Information Services Industry Directions

Executive Presentation

MS-1

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Notes

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Market Research and Consultancy

Information Services Industry

15 Years in Business

100 Employees

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Notes

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California, New York, Washington D.C., London, Paris, Tokyo

Primary Research Emphasis

Senior Executives Experienced in Information Services

Forecast from Comprehensive Data Base

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MS-7

Notes

- Introduction
- Information Systems Environment
- Information Services Markets
- Competition
- Conclusion

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MS-11

Notes

Information Systems

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Notes

Fundamental Driving Forces

Key Business Trends:

- Shorter product life cycles
- More customization/specialization
- Narrower market segments
- Higher impact of technology
- More competition from overseas vendors

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Notes

Blocking Factors

- Infrastructure gridlock
- Lack of qualified in-house personnel
- Existing applications portfolio
- Organizational response time

Create opportunities for the information services industry

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Notes

Strategic Values

- Information
- Information systems (IS)
- Information technology (IT)

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Notes

IS Trends

- IS to reduce costs
- IS for competitive advantage
- Mission-critical systems
- Inter-enterprise systems
- Integrated customer-oriented systems

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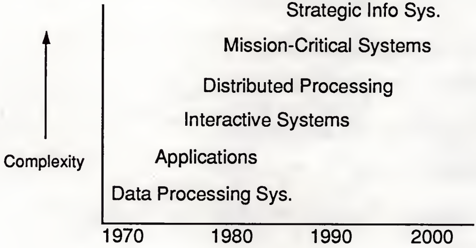
Notes

Complexity of the Requirement



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Notes

Where's the Productivity?

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I- 8

Notes

Make vs. Buy

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Notes

Technology Trends

- Not a driving force
- Evolutionary vs. revolutionary
- Three phases of technology application
  - Comparative advantage
  - Comparative parity
  - Comparative necessity

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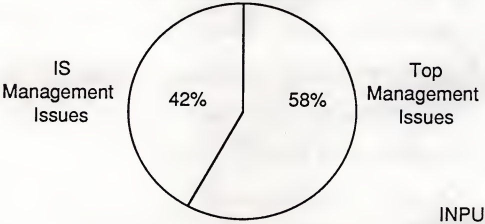
Notes

Implementation Inhibitors—Top Management vs. Information Systems



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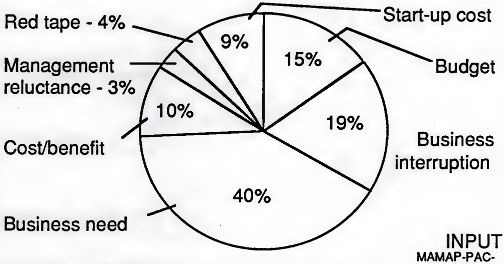
Notes

Implementation Inhibitors
Top Management



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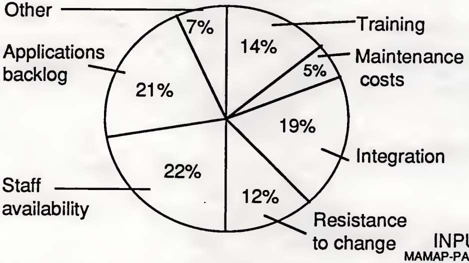
Implementation Inhibitors
Information Systems



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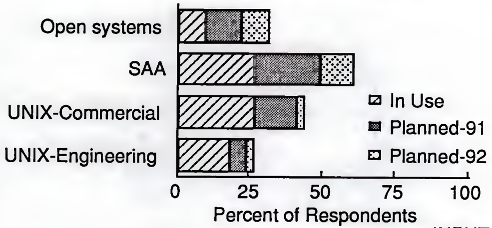
Notes

Technology Status and Timing
Operating Systems/Architecture



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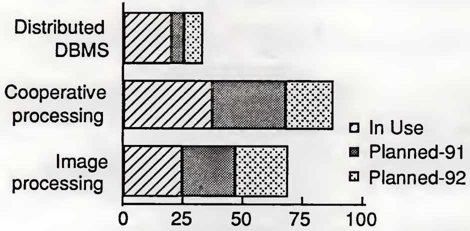
Notes

Technology Status and Timing
Operating Systems/Architecture



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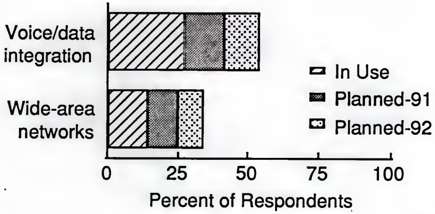
Notes

Technology Status and Timing
Networks/Communications



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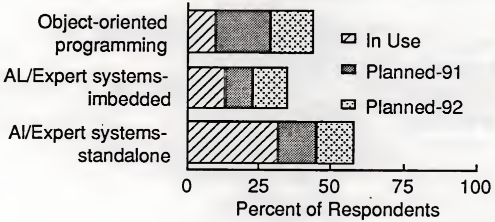
Notes

Technology Status and Timing
Application Development



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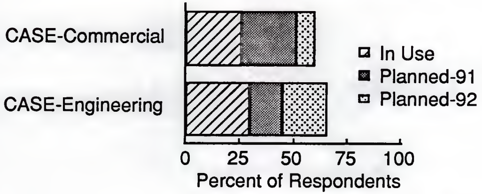
Notes

Technology Status and Timing
Application Development



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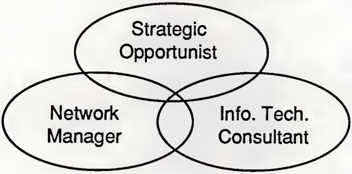
Notes

Information Systems Executive Role in the 1990s



An Internal "Systems Integrator"

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I- 41

Notes

IS Organization in the 1990s

Not Centralized

Not Decentralized

Federated

Brought together "by agreement of each party to sublimate its power to the central authority in common affairs." - Webster

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I- 42

Notes

Outsourcing is the contracting of information systems (IS) functions to external vendors.

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OU-6

Notes

Beyond Products: Service-Based Strategy

HBR March/April 1990

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OU-2

Notes

IS Outsourcing Areas

1. Development
2. Operation and maintenance

OU-7

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Notes

"Outsourcing" vs. Buying Services

1980s: Services achieved recognition

1990s: Overcome prejudice against buying management services

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OU-10

Notes

"Outsourcing" vs. Buying Services

- Greater commitment on part of buyer
- "Partnership"
- Responsibility/risk for vendors

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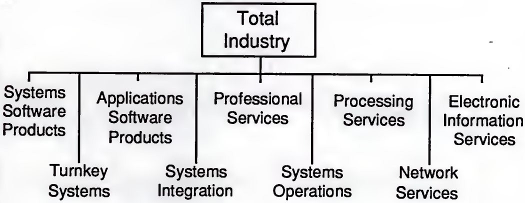
OU-11

Notes

Information Services Industry Structure



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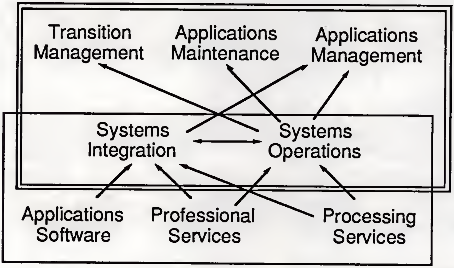
Notes

Systems Management Opportunities



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Notes

12/13/90

Information Services Industry Trends

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Notes

Economic Impacts and Information Systems Spending

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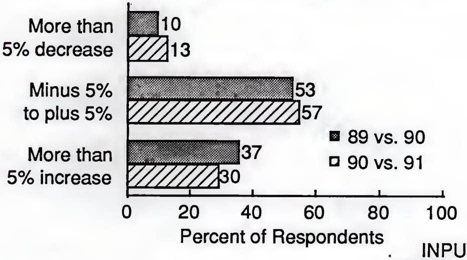
Notes

Information Systems Budgets 1989 vs. 1990 and 1990 vs. 1991



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Notes

Existence of Budgetary Restrictions

- 58% have restrictions in place
- 22% planning for recession
- 11% believe recession started 3rd qtr 1990
- 16% believe recession will last 6-9 months

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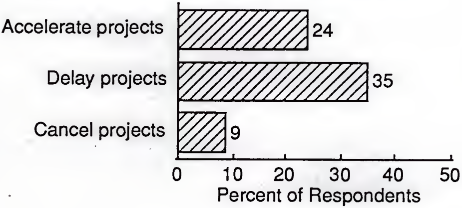
MAMAP-PAC- 13

Notes

Recession Impacts Application Development



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Notes

Recession Impact on Information Services Spending

- Overall - About 40% no change
- Consulting - 42% reduce more than 10%
- Systems development - 41% reduce more than 10%

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MAMAP-PAC- 15

Notes

Recession Impact on Information Services Spending

- Processing Services - Generally no change, some increases
- Systems Integration - 29% reduce more than 10%
- Systems Operations - No change

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MAMAP-PAC- 16

Notes

Professional Services Vendor Views

- Recession has started
- Recession impact - First, greatest, negative
- Near-term growth (vendor response) - 10%
- Internal constraints - Significant
- Some opportunities for project speed-up

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MAMAP-PAC- 21

Notes

Processing Services Vendor Views

- Recession has started
- Recession impact - Modest to none
- Near-term growth (vendor response) - over 10%
- Internal constraints - Modest
- Business "almost" as usual

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MAMAP-PAC- 22

Notes

Network Services
Vendor Views

- Recession has started
- Recession impact - Mixed, slowing growth
- Near-term growth (vendor response) - over 15%
- Internal constraints - Modest
- Impacts by industry - Mfg., Banking

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MAMAP-PAC- 23

Notes

Systems Software Products Vendor Views

- Recession impact - By submode
  - Systems control - Slowed growth
  - Application development tools - Mixed
  - Operations management - None
- Near-term growth (INPUT) - 14%
- Business varies by submode

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MAMAP-PAC- 24

Notes

Systems Operations

SO- 1

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Notes

SO Definition

Contracting for all or a major portion of an IS operation on a long-term (more than one year) basis

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SO-73

Notes

Types of SO

- Platform (utility) systems operations
  - Network
  - Computers
- Applications systems operations

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SO-74

Notes

Systems Operations Driving Forces

- Increasing complexity of operations
- Scarcity and expense of required talents
- Costs and problems of systems upgrades
- Service level requirements
- Backup requirements

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SO-10

Notes

Systems Operations Driving Forces

- Core business focus
- Business transition
- Expense reduction
- Capital preservation

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SO-10

Notes

rev. 11/26/90

Systems Operations Driving Forces

- Systems integration creates opportunities
- Reduction of costs through sharing
  - People
  - Software
  - Computer systems
  - Networks

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SO-11

Notes

Systems Operations and Competitive Advantage

- Operations advantages hard to achieve
- Avoidance of operations disadvantages imperative
- Advantage/disadvantage comes from applications

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SO-12

Notes

Perceived SO Inhibitors

- Cost
- Employee loyalty
- Vendor employee turnover
- Loss of control
- Acceptance by user community

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SO-76

Notes

SO Vendor Issues

- Account control
- Potential conflicts of interest
- Profit maximization vs. performance

SO-77

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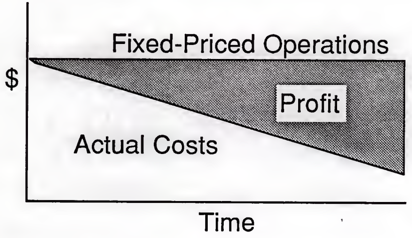
Notes

Systems Operations Efficiency Yields Profits



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SO-17

Notes

Systems Operations Benefits
(Users' Viewpoint)

- Business
  - Cost reduction/savings
  - Increased business focus
  - Improved career path
  - Predictability

SO-126

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Notes

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Systems Operations Benefits
(Users' Viewpoint)

- Technology
  - Access to better technology
  - Improved service quality
  - Improved reliability

SO-127

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Notes

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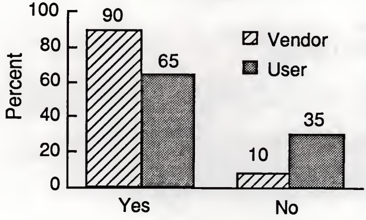
Network Operations Management
A Growing Trend



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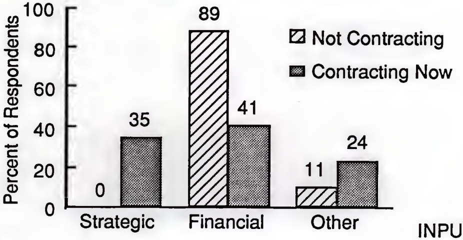
Notes

11/9/90

Outsourcing Decisions Primarily Financial



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SO-91

Notes

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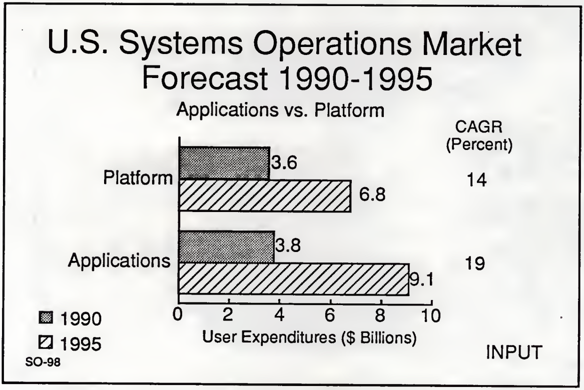

Notes

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Competitive Trends

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CT-1

Notes

Andersen Consulting

- Management Consulting
  Software Development
- Software Products
  - MAC PAC
  - FOUNDATION
  - DCS
- Systems Integration
- Systems Operations
  - Infonet
  - Sun Oil
  - INPUT

SO-103

Notes

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IBM

Software Products	ASD
Processing Services	IIN
Systems Integration	FSD SID
Applications Solutions	AS
Systems Operations	SSD IIN

SO-102

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Notes

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EDS

- Industry leader
- Full range of information services
- Shared resources SO focus
- Vertical industry organization
- Aggressive growth strategy
- Leverage GM experience/resources

SO-101

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Notes

12/11/90

European Companies

- CAP Gemini Sogetti (CAP-SESA) is parent of CAP GEMINI AMERICA (CGA)
  - Close to $1 billion in 1989
  - Focus on professional services

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CT-27a

Notes

Aerospace Subsidiaries

- Successes

1. Government
   - BCS
   - Grumman
   - MMDS
2. Specialized areas
   - TRW

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CT-25b

Notes

Japanese Vendors

- Large companies already exist
- Close scrutiny of U.S., European markets
- Cautious approach to investment
- Alliances likely to come first
- Entering markets with Japanese clients
- Usually part of corporate family
- Attacking secondary markets

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CT-29

Notes

Summary and Conclusions

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SC-1a

Notes

Environment for Information Services in Year 2000

- Worldwide network infrastructure in place (ISDN)
  - Voice
  - Data
  - Text
  - Graphics

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SC-2

Notes

Environment for Information Services in Year 2000

- Simultaneous language translation/transmission
- Active home/consumer use of videotex, data base access

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SC-3

Notes

Environment for Information Services in Year 2000

- Image processing is routine
- Portable, desktop computers used by all professional/clerical/ managerial workers
- Standards in place for OS, graphical interfaces

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SC-4

Notes

Environment for Information Services in Year 2000

- Fewer hardware vendors
- Solutions delivered, not products
- Software customized by nonprogrammers

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SC-5

Notes

Conclusions

- Double-digit annual growth for all vendors
- no longer "automatic"
- Worldwide markets offer real opportunities

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SC-8b

Notes

Information Services Market Penetration Worldwide

	Expenditures ($ Billions)	
	1989	1994
Information Systems	840	1,420
Information Services*	170	380
Penetration	20%	27%

* Less electronic information services

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MPRE-186

Notes

Potential for revolution is there.

Forecasts are based on evolution.

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OU-17

Notes

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INPUT OFFICES

North America

San Francisco
1280 Villa Street
Mountain View, CA 94041-1194
Tel. (415) 961-3300
Fax (415) 961-3966

New York
Atrium at Glenpointe
400 Frank W. Burr Boulevard
Teaneck, NJ 07666
Tel. (201) 801-0050
Fax (201) 801-0441

Washington, D.C.
1953 Gallows Road, Suite 560
Vienna, VA 22182
Tel. (703) 847-6870
Fax (703) 847-6872

International

London
Piccadilly House
33/37 Regent Street
London SW1Y 4NF, England
Tel. (071) 493-9335 Fax (071) 629-0179

Paris
52, boulevard de Sébastopol
75003 Paris, France
Tel. (33-1) 42 77 42 77 Fax (33-1) 42 77 85 82

Frankfurt
Sudetenstrasse 9
D-6306 Langgöns-Niederkleen, Germany
Tel. (0) 6447-7229 Fax (0) 6447-7327

Tokyo
Saida Building
4-6, Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101, Japan
Tel. (03) 3864-0531 Fax (03) 3864-4114