Federal Professional Services Market

Jim Kerrigan
Vice President
INPUT, Inc.

Overview

- Market Environment
- Market Analysis and Forecast
- Agency Perceptions
- Vendor Perceptions
- Recommendations

Notes

INPUT

Federal Market Pressures

- Improve productivity
- Technical staff shortage
- Budget deficit
- Contracting-out bias
- GSA delegation requirements

Notes

Competitive Forces

- Set-asides for 8(a) or small businesses
- New players in the market
  - Aerospace firms
  - Big 6 accounting firms
  - Specialized niche firms

INPUT
FIOV1- 4

Notes

INPUT

Top PS Vendors, FY1989

Vendor	Rank
Computer Sciences Corp.	1
Unisys	2
Black & Decker	3
Martin Marietta	4
Grumman Data Systems	5

INPUT
FIOV1- 5

Notes

INPUT

Agency PS Budgets— Software Development

$ Millions		Agency
1990E	1991F	
301	320	Energy
334	404	GSA
440	510	NASA

E = estimated   F = forecast

INPUT
FIOV1- 6

INPUT

Agency PS Budgets—
Software Development

$ Millions		Agency
1990E	1991F	
424	392	Air Force
429	461	Navy
259	323	Army

E = estimated　　　F = forecast

INPUT

Top Federal Government Professional Services Users
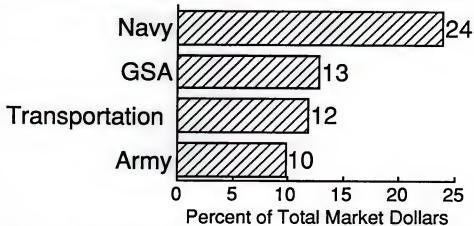
Bar chart showing Percent of Total Market Dollars:
- Navy: 24
- GSA: 13
- Transportation: 12
- Army: 10

X-axis: Percent of Total Market Dollars (0, 5, 10, 15, 20, 25)

INPUT
FIOV1- 8

Notes

INPUT

Professional Services Market
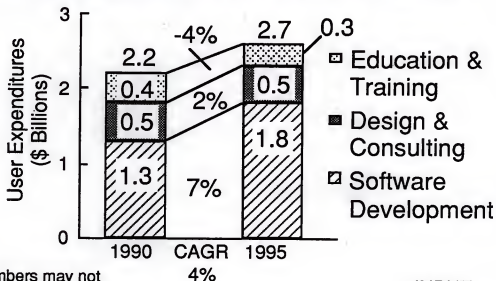
Systems Operations Market
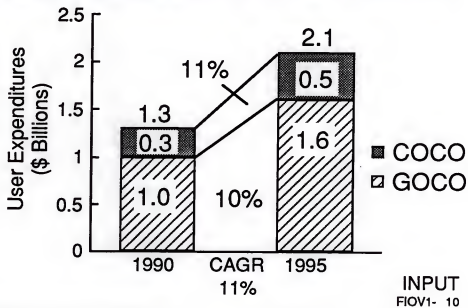
INPUT

Civil Agencies' Application Areas

Scientific 8%
Office Automation 10%
Data Management 10%
Computer Operations 14%
MIS 15%
Financial 18%
Administration and Logistics 25%
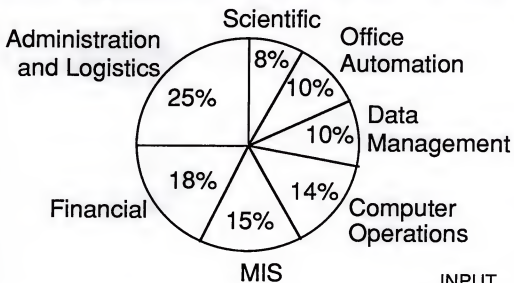
Notes

DoD Application Areas

Application Area	Percentage
Financial	10%
Office Automation	10%
MIS	22%
Administration and Logistics	17%
Data Management	22%
Scientific	19%
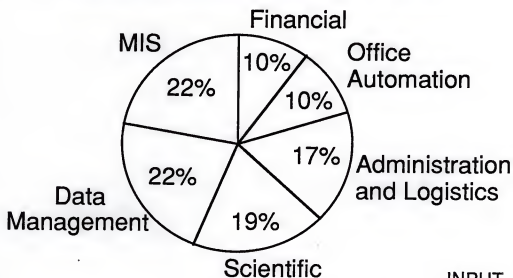
INPUT
FIOV1- 12

Notes

INPUT

Agencies' Software Requirements

- Portable
- Engineering technologies
- High-level development tools
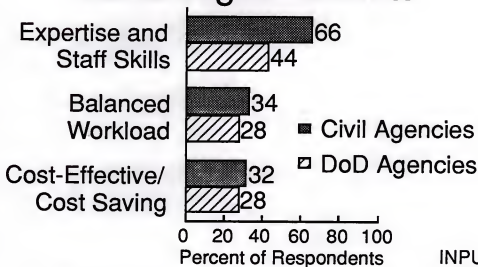- Analytic tools

Notes

Agency Use of Artificial Intelligence

- Expert systems for software development and decision support
- Training
- Prototype systems
- Information systems management

Agency Views of PS Advantages/Benefits

	Percent of Respondents
Expertise and Staff Skills	66 (Civil Agencies), 44 (DoD Agencies)
Balanced Workload	34 (Civil Agencies), 28 (DoD Agencies)
Cost-Effective/ Cost Saving	32 (Civil Agencies), 28 (DoD Agencies)

■ Civil Agencies
▨ DoD Agencies

Percent of Respondents

INPUT
FIOV1- 15

Notes

INPUT

Agency Views of PS Disadvantages/Liabilities

INPUT

Agency Views of PS Disadvantages/Liabilities

Contractor Learning Curve — Civil Agencies 22, DoD Agencies 11

Performance Risk — Civil Agencies 24, DoD Agencies 6

Percent of Respondents
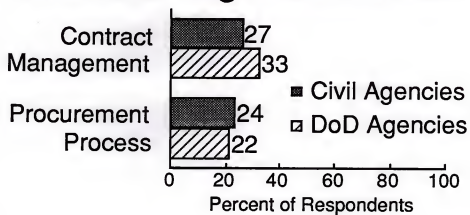
■ Civil Agencies
▨ DoD Agencies
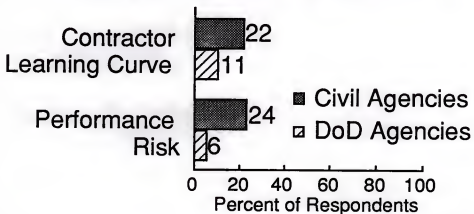
INPUT
FIOV1- 17

Notes

INPUT

Agency Selection Criteria

Selection Criteria	Ranking
Proposed technical solution	1
Vendor reputation	2
Staff experience	3
Cost	4
Project management	5

INPUT
FIOV1- 18

Notes

INPUT

Agency PS Vendor Preference

Vendor/Organizational Type	Civil Agencies %
Mainframe manufacturer	16
PS company	55
Not-for-profit	9
Software products vendors	20

Notes

Agency PS Vendor Preference

Vendor/Organizational Type	Civil Agencies %
Mainframe manufacturer	15
PS company	69
Not-for-profit	8
Software products vendors	8

INPUT
FIOV1- 20

Notes

INPUT

Preference for PS Contract Type

Preferred Contract Type	Vendors (%)	Agencies (%)
Cost-plus/cost-plus-incentive-fee	23	36
Fixed-price	47	30
Mix	23	24
Other	7	10

INPUT
FIOV1- 21

Notes

INPUT

Basic Ordering Agreements (BOAs)

Change in BOA Use	% of Respondents
Increasing	67
Decreasing	17
Remaining the same	8
Little experience	8

INPUT
FIOV1- 22

INPUT

Agency Conversion Plans

Planned Conversion	Civil Agencies (%)
From contractor to in-house staff	24
From in-house staff to contractor	51
No conversion plans	25
Total	100

INPUT

Notes

Agency Conversion Plans

Planned Conversion	DoD Agencies (%)
From contractor to in-house staff	30
From in-house staff to contractor	60
No conversion plans	10
Total	100

INPUT
FIOV1- 24

Notes

INPUT

Factors Impacting Future PS Use

Budget Process and Restrictions: Civil Agencies 52, DoD Agencies 28
Staffing Restrictions: Civil Agencies 21, DoD Agencies 11
Directives and OMB Policies: Civil Agencies 17, DoD Agencies 11

Percent of Respondents (0 20 40 60 80 100)

Legend: ■ Civil Agencies, ▨ DoD Agencies
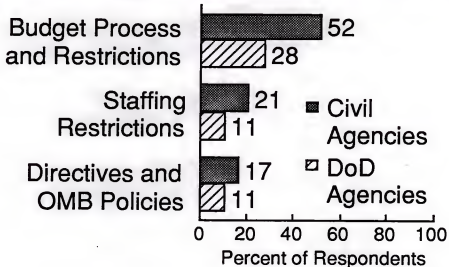
INPUT
FIOV1- 25

Notes

INPUT

Technological Factors Affecting PS Spending (Ranking)

Factor	Civil Agencies
Evolution in use of personal computers	1
Developments in software development and maintenance	2

INPUT
FIOV1- 26

Notes

INPUT

Technological Factors Affecting PS Spending (Ranking)

Factor	Civil Agencies
Improvements in end-user capabilities	3
Changes in micro-computer architecture	4
Proliferation of LANs	5

Notes

Technological Factors Affecting PS Spending (Ranking)

Factor	DoD Agencies
Evolution in use of personal computers	1
Changes in micro-computer architecture	2
Proliferation of LANs	3

INPUT
FIOV1- 28

Notes

INPUT

Technological Factors Affecting PS Spending (Ranking)

Factor	DoD Agencies
Developments in software development and maintenance	4
Improvements in end-user capabilities	5

INPUT
FIOV1- 29

Notes

INPUT

Agency Satisfaction
with PS Vendors (Ratings*)

Quality	Civil	DoD	Vendor
Delivery schedule	2.8	3.3	2.9
Cost	2.9	3.8	3.2
Project management	2.9	3.4	3.1
Development visibility	3.1	3.6	3.1

*1 = lowest, 5 = highest

INPUT
FIOV1- 30

Notes

INPUT

Staff Competition

Vendors Losing Contracts from In-House Staff — 38

Vendors Gaining Contracts from In-House Staff — 69
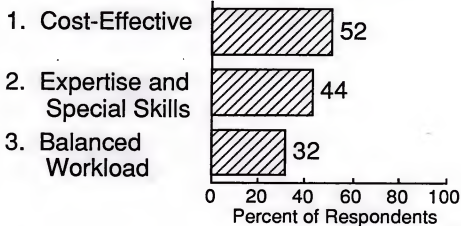
Proportion of Respondents

0 20 40 60 80 100
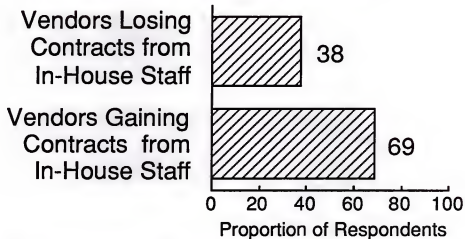
Note: Total exceeds 100% because the results were not mutually exclusive.

INPUT
FIOV1- 31
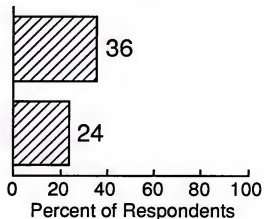
Notes

INPUT

Vendor Views of PS Advantages/Benefits

1. Cost-Effective — 52
2. Expertise and Special Skills — 44
3. Balanced Workload — 32

Percent of Respondents
0 20 40 60 80 100

INPUT
FIOV1- 32

Notes

INPUT

Vendor Views of PS Disadvantages/Liabilities

1. Procurement Process — 36
2. Dependence on Contractor — 24

Percent of Respondents

INPUT
FIOV1- 33

INPUT

Vendor Views of PS Disadvantage/Liabilities

3. Contract
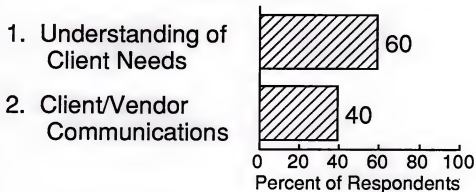   Management | 16

4. Contractor
   Learning Curve | 16

0   20   40   60   80   100
Percent of Respondents

INPUT
FIOV1- 34

INPUT
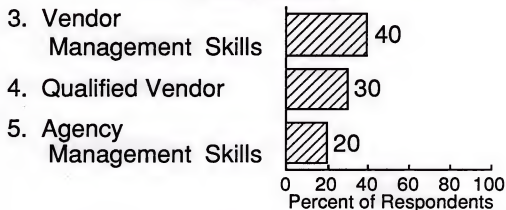
Factors Contributing to Satisfactorily Performed Contracts

1. Understanding of Client Needs — 60

2. Client/Vendor Communications — 40

Percent of Respondents
0 20 40 60 80 100

Notes

Factors Contributing to Satisfactorily Performed Contracts

3. Vendor Management Skills — 40

4. Qualified Vendor — 30

5. Agency Management Skills — 20

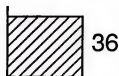Percent of Respondents
0 20 40 60 80 100

INPUT
FIOV1- 36

Notes

INPUT

Factors Contributing to
Poorly Performed Contracts

1. Poorly Defined
   Requirements

2. Poor Vendor
   Management Skills

36

18

0   20   40   60   80   100
Percent of Respondents

Notes

Factors Contributing to Poorly Performed Contracts

3. Cost Overruns ▨ 18

4. Bid Process Favors Low Bidders ▨ 18

0   20   40   60   80   100
Percent of Respondents

INPUT
FIOV1- 38

Notes

INPUT

Market Differences—Federal

Federal Market	Rank
Greater price sensitivity	1
Complex acquisition process	2
Wider range of evaluation criteria	3

Notes

INPUT

Market Differences— Federal

Federal Market	Rank
Lengthy phased development cycle	4
Subject to greater legal and economic constraints	5

Notes

Market Differences— Commercial

Commercial Market	Rank
Less price sensitivity	1
Simpler purchasing procedures	2
Narrower basis for award	3

Notes

INPUT

Market Differences— Commercial

Commercial Market	Rank
Shorter-term evolution	4
Less-rigid legal and economic constraints	5

Notes

Vendor Ranking—Products and Services

Products/Services	Rank
Software development	1
Consulting	2
Project management	3
Financial systems	4
Support	5

INPUT
FIOV1- 43

Notes

INPUT

Ranking of Factors Affecting Future PS Spending

Factor	Rank	Effect
Budget changes	1	Negative
Gov't personnel availability	2	Positive

Notes

INPUT

Ranking of Factors Affecting Future PS Spending

Factor	Rank	Effect
Regulatory policy changes	3	Positive
Price	4	Negative

Notes

Ranking of Industry Trends Affecting Revenue

Industry Trends	Rank
New technology	1
Industry standardization efforts	2
Increased competition due to CICA	3
Consolidation of contracts	4

INPUT
FIOV1- 46

Notes

INPUT

Impact of Technology on PS Vendors

Impact	% of Responses
Acquire more technical expertise	57
Increase responsiveness	43

Notes

Impact of Technology on PS Vendors

Impact	% of Responses
Increase programmer productivity	14
Impacts cost	14

Notes

Vendor Qualification in Ada

Status	% of Responses
Vendors currently qualified in Ada	67
Vendors planning to become qualified	19

INPUT
FIOV1- 49

INPUT

Vendor Qualification in Ada

Status	% of Responses
Vendors with no current plans for Ada	14
Total	100

Notes

Vendor Ranking of Technological Factors

Factor	Rank
Increase in optical disk storage capabilities	1
Developments in artificial intelligence	2
Standardization efforts	3

INPUT
FIOV1- 51

Notes

INPUT

Vendor Ranking of Technological Factors

Factor	Rank
Developments in interface capabilities	4
Increase in use of supercomputers	5

INPUT
FIOV1- 52

Notes

INPUT

Vendor Ranking of Technological Factors

Factor	Rank
Telecommunications developments	6
Increased use of fiber optics	7

Notes

Civil Agencies' Suggestions

Suggestions	Rank
Increase cooperation and responsiveness to agency needs	1
Increase experience of staff	2

Notes

INPUT

Civil Agencies' Suggestions

Suggestions	Rank
Increase adherence to agency pricing policy	3
Increase management skills	4
Increase availability of off-the-shelf software	5

INPUT
FIOV1- 55

Notes

INPUT

Defense Agencies' Suggestions

Suggestions	Rank
Increase availability of integrated services	1
Increase awareness of DoD standards	2
Increase use of 4th-gen. tools for development	3

INPUT
FIOV1- 56

Notes

INPUT

Defense Agencies' Suggestions

Suggestions	Rank
Increase work force's knowledge and ability	4
Increase awareness of agency requirements	5

Notes

INPUT

Recommendations

- Maximize pricing strategies
- Comply with federal standards
- Vertically penetrate agencies
- Maintain positive reputation

Notes

INPUT

Recommendations

- Direct marketing efforts to reflect political emphasis on programs
- Capitalize on specialized expertise
- Target markets

Notes

INPUT