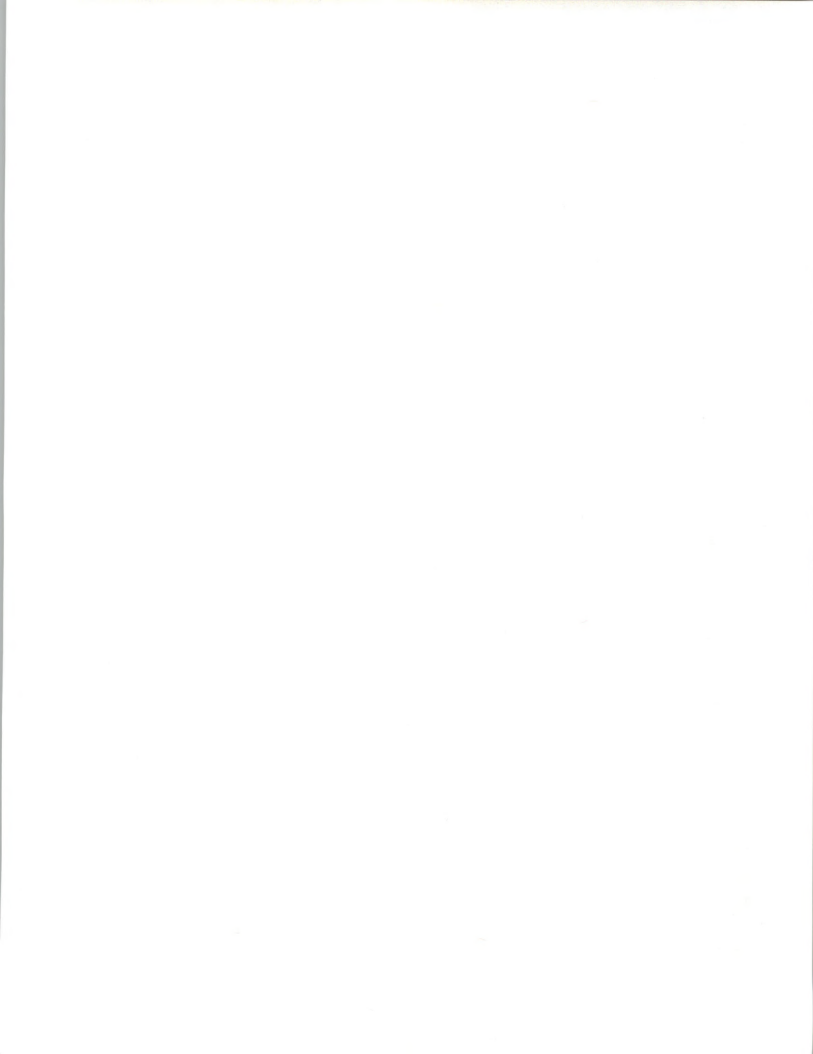


Major Outsourcing Contracts, 1992-1993

Client	Vendor	Contract Value (\$M)	Number of Years
BHS	CSC	200	11
Kooperativa Forbundet	EDS	≈1,000	10

E-OU-87
6/8/93

INPUT

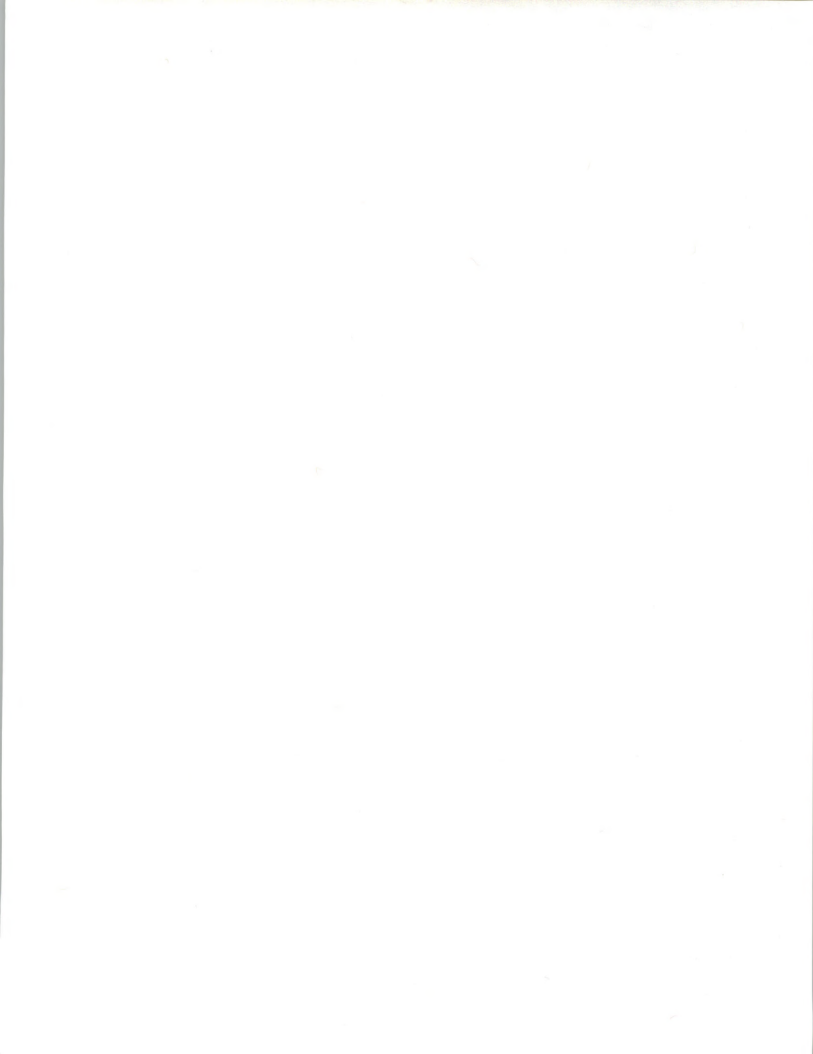


Systems Operations, Europe

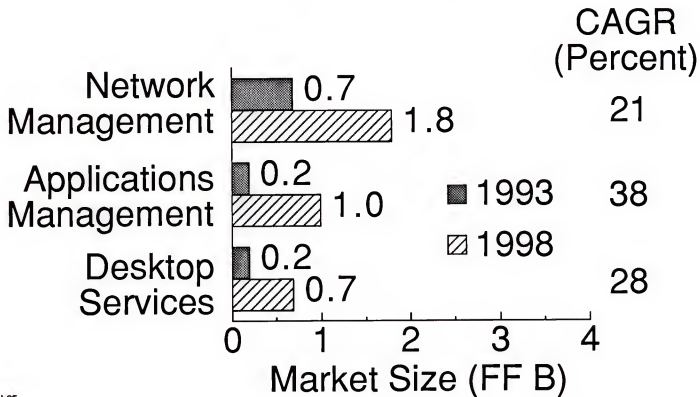
Contract Length by Contract Type

Contract Type	Avg. Contract Length (Years)
Platform Operations	3.5
- Transition Outsourcing	2.5
- Other Platform Operations	4.5
Applications Operations	5

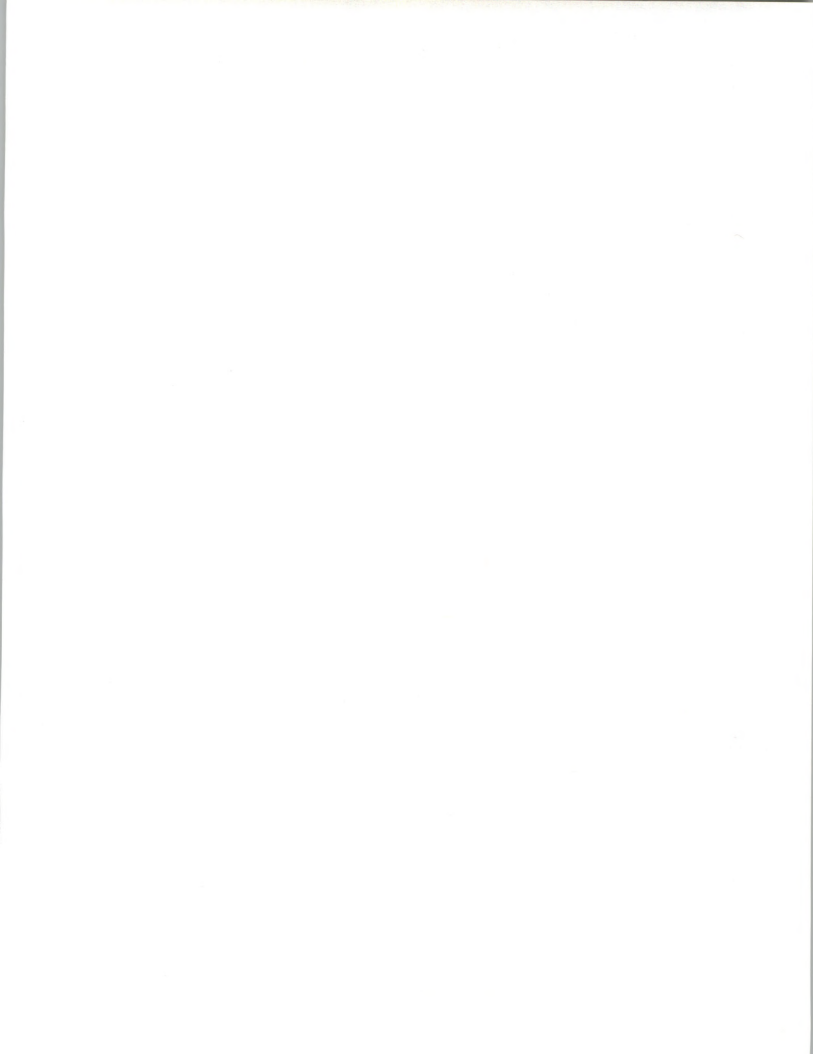
E-OU-88
6/8/93



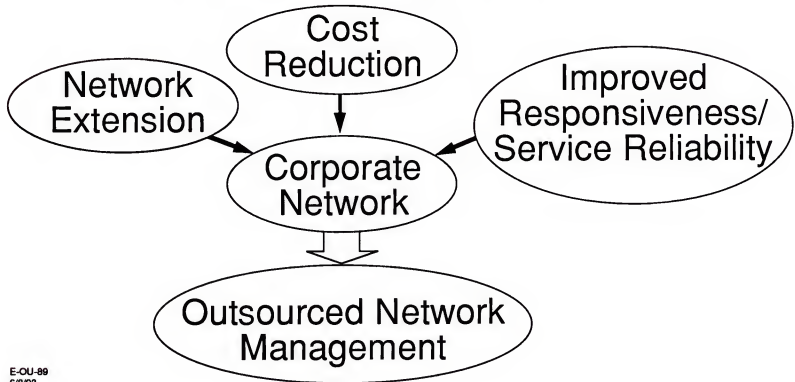
Outsourcing Market, France



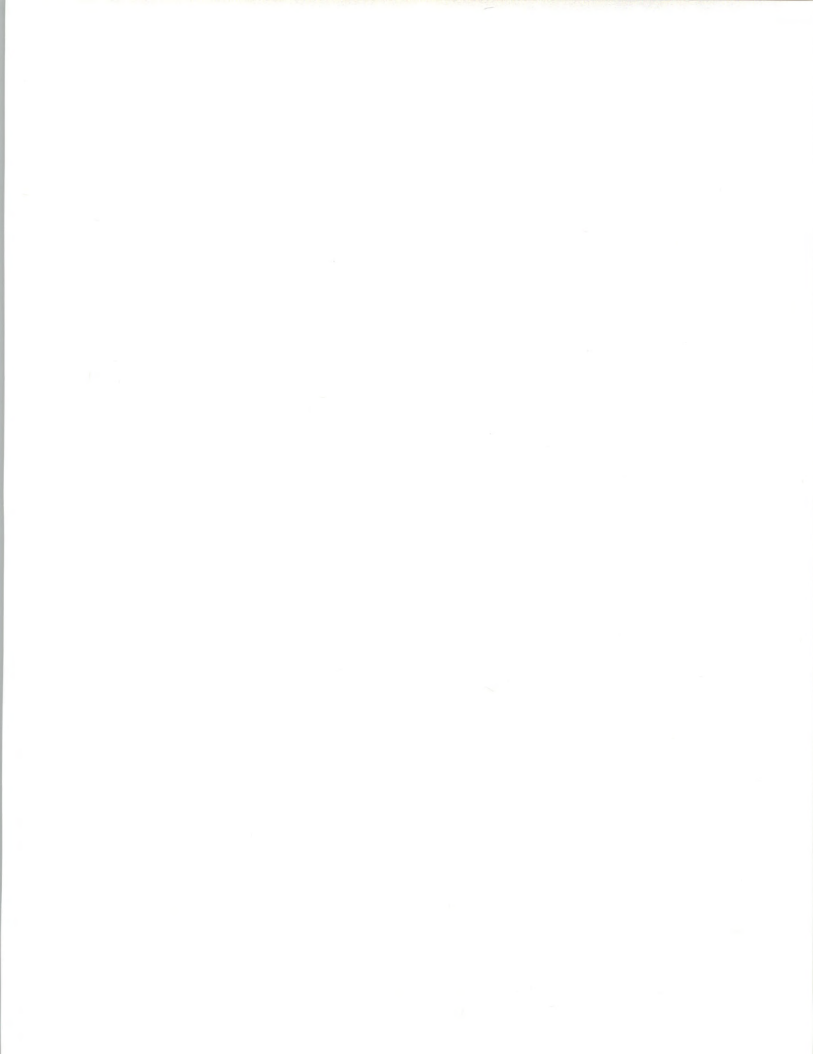
E-OU-85
6/8/93



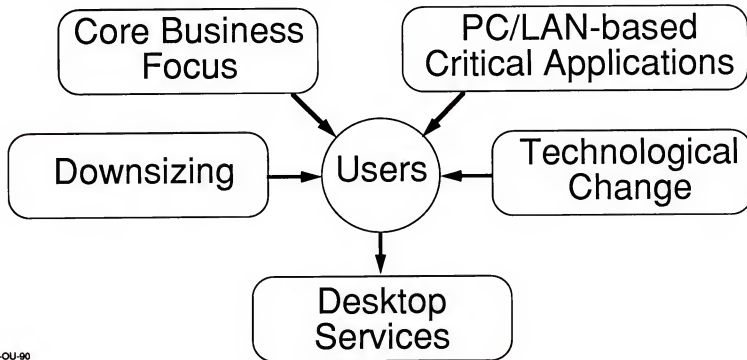
Network Management Outsourcing Drivers



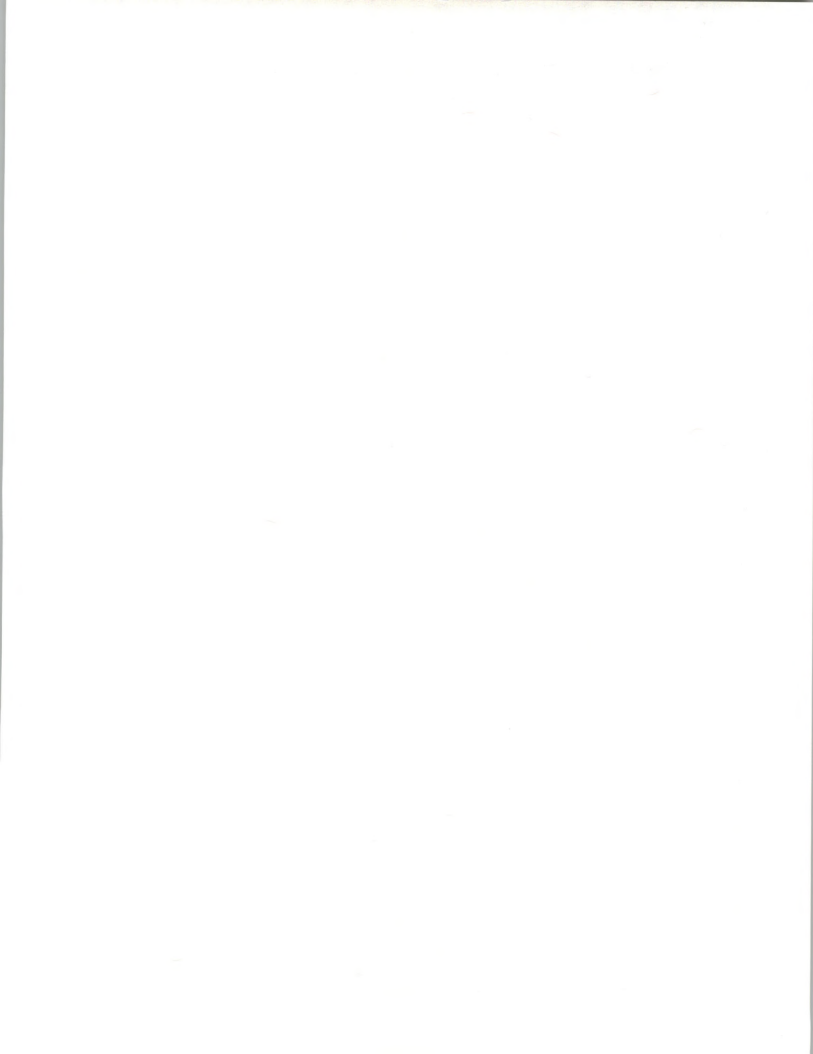
E-OU-99
6/8/93



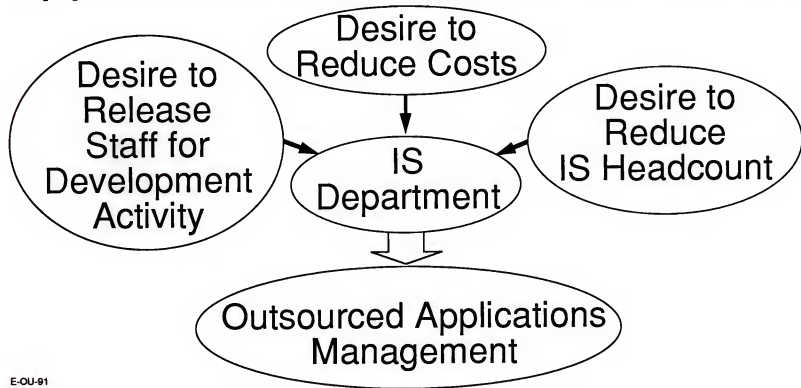
Driving Forces Desktop Services, Europe



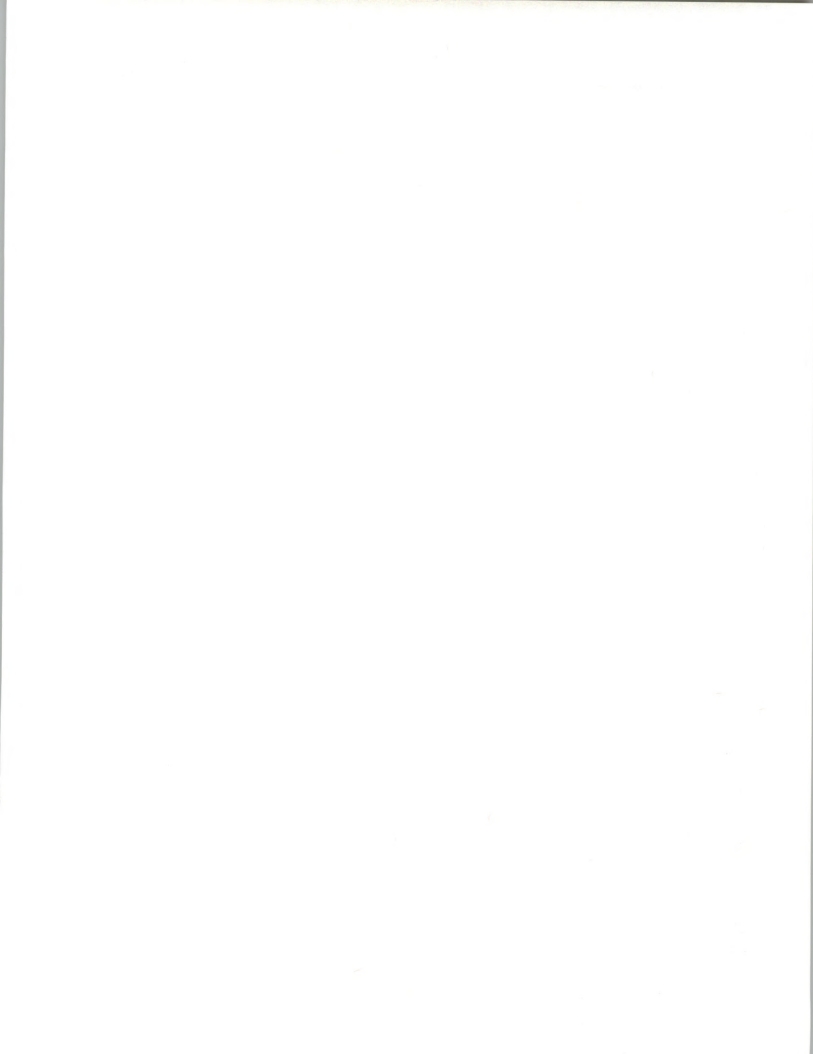
E-OJ-90
6/8/93



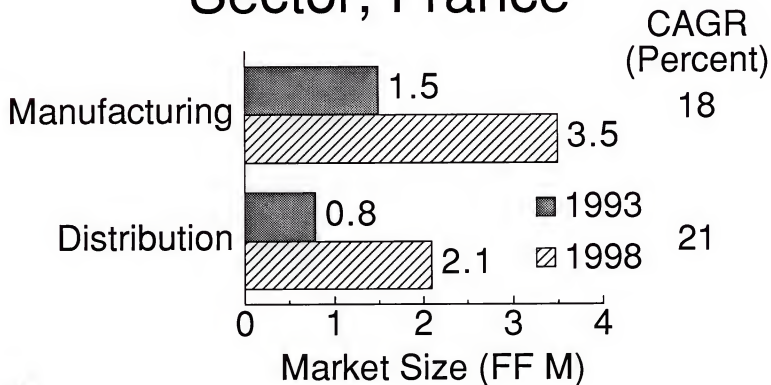
Driving Forces Applications Management, Europe



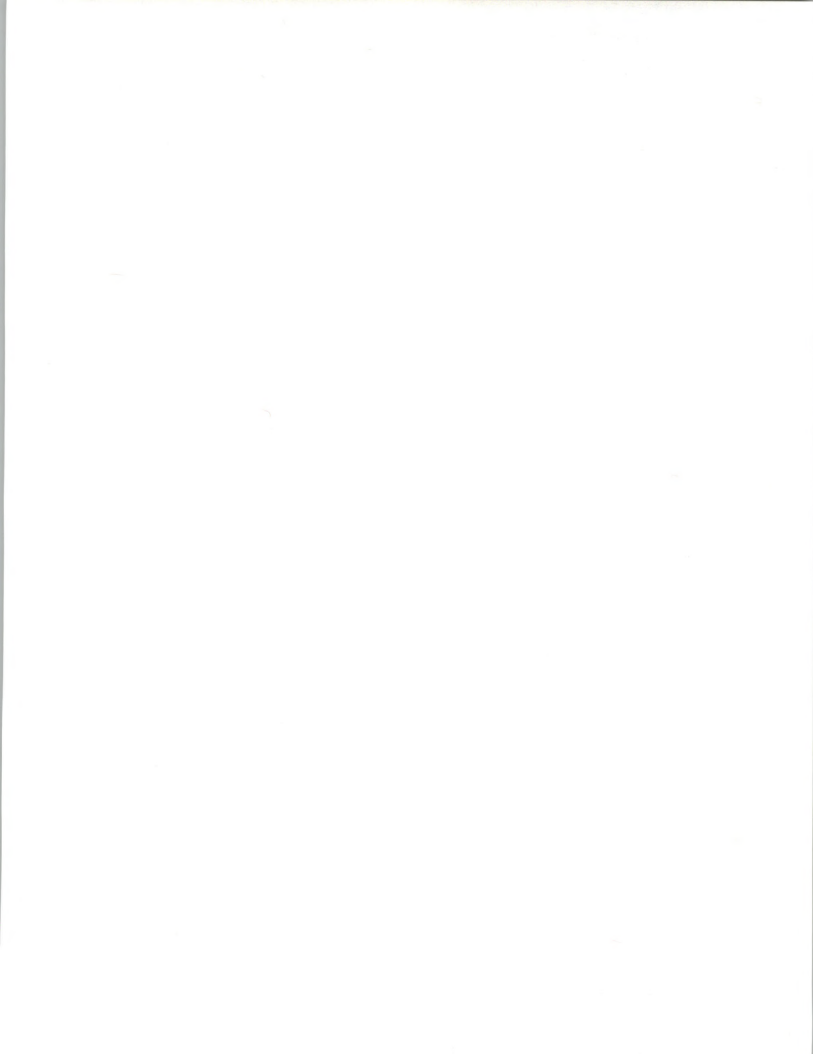
E-OJ-91
6/8/93



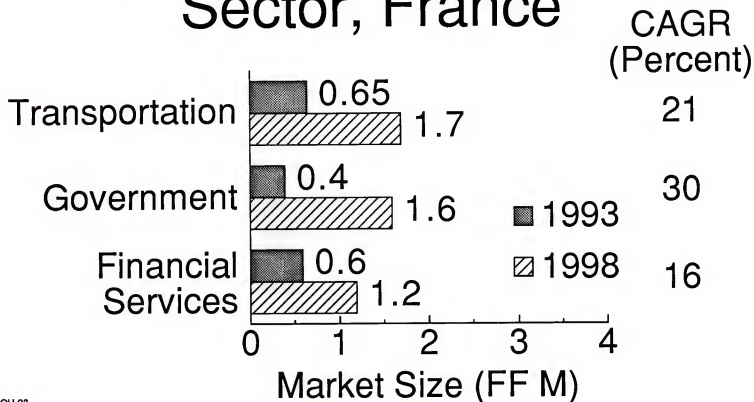
Outsourcing by Industry Sector, France



E-OU-92
6/8/93

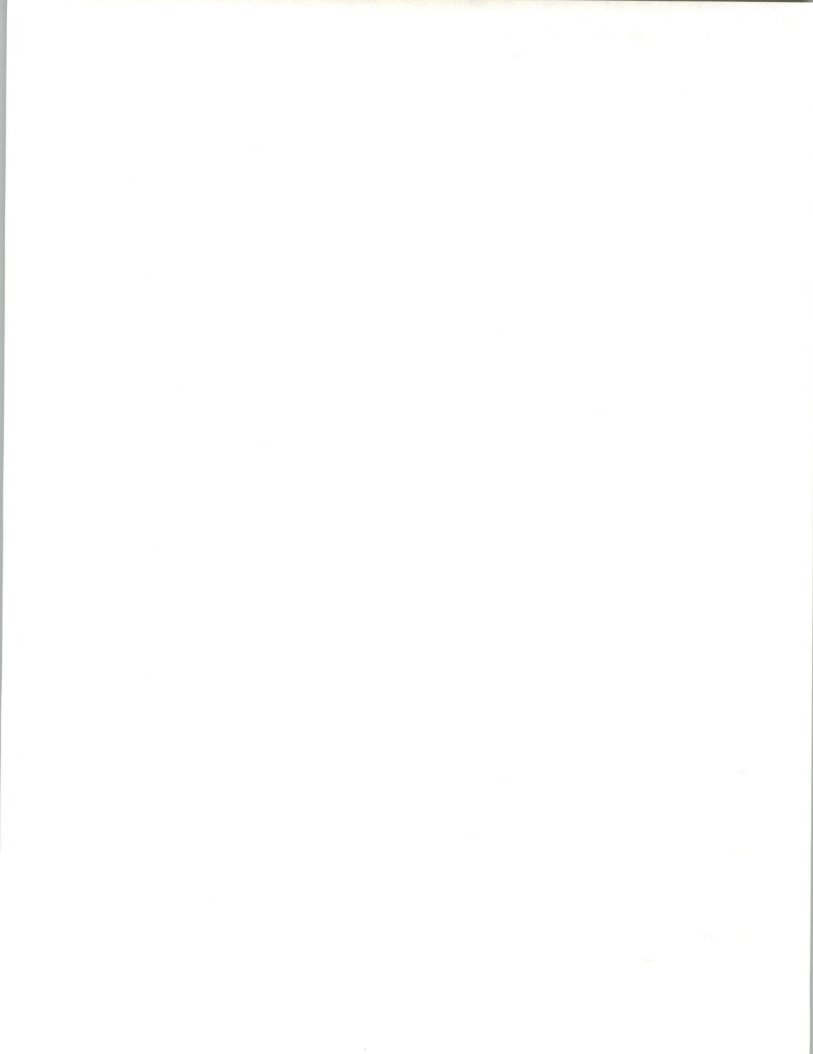


Outsourcing by Industry Sector, France



E-OU-93
6/8/93

INPUT



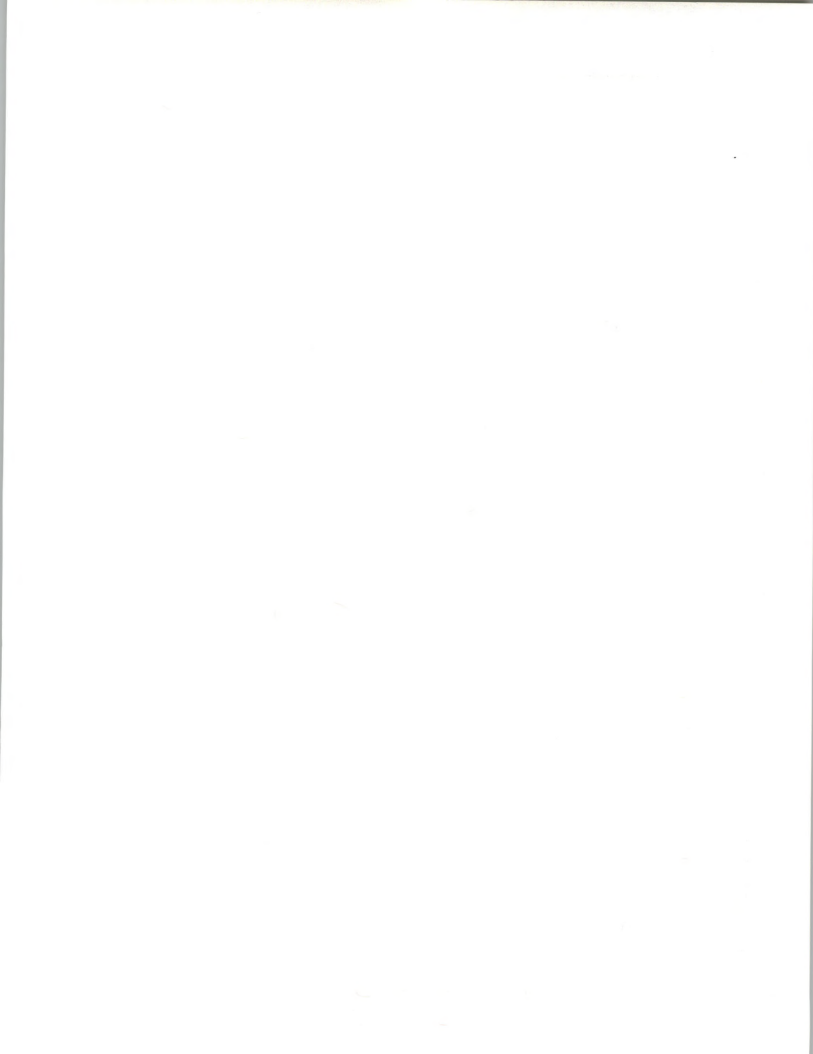
Systems Operations, Europe

Breakdown by Client Turnover, 1992

Turnover of Client Organization	Proportion of Contracts (%)
>\$200 M	70
\$40 - \$200 M	25
<\$40 M	5

E-OU-94
6/8/93

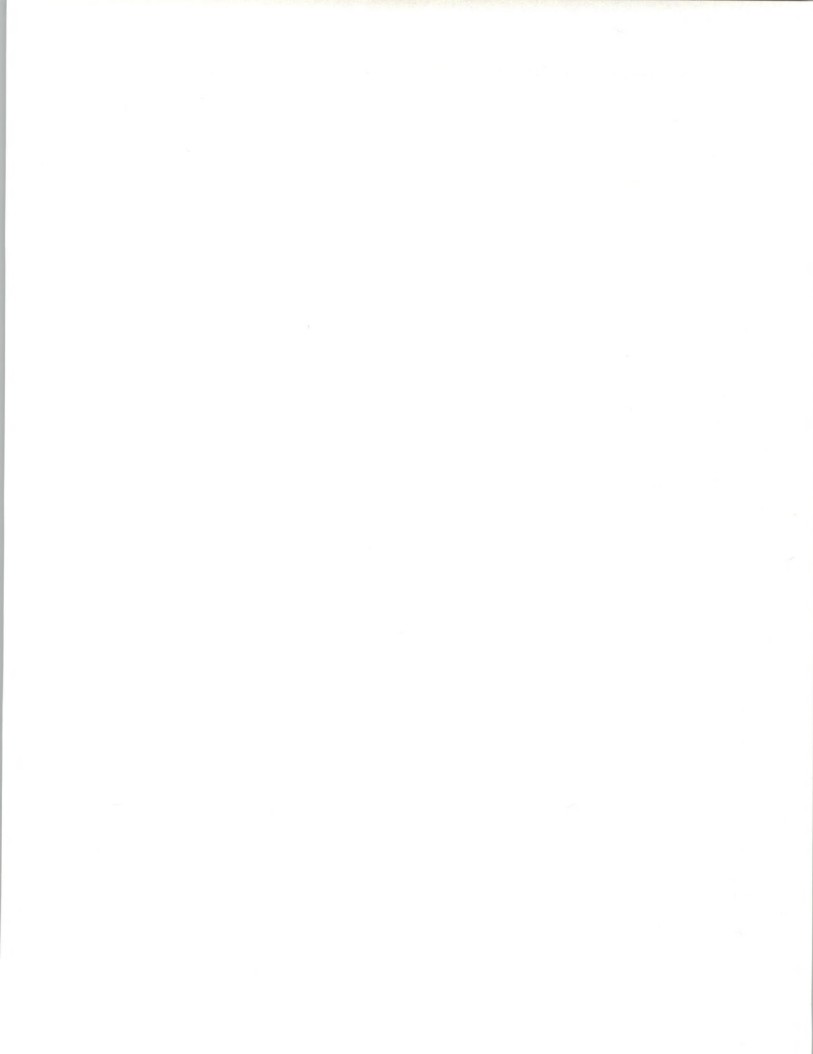
INPUT



Leading Outsourcing Vendors France, 1992

Company	Est. Rev. (FF M)
EDS-GFI	750
GSI	350
Télésystèmes	280
IBM/Axone	240
CISI	200

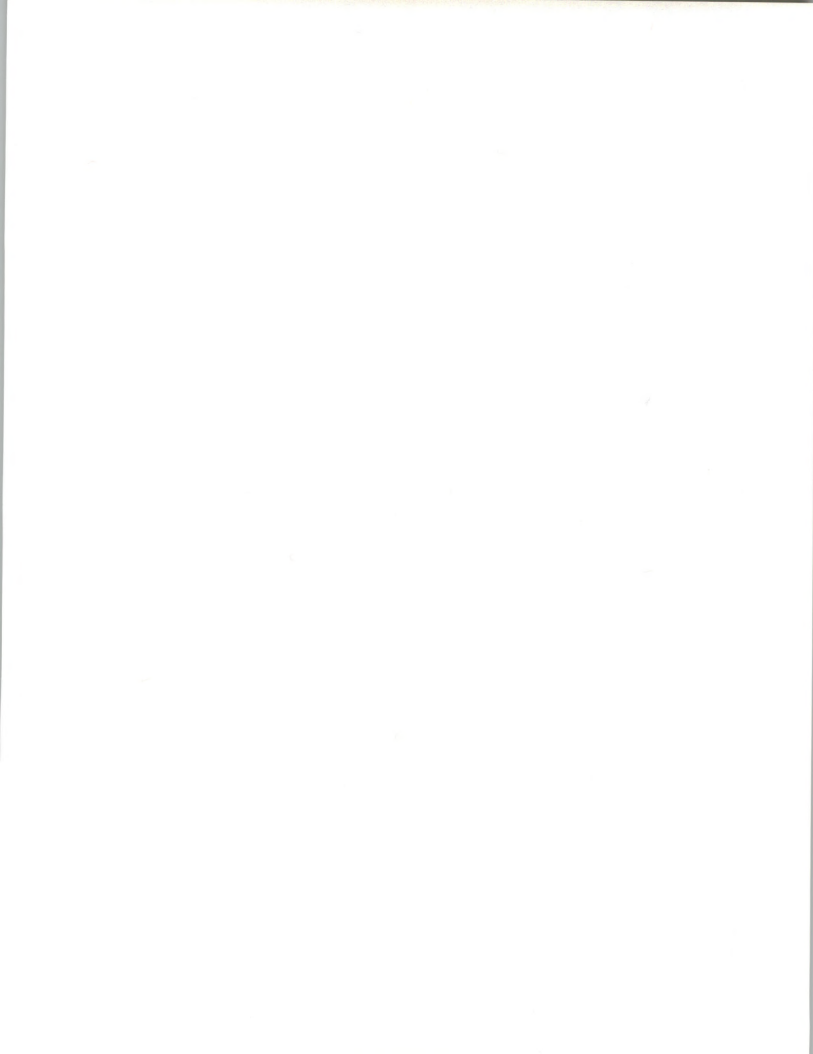
E-OU-95
6/9/93



Outsourcing Opportunities for Equipment Vendors

E-OU-96
6/8/93

INPUT

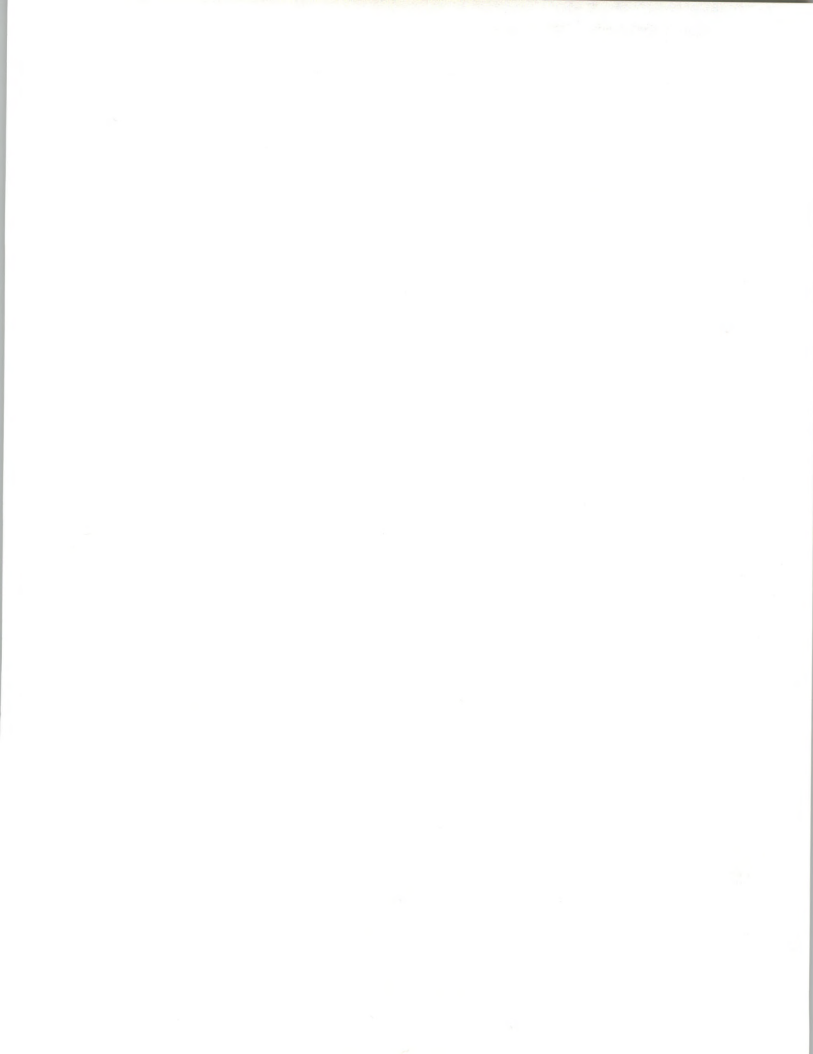


Characteristics of Platform Operations Market

- Services are mainframe-based
- Low cost service provision essential
- Transition outsourcing a major component
- HP could target via partnership?

E-OU-97
6/8/93

INPUT



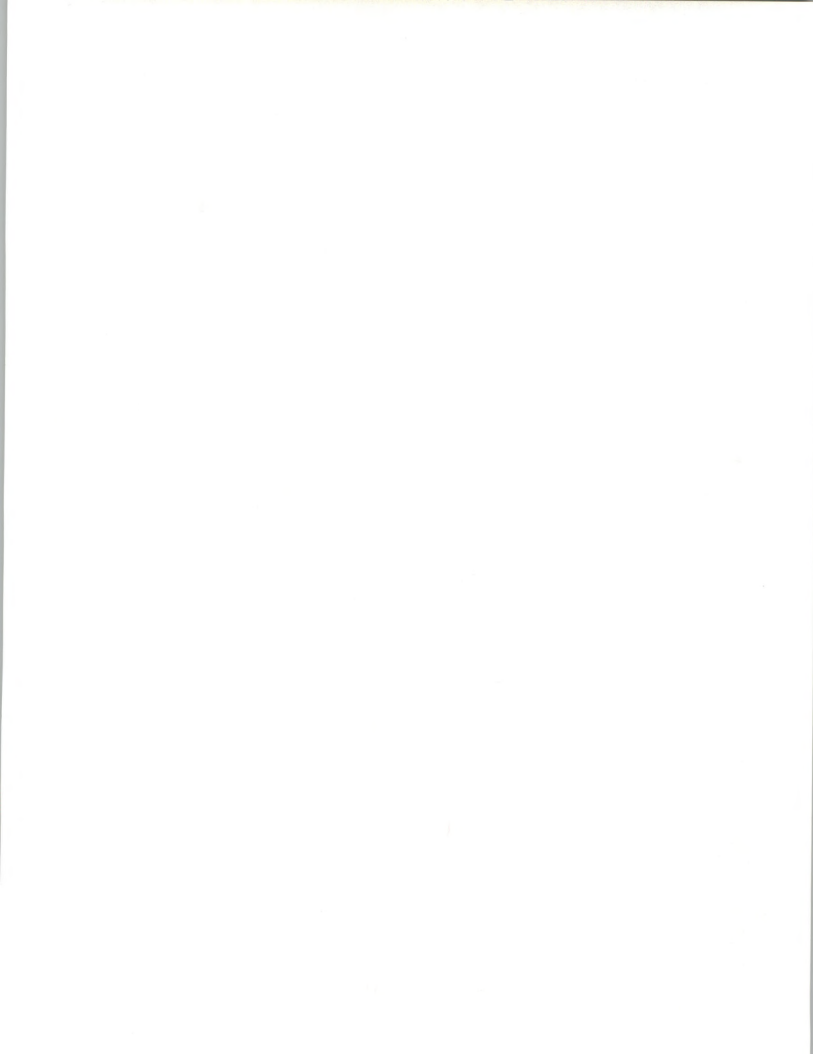
Desktop Services, Europe

Degree of Outsourcing

Service Element	Relative Level of Outsourcing by Users
Purchasing Consultancy	Medium
Equipment Purchase	Medium
Equipment Maintenance	High

E-OU-08
5/8/93

INPUT

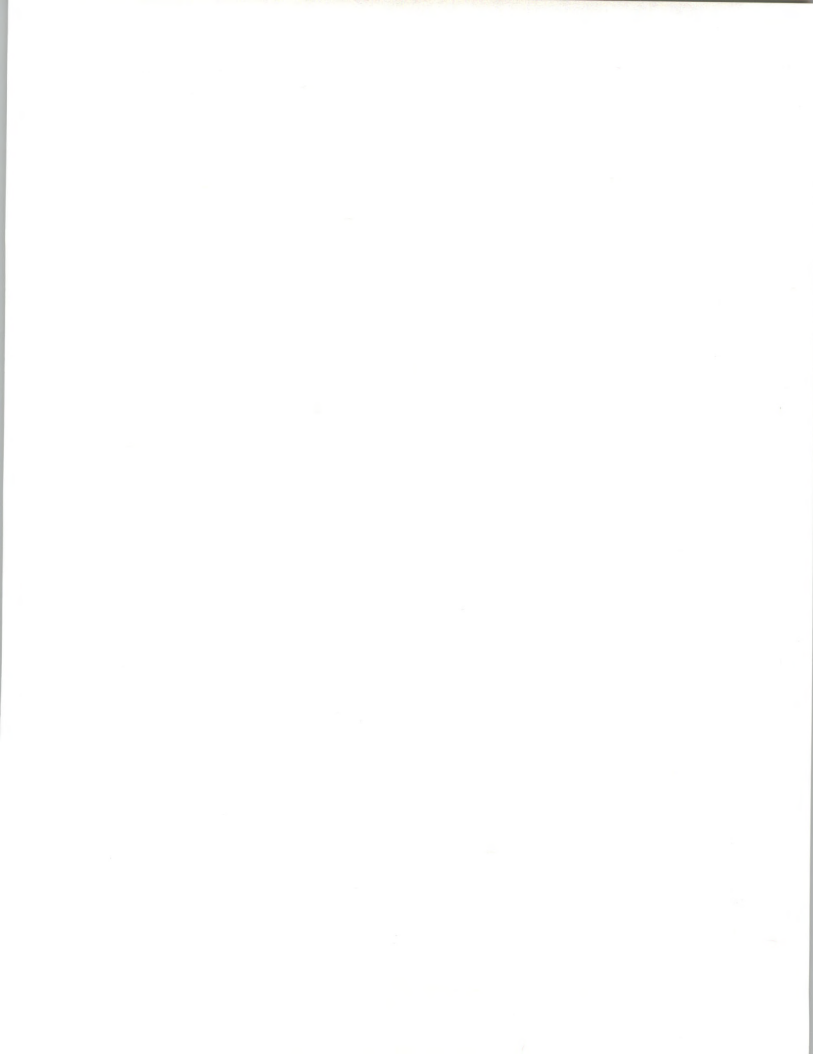


Desktop Services, Europe

Degree of Outsourcing

Service Element	Relative Level of Outsourcing by Users
LAN/Equipment Installation	High
LAN Management	High

E-OU-99
6/8/93

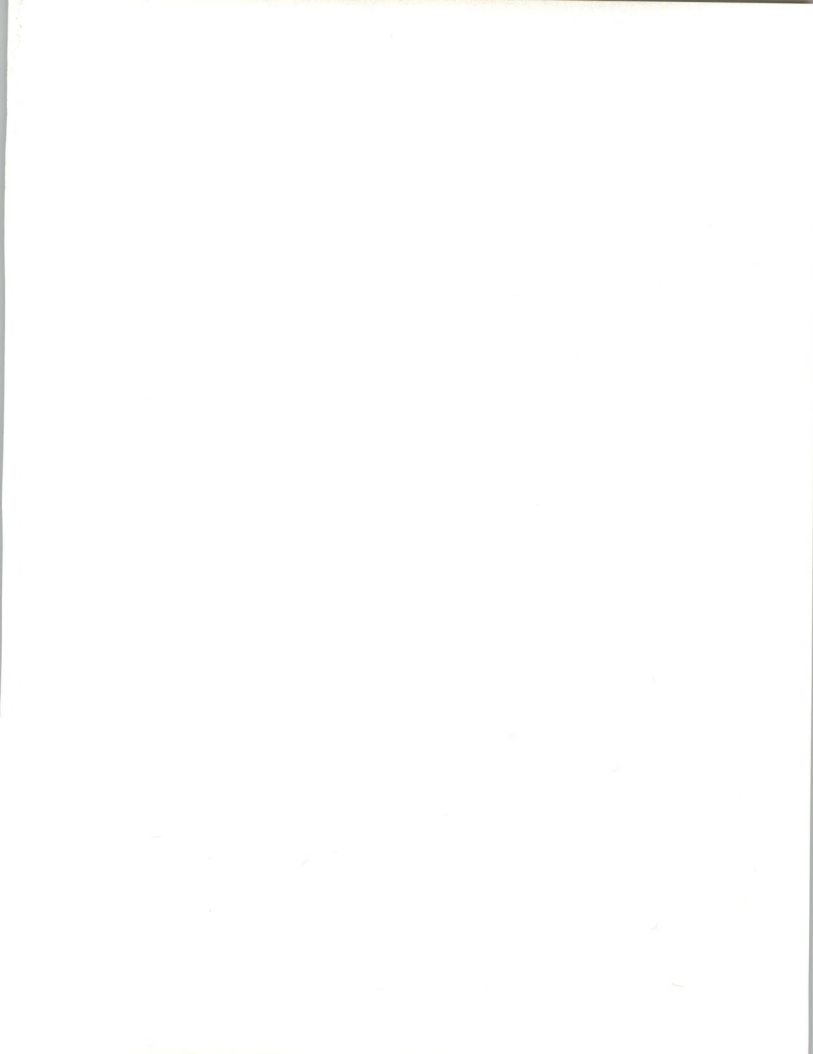


Desktop Services, Europe

Degree of Outsourcing

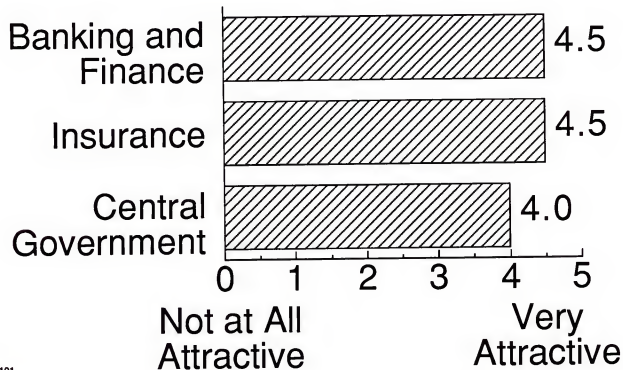
Service Element	Relative Level of Outsourcing by Users
Help Desk Services	
- Systems Software	Medium-High
- Applications Software	Medium
Second-line Tech. Support	High

E-OU-100
6/8/93

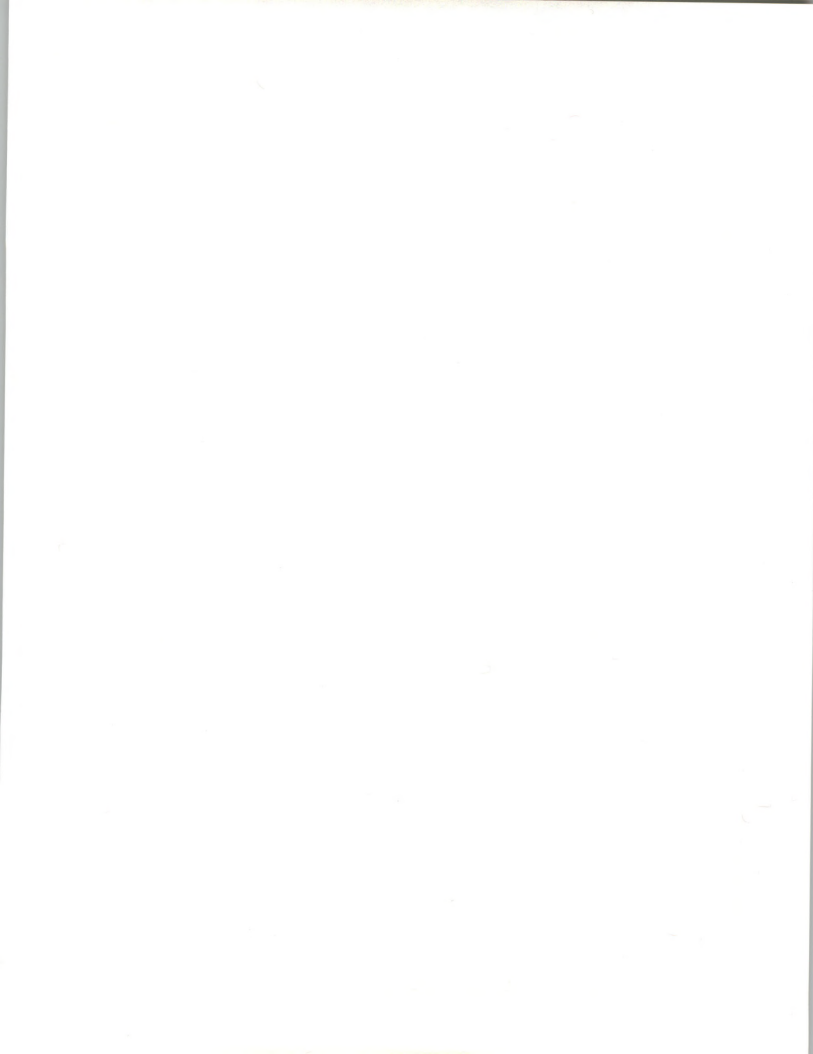


Desktop Services, Europe

Attractiveness of Industry Sectors

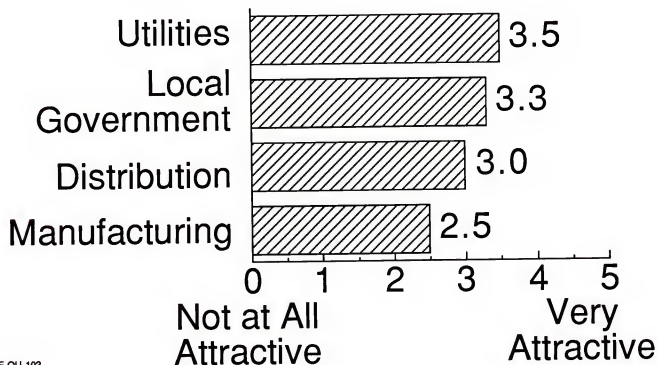


E-OU-101
6/8/93

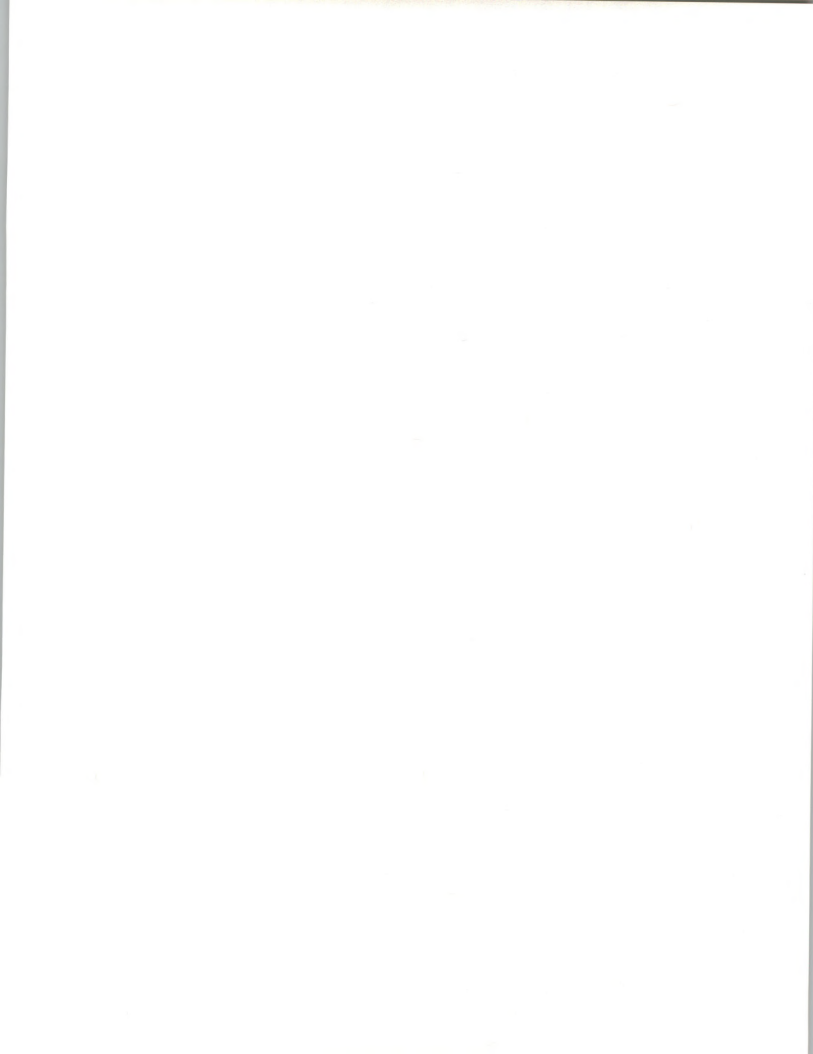


Desktop Services, Europe

Attractiveness of Industry Sectors



E-OU-102
6/8/93



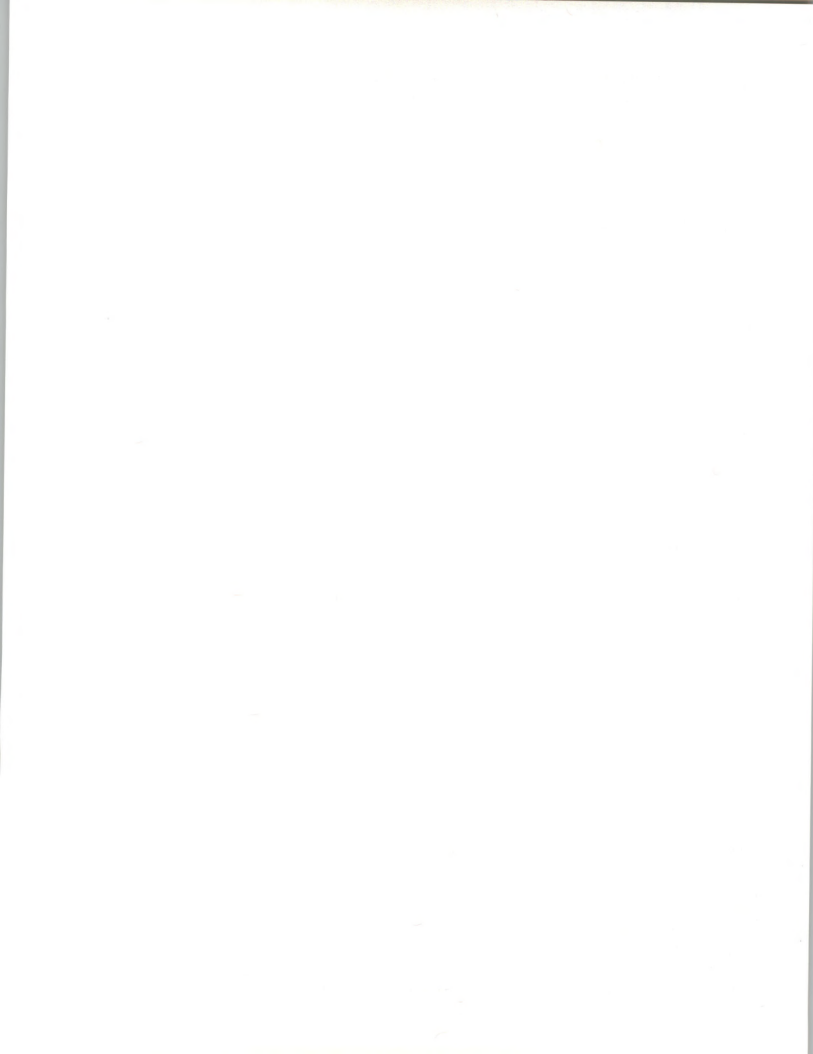
Desktop Services, Europe

Vendor Challenges

- Independence of supply
- Full service capability
- Breadth of software product support capability
- Up-to-date technical skills
- Pan-European coverage

E-OU-103
6/8/93

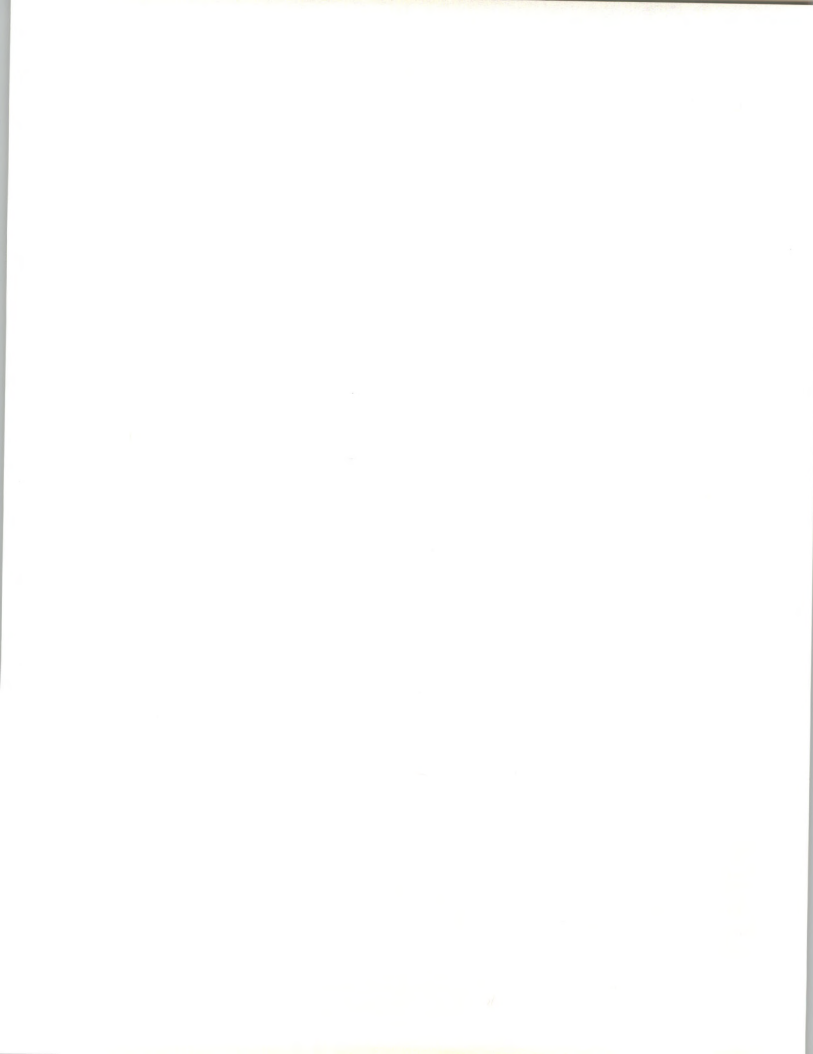
INPUT



Conclusions

Segment	Comments
Platform Operations	Partnership may be desirable
Desktop Services (LAN Management)	A good prospect
Network Management	Partnership?

E-OU-104
6/8/93



Conclusions

Segment	Comments
Applications Management	No
Applications Operations	Target selected industries Partnership for mainframe operations

E-OU-105
6/8/93

