

**Systems Integration
Market Analysis
1988**

**Doug Wilder
SI Program Manager
INPUT**



SI Market Definition

- **Integrated** solution to a multidisciplinary information systems requirement
 - Multiple vendors
 - Multiyear schedules
 - Prime contractor assumes full risk

INPUT

NOTES:

MSEM-DRW-2



Overview

- Market forecasts
- Issues
- Markets
- Competition
- Trends

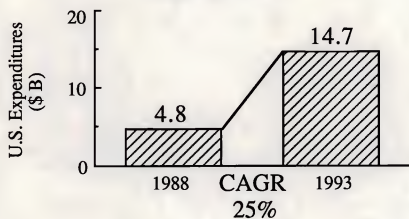
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Systems Integration Market Forecast



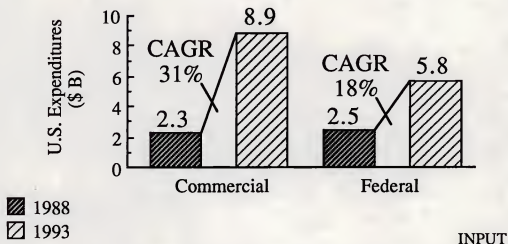
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Systems Integration Market Forecast



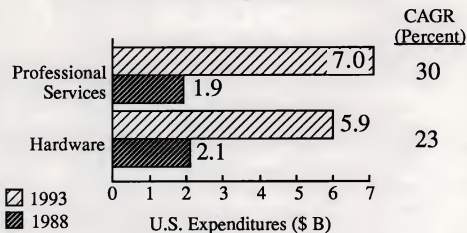
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Systems Integration Market

1988-1993 Component Groups



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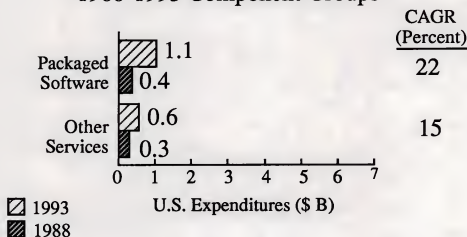
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Systems Integration Market

1988-1993 Component Groups



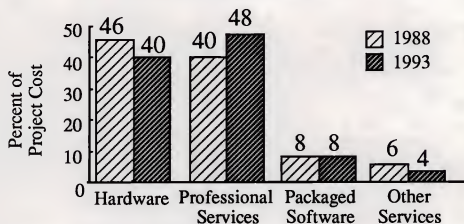
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MSEM-DRW-7



Trends in SI Project Composition



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MSEM-DRW-8



Major Buyers Issues—1988

- Rising management expectations
- User demands for increasingly complex solutions
- Managing the technology investment
- Integration—data/applications/technology
- "Mission Critical" solutions

INPUT

Notes:

MSEM-DRW-9



Major Vendor Issues—1988

- Potential of catastrophic failure
- Resistance from in-house integrators
- Increasing competition—confusion
- Competitive exposure through specific project alliances
- Leading-edge technology risks

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Notes:

MSEM-DRW-10



Key Commercial SI Market Factors

- Rising demand for connectivity
- Major infrastructure rebuilding
- Growing user management trend
- Growing application complexity

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MSEM-DRW-11



Key Federal SI Market Factors

- Demand for productivity improvement
- Shortage of technical staff
- Shared implementation risks
- Trend toward technology upgrades

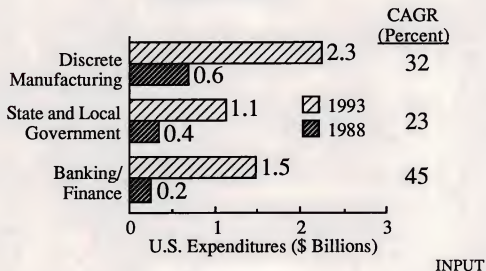
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Expenditures by Industry 1988-1993

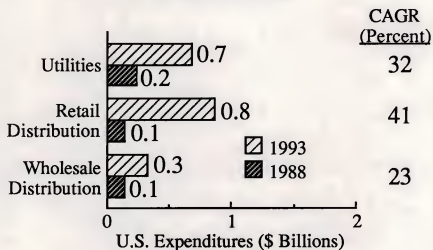


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Expenditures by Industry 1988-1993



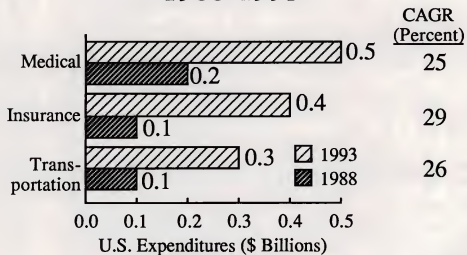
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Expenditures by Industry 1988-1993

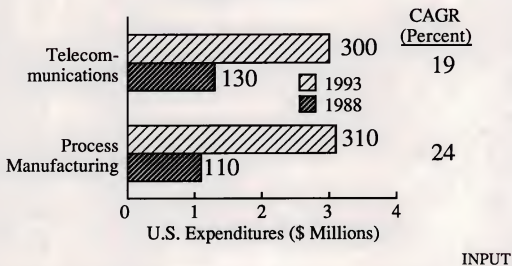


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Expenditures by Industry 1988-1993

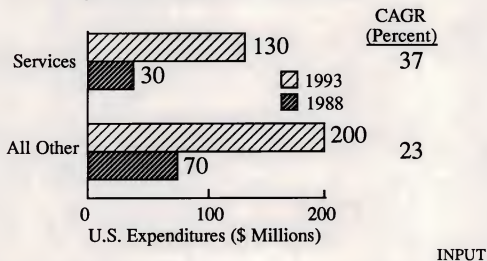


Notes:

MSEM-DRW-16



Systems Integration Expenditures by Industry, 1988-1993



Notes:

MSEM-DRW-17



Market Share by Class of Competition, 1988

Vendor Class	Percent of Market		
	Federal	Commercial	Overall
Hardware Manufact.	20	21	20
Commun. Vendors	3	10	7
Professional Svcs.	53	32	42
"Big 8"	3	10	7
Aerospace	16	11	14
Other	5	16	10

INPUT

Notes:

MSEM-DRW-18



Leading Systems Integration Vendors, Market Shares, 1988

Vendor	U.S. Revenues (\$Millions)	Market Share (%)
IBM	850	18
EDS/GM	505	12
Andersen Consulting	383	9
CSC	345	8

INPUT

Notes:

MSEM-DRW-19



Leading Systems Integration Vendors, Market Shares, 1988

Vendor	U.S. Revenues (\$Millions)	Market Share (%)
Unisys	300	7
SAIC	280	6
Grumman	250	6
Boeing	200	5

INPUT

Notes:

MSEM-DRW-20



Future Trends

- Entry of new domestic and off-shore competitors
- Market "hype" will blur definitions
- Increased centralization of vendor SI "product" management
- Increased development of proprietary technologies/methodologies

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Notes:

MSEM-DRW-21



Future Trends

- Growing investment in marketing/promotion
- Development of formal market strategies by non-SI vendors
- Telecommunications companies

INPUT

Notes:

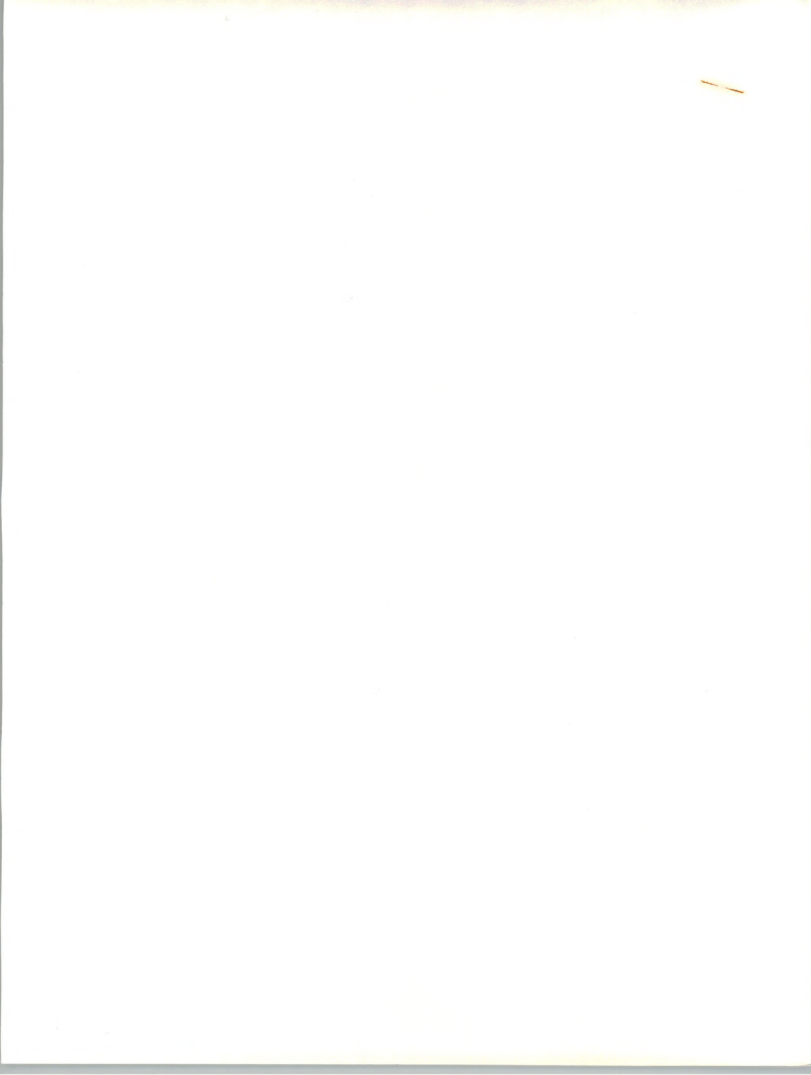
MSEM-DRW-22



Douglas R. Wilder
Director, Systems Integration
INPUT

Douglas R. Wilder provides information consulting service to executives and planning managers in the computer industry. With INPUT he specializes in analysis and forecasting of major trends in the industry, particularly in systems integration, and the impact of these trends on vendors and end users. Mr. Wilder has twenty-seven years of experience in the computer industry, including ten years in management. Mr. Wilder retired from International Business Machines Corporation (IBM) in December, 1988. While with IBM he held a variety of professional and management positions in the areas of market research, corporate strategy development and planning, field marketing, and customer executive education. Most recently, as Manager of Business Analysis for the Systems Integration Division, he was responsible for strategy development and systems integration market research. Mr. Wilder joined IBM after two years as an officer in the U.S. Army.

Mr. Wilder holds a B.A. from Dartmouth College.



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SYSTEMS INTEGRATION
MARKET ANALYSIS
1988

DOUG WILDER

~~JOHN FENNER~~

~~SI PROGRAM MANAGER~~

~~VICE PRESIDENT~~

~~REPORT~~

SI Program Manager

Input

MSEM-DRW-1

~~SEM-DRW-1~~



SI Market Definition

- **Integrated** Solution to a
Multidisciplinary Information
Systems Requirement
- Multiple Vendors
- Multiyear Schedules
- Prime Contractor
Assumes Full Risk

INPUT

NOTES:

SIOS-3

2

~~SIOS-3~~
MSEM-DPW-2



OVERVIEW

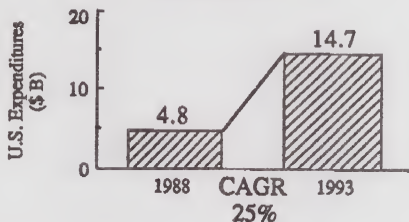
- MARKET FORECASTS
- ISSUES
- MARKETS
- COMPETITION
- TRENDS

~~SEEM - JEE?~~

MSEM-DPW-3



Systems Integration Market Forecast



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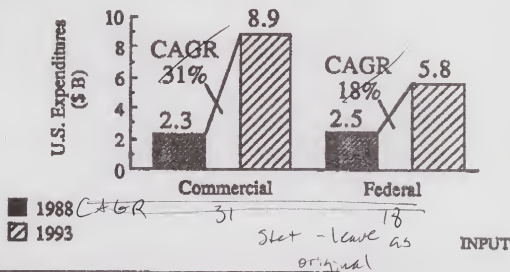
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MSEM-DEW4



Systems Integration Market Forecast



NOTES:

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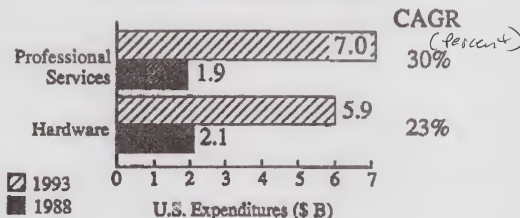
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Systems Integration Market 1988-1993 Component Groups



INPUT

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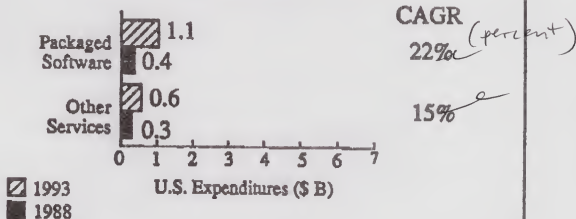
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Systems Integration Market 1988-1993 Component Groups



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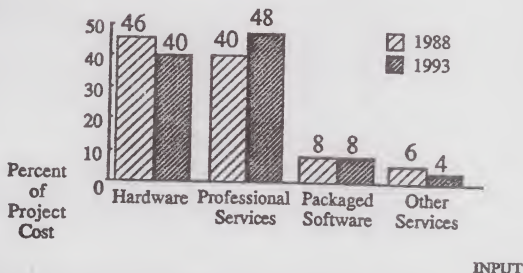
SIOS-47b

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SSEM JEP-70 MSEM-DRW-7



Trends in SI Project Composition



NOTES:

SIOS-46

SSEM-JEF-H

MSEM-DEWG



Major Buyers Issues—1988

- Rising Management Expectations
- User Demands for Increasingly Complex Solutions
- Managing the Technology Investment
- Integration—Data/Applications/Technology
- "Mission Critical" Solutions

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NOTES:

SIOS-36

12

~~SSM JETZ~~ MSEM-DEW 9



Major Issues—1988 Vendors

- Potential of Catastrophic Failure
- Resistance from In-House Integrators
- Increasing Competition—Confusion
- Competitive Exposure through Specific Project Alliances
- Leading-Edge Technology Risks

INPUT

NOTES:

SIOS-37

17

~~SEM-JEF-17~~
MSEM-DRAW 10



Key Factors Commercial SI Markets²

~~Positive~~ ²

- Rising Demand for Connectivity
- Major Rebuilding of Infrastructure
- Growing ~~Trend Toward~~ ⁴ User Management *Trend*
- Growing Application Complexity

INPUT

NOTES:

SIOS-13a

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~~SSGM JEF-20~~
MSEM-DRW11



Key Factors

Federal SI Markets

Positive

- Demand for Productivity Improvement
- Shortage of Technical Staff
- Shared Implementation Risks
- Trend Toward Technology Upgrades

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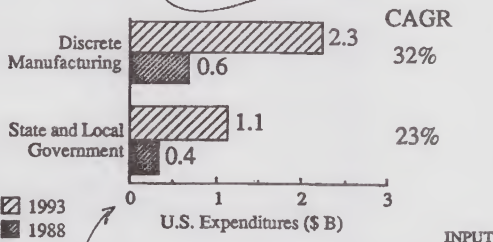
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Systems Integration^e Expenditures by Industry 1988-1993



NOTES:

Add Banking/Finance

*Please Reconsider
5/05/17/20/24/27/30
into 4 charts -
put 3 industries per
chart (use theme bars)*

22

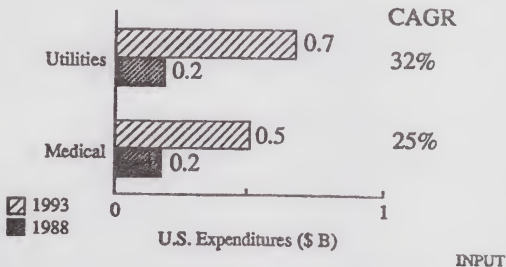
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Expenditures by Industry 1988-1993



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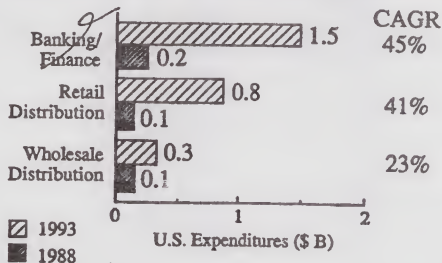
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Systems Integration Expenditures by Industry, 1988-1993



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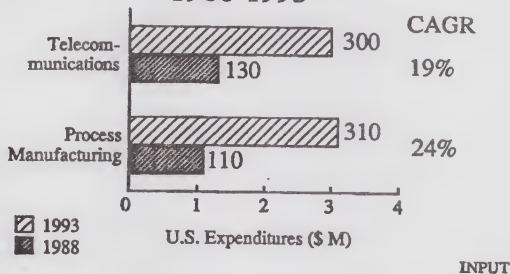
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MSEM-DRW 15



Expenditures by Industry 1988-1993



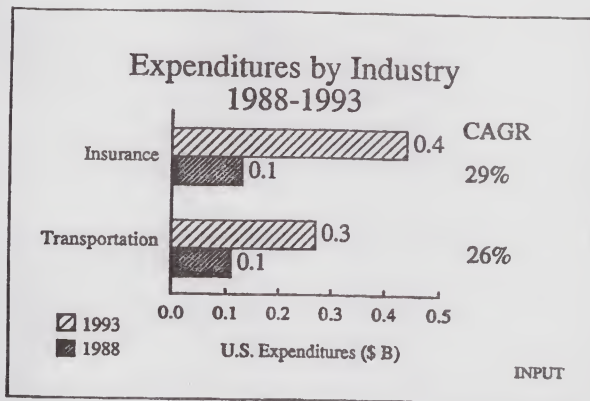
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Combined w other slides

SIOS-30

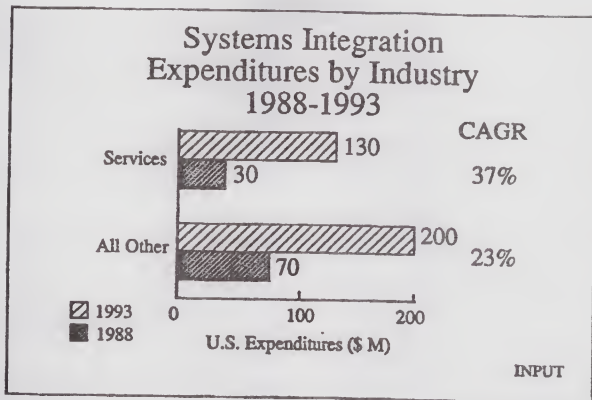
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NOTES:

SIOS-33

256

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MARKET SHARE BY CLASS OF COMPETITION

~~1987~~

1988

Vendor Class	Percent of Market		
	Federal	Commercial	Overall
Hardware Manufacturers	20	27	20
Communication Vendors	3	10	7
Professional Services	53	32	42
"Big 8"	3	10	7
Aerospace	16	11	14
Other	5	16	10

29



Leading Systems Integration Vendors, Market Shares, 1988

Vendor	U.S. Revenues (\$M)	Market Share (%)
IBM	515 850	14 18
EDS/GM	450 505	12 12
Andersen Consulting	400 383	11 9
Boeing	250	8
CSC	345	

INPUT

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SIOS-49a

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SSCM-JEF (30) MSEM-DZW19



Leading Systems Integration Vendors, Market Shares, 1988

Vendor	U.S. Revenues (\$M)	Market Share (%)
CSC UNISYS	195 300	7
SAIC	175 280	6
Grumman	130 250	6
EDC BOEING	130 200	5

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NOTES:

SIOS-49b

31

SSM-JEF (31)

MSEM-DREW2c.



Future Trends

- Entry of New Domestic and Off-Shore Competitors
- Market "Hype" Will Blur Definitions
- Increased Centralization of SI "Product" Management within Vendors
- Increased Development of Proprietary Technologies/Methodologies

INPUT

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~~SSEM-JEF-36~~

MSEM-DBW 21.



Future Trends

- Growing Investment in Marketing/Promotion
- Development of Formal Market Strategies by Non-SI Vendors
- Telecommunications Companies

INPUT

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STOS-62a

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~~SSA JCF~~ 37 MSEM DEW 22.

