Federal Systems Integration Market

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INPUT

May 1990

Overview

- Market pressures
- Market forecast
- Market participation
- Market characteristics
- Market recommendations

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Notes

Federal Market Pressures

- Improve productivity of operations
- Consolidate and improve aging systems
- Overcome staff shortages
- Maintain fair competition of contracts
- Share implementation risks
- Criticisms of the "Grand Design" Concept

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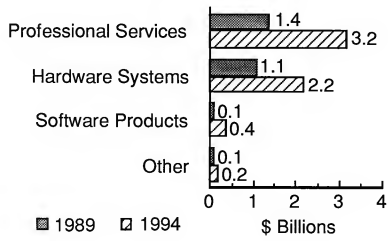
Notes

Systems Integration Forecast GFY 1989-GFY 1994



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Notes

DoD FY90 IRM Budget Cuts

Branch	Number of Programs	$ Millions Cut
Army	18	270
Air Force	8	93
Navy	11	193
Other DoD	3	35

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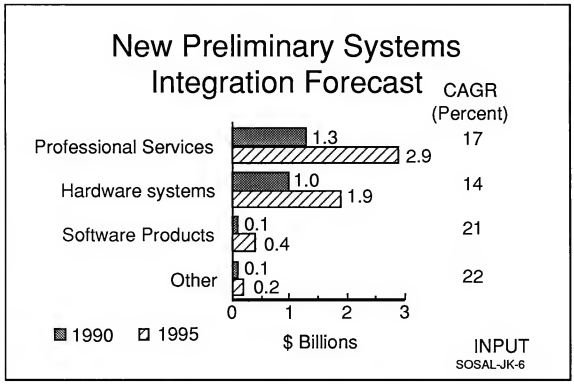
Notes



Notes

Leading Federal Systems Integration Vendors

- IBM
- Electronic Data Systems
- Computer Sciences Corporation
- SAIC
- Grumman Data Systems

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Notes

Systems Integration Opportunities by Type of Implementation FY 1989-FY 1994

Type of Implementation	Agencies		
	Defense	Civilian	Total
Upgrade/expansion	10	11	21
Replacement	2	5	7
New start	8	11	19
Total	20	27	47

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Notes

Primary Applications

- Information management
- Human resources
- Office automation
- Graphics
- Logistics and distribution

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Notes

Critical Systems Integration Success Factors

- Timely software delivery
- Proper management of pilot
- Technology refreshments
- Upgradability
- Attention to support services

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Notes

Recommendations

- Process understanding
- Project management talent
- Proper teaming selection and management
- Proper focus of marketing efforts
- Empathy with customer problems

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Notes

FEDERAL Systems INTEGRATION MARKET

Jim Kerrigan
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May, 1990

OVERVIEW

- Market Pressures
- Market Forecast
- Market Participation
- Market Characteristics
- Market Recommendations

II

Executive Overview

A Federal Market Pressures

Prospects for systems integration (SI) continue to improve in both federal and commercial markets. The government will continue to spend more on systems integration projects, although fewer new projects will be initiated. Some of the pressures affecting this growth are listed in Exhibit II-1. The federal SI projects now require more "bang for the buck" than ever.

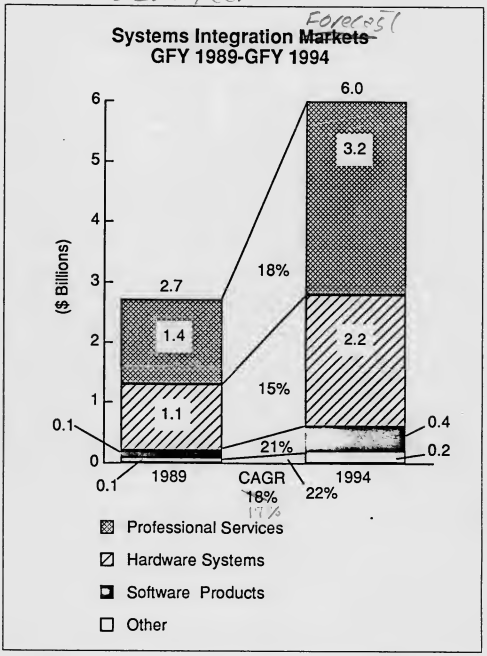
EXHIBIT II-1

Federal Market Pressures

- Improve productivity of operations
- Consolidate and improve aging systems
- Overcome staff shortages
- Maintain fair competition of contracts
- Share implementation risks
- Criticisms of the "Grand Design" Concept

Many federal government agencies are faced with a tightening budget and a need to improve service to their users. The government must improve productivity within its own operations. New and improved information technology will provide a partial solution to this problem.

EXHIBIT III-1



This approach permits a more comprehensive comparison between the modes and with the commercial market. As illustrated in Exhibit III-1, the various modes will grow at differing rates. This reflects the expected shift of emphasis from hardware to software and services in systems integration projects over the next five years.

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DOD FY90 IRM BUDGET CUTS

Branch	# of Programs	Cut ($ Millions)
Army	18	270
Air Force	8	93
Navy	11	193
Other DoD	3	35

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NEW PRELIMINARY SYSTEMS INTEGRATION FORECAST

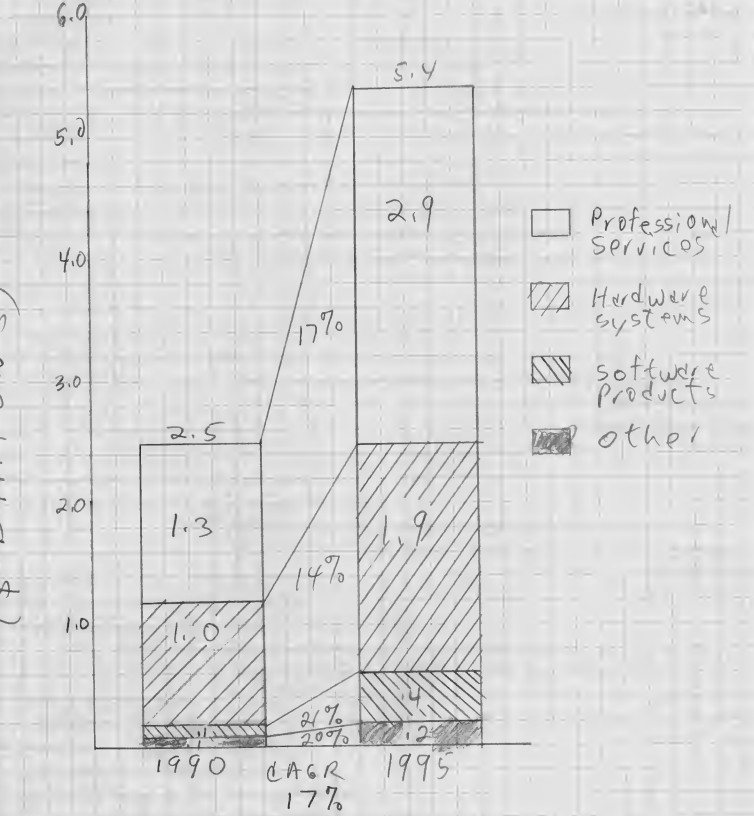

EXHIBIT II-3

Leading Federal Systems Integration Vendors

- IBM
- Electronic Data Systems
- Computer Sciences Corporation
- SAIC
- Grumman Data Systems

D

Federal Systems Integration Opportunities

Although many federal SI vendors focus their efforts on the Department of Defense (DoD), INPUT found more solid opportunities on the civilian side of the federal government (see Exhibit II-4). Although the count does not reflect the entire market, it does represent the relative interests of defense versus civil agencies. These are based on a search of

INPUT's PAR data base; the opportunities represented are thus solid and likely to occur.

EXHIBIT II-4

Systems Integration Opportunities by Type of Implementation, FY 1989-FY 1994

Type of Implementation	Agencies		
	Defense	Civilian	Total
Upgrade/Expansion	10	11	21
Replacement	2	5	7
New start	8	11	19
Total	20	27	47

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The statistics show the dominance of civilian agencies in the SI market. The Air Force is tied with the Department of the Treasury for the greatest number of identified opportunities. The Navy, HHS, and the Army also have a greater number of identified opportunities than other agencies.

Upgrades and expansion opportunities are more prevalent than other types. The number of new starts grew from last year, while the number of replacement opportunities decreased. These facts reflect the federal need to strengthen and enhance many existing systems, which in turn reveals the continuing shortcomings of these systems.

In terms of individual system costs, the civilian agencies again will expend more than the defense agencies. However, the defense agencies do have some very significant opportunities planned, such as the Army's Small Multi-User Computer contract and the Navy's CAD/CAM II project. They are potentially long-term, high-value contracts. Depending on the sequestration of the FY 1990 budget and the outcome of conference committee meetings, several other major SI opportunities may come to fruition or may be delayed.

Primary Applications

Information management for analysis and the sharing of data is the most frequent application for upcoming SI programs. These programs are most often applied to mission-critical areas. Mission-oriented systems would include an accounting system for the Air Force Accounting and Finance Center, an information management system for DCA, and a distributed information system for the U.S. Geological Survey.

EXHIBIT II-5

Primary Applications

- Information management
- Human resources
- Office automation
- Graphics
- Logistics and distribution

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Human resources and office automation also constitute significant portions of the applications in systems integration projects. Graphics applications opportunities, involving both data displays and mapping, will increase in a number of agencies. The USDA Geographic Information System is a major SI opportunity in which graphics is the primary application.

The Department of Defense frequently mentions logistics and distribution systems as important applications. The defense agencies also need systems in accounting and procurement.

Other applications include the following:

- Management systems
- Administration
- Project Management

F Critical Success Factors

Although the federal SI market is considered mature, it still has not reached its full potential. More successes must become widely visible to enhance the credibility of contractual federal SI prospects.

Based on interviews and case studies, INPUT has identified elements which are critical to a successful SI effort. These are listed in Exhibit II-6.

EXHIBIT II-6

Critical Systems Integration Success Factors

- Timely software delivery
- Proper management of pilot
- Technology refreshments
- Upgradability
- Attention to support services

EXHIBIT II-7

Recommendations

- Process understanding
- Project management talent
- Proper teaming selection and management
- Proper focus of marketing efforts
- Empathy with customer problems

- Most, if not all, SI projects are so complex that a single vendor cannot expect to satisfy the user requirements alone. Proper teaming selection for the proposal effort and a proper teaming relationship during project implementation will lead to more wins and smoother efforts.
- Bidding too many opportunities can rapidly exhaust a company's bid and proposal budget and burn out the staff. To win frequently, the successful integrator needs to focus marketing efforts with proper prepositioning. Knowing when not to bid an opportunity is almost as critical as knowing when to bid.
- Finally, the successful integrator must empathize, not just sympathize, with the customer's problems. The vendor needs to understand the issues with which the customer (or prospect) is coping. The pre-proposal, proposal, and postaward activities must reflect a solution to the problems.

In view of the continuing prospects in this marketplace and the growing roster of participants, proactive vendors will need to adopt all of these strategies, and more, in order to succeed.

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