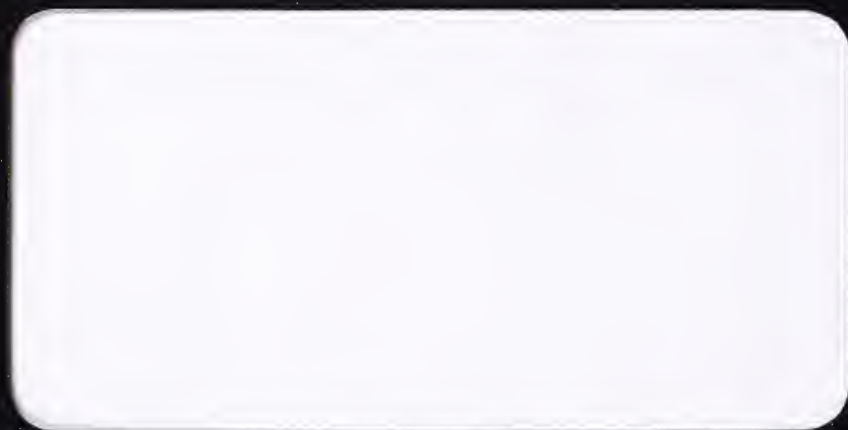


Presentation To:  
Computer Marketing  
Analysis Group

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Analysis Group

May 6, 1993

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Published by  
INPUT  
1280 Villa Street  
Mountain View, CA 94041-1194  
U.S.A.

***Presentation to Computer Marketing Analysis  
Group***

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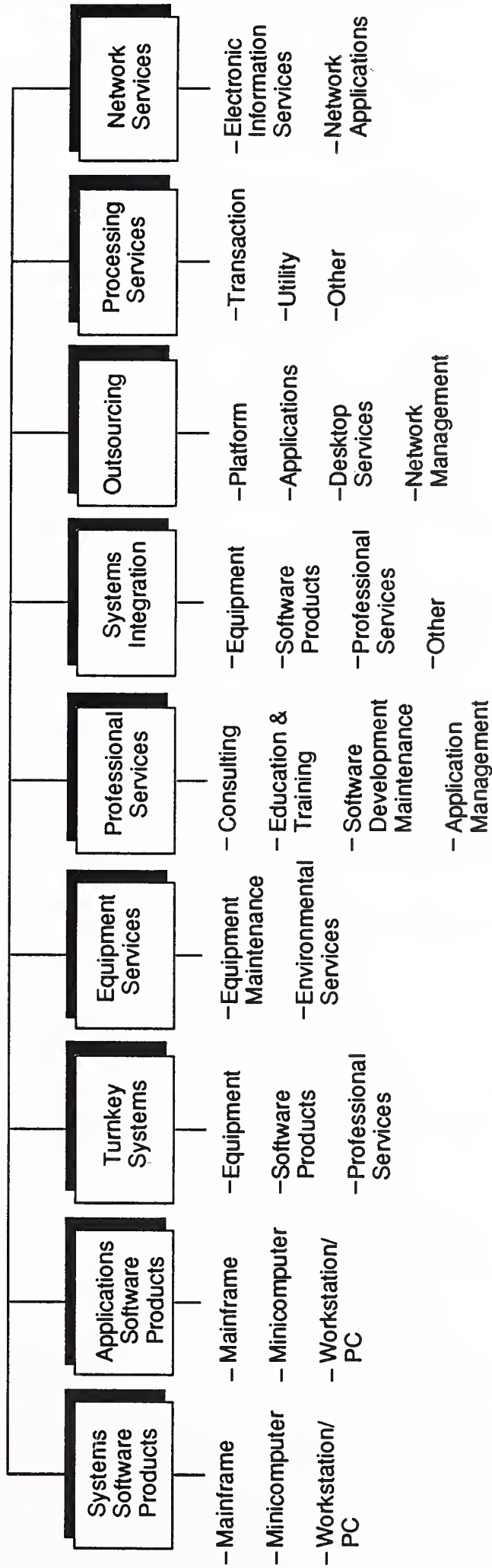
# **Market Analysis Program**

## **Research Methodology**

## **INPUT Mission**

To provide objective data and insightful analysis on information services markets, companies, and products to enhance the competitive positions and increase the profits of our clients.

# Comprehensive Industry Coverage



15 Vertical Markets, 7 Cross-Industry Markets

# Information Services Market Analysis Program

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## Verticals

Banking/Finance

Discrete

Manufacturing

Process

Manufacturing

Retail Distribution

Wholesale

Distribution

Education

Health Services

Insurance

Utilities

Federal Government

State/Local

Government

Transportation

Telecommunications

Business Services

Miscellaneous

Industries



# Information Services Market Analysis Program

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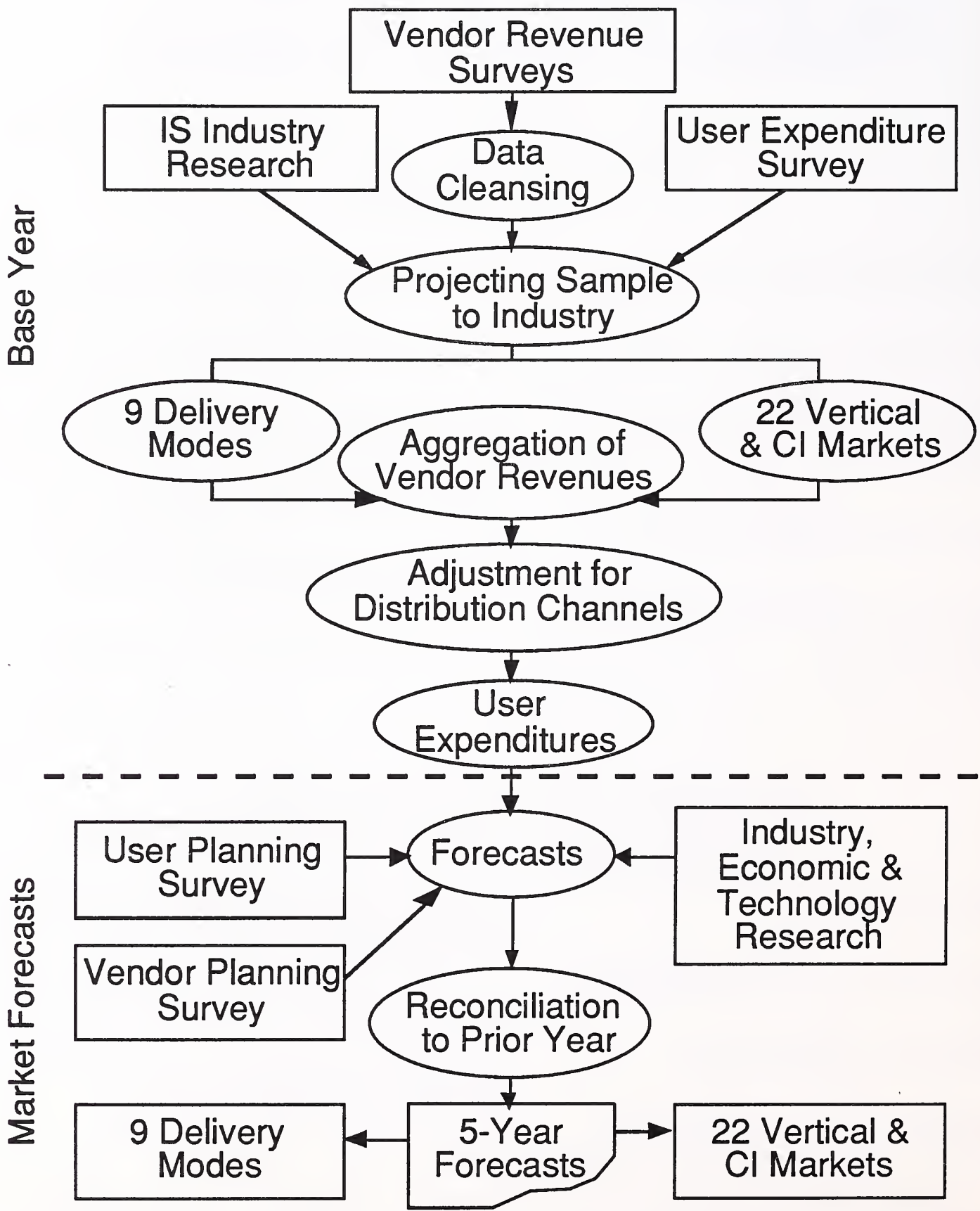
## Delivery Modes

Processing Services	Professional Services
Turnkey Systems	Systems Integration
Systems Software Products	Systems Operations
Network Services	Network Services
Applications Software Products	Equipment Services

## Cross-Industry Markets

Accounting	Engineering & Scientific
Planning & Analysis	Education & Training
Office Systems	Sales & Marketing
Human Resources	

# INPUT Primary Market Research Methodology



## Forecast Methodology

- 2,000 User Surveys (U.S.)
    - Telephone interview
    - Vertical industry
    - Size of firm
    - Functional management
  - Survey Areas
    - New applications/technologies
    - Vendor preferences
    - Client/server
    - Outsourcing
    - Platforms
    - Budget levels and changes
    - Major issues
- } Sample Segmentation

## Forecast Methodology

- Vendor Revenue Surveys
  - Telephone Surveys
  - 400 Leading Vendors (U.S.)
    - Delivery mode leaders
    - Vertical market leaders
    - 60% of industry total dollars
  - 800 data points
  - Survey Areas
    - Total revenues, U.S. and international
    - Revenue growth by: Delivery mode, Vertical market, Client/server architecture
    - Acquisitions/divestitures
    - Price increases
    - IS employees
    - Key issues

## Forecast Methodology

- Data Cleansing - Vendor Surveys
  - Calendarizing
  - U.S. revenues versus international
  - Acquisitions: growth rate adjustments
- Projecting Sample to Industry
  - Large vendors: actual and estimated revenues
  - Small vendors: average revenue/firm, times number of firms = small vendor's segment
  - Sum of large and small vendor segments = first cut

## Vendor Revenue to User Expenditure Conversion

Delivery Mode	Vendor Revenue Multiplier
Applications Software Products	1.18
Systems Software Products	1.10
Systems Operations	0.95
Systems Integration	0.95
Professional Services	0.99
Network Services	0.99
Processing Services	0.99
Turnkey Systems	0.95
Equipment Services	0.99

## Concentrated Information Services Markets

Services	Industries
• Systems Integration	• Telecommunications
• Systems Operations	• Process Manufacturing
• Systems Software	• Utilities
• Processing Services	• Insurance
	• Federal
	• Banking and Finance

## Fragmented Information Services Markets

Services	Industries
<ul style="list-style-type: none"><li>• Professional Services</li></ul>	<ul style="list-style-type: none"><li>• Discrete Manufacturing</li></ul>
<ul style="list-style-type: none"><li>• Applications Software</li></ul>	<ul style="list-style-type: none"><li>• Distribution</li></ul>
	<ul style="list-style-type: none"><li>• Health</li></ul>
	<ul style="list-style-type: none"><li>• State and Local Government</li></ul>



# Forecast Methodology

## Vendor Planning Survey

- Leading and Emerging Vendors in Each Segment
  - Key issues
  - Technology trends
  - Growth promoters/inhibitors
  - Growth rate expectations
  - Product/market strategies
  - Key competitors/market shares

# INPUT Market Research Conventions

- Use real dollars, real GDP
  - Blue Chip Report (updated semiannually)
  - Inflation/deflation removed
- Round financial estimates
- Identify respondent/population attributes (e.g., Is conclusion based upon percent of population or percent of responses?)

# INPUT Market Research

## Common Sources of Forecast Variations

- Difference in market definition (SIC)
- Double counting where markets overlap
- Vendor market overstatement (revenues)
- User market understatement (expenditures)
  - Non-IS dollars omitted
  - Budgetary caution

## Market Research Truisms

- Always a knowledgeable estimate
- Primary forecast attributes
  - Relative opportunity
  - Relative magnitude
  - Driving/inhibiting forces
  - Reconciliation (with last forecast)
  - Continuity (INPUT's 18 years)

# INPUT Market Research Sample Sizes

Consideration	Interviews	
	Users	Vendors
Population typically controlling 80% exp./rev.	500-1,000	20-100
Target interviews	100	50
Minimum interviews	50	30

# INPUT Market Research Confidence Level

- INPUT seeks to attain 95% confidence level
- Use targeted interviews based upon:
  - Industry
  - Topic
  - Geography
  - Installed equipment
  - Company revenues
  - Management title

# Wholesale Distribution Sector Market Size by Delivery Mode 1991-1997

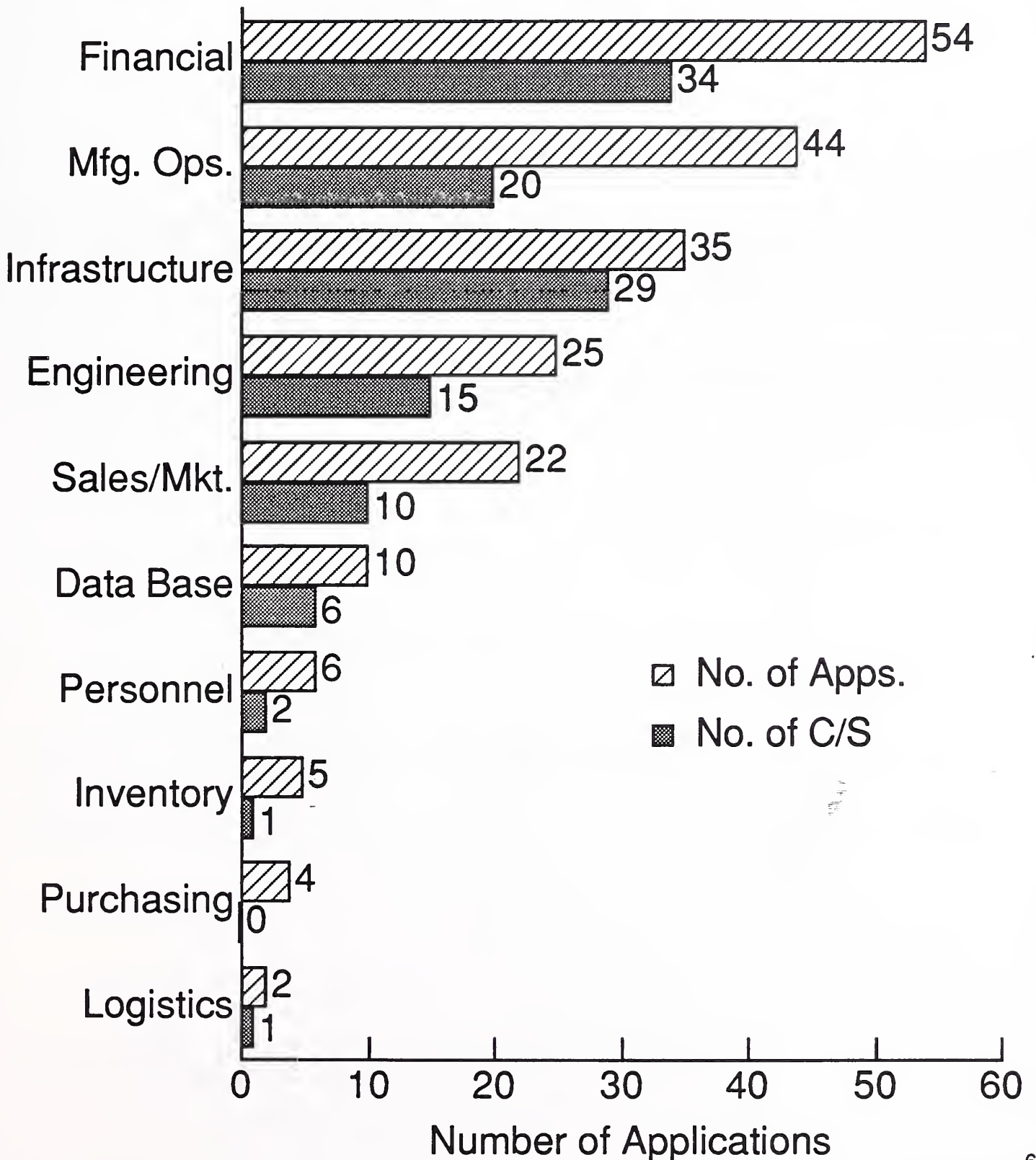
Delivery Modes	Growth 91-92 (%)	1992 (\$M)	1997 (\$M)	CAGR 92-97 (%)
Sector Total	11	2,532	4,573	13
<i>Processing Services</i>	3	307	418	6
- Transaction Processing	3	307	418	6
<i>Turnkey Systems</i>	7	522	731	7
<i>Applications Software</i>	11	587	1,083	13
- Mainframe	4	255	317	4
- Minicomputer	12	137	226	11
- Workstation/PC	22	195	540	23
<i>Systems Operations</i>	19	229	502	17
<i>Systems Integration</i>	16	181	384	16
<i>Professional Services</i>	8	380	542	7
<i>Network Services</i>	22	326	13	23
- Electronic Info. Svcs.	10	69	127	13
- Network Applications	21	257	786	25

# Wholesale Distribution Sector 1992 MAP Data Base Reconciliation

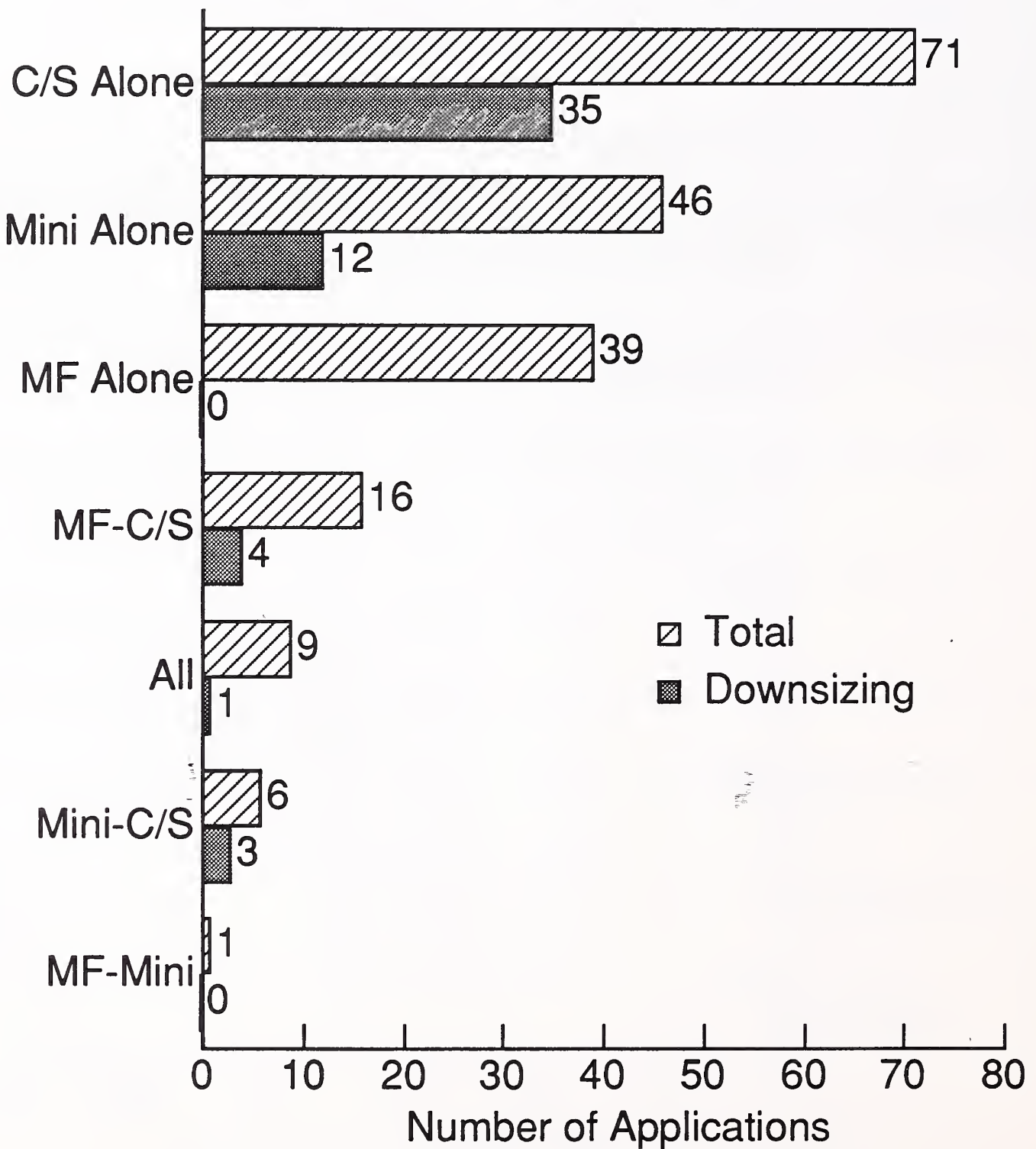
Delivery Modes	1996 Market				91-96 CAGR per data 91 Rpt (%)	91-96 CAGR per data 92 Rpt (%)
	1991 Report (Fcst) (\$M)	1992 Report (Fcst) (\$M)	Variance from 1991 Report			
			(\$M)	(%)		
<b>Total Wholesale Distribution Sector</b>	<b>3,847</b>	<b>4,032</b>	<b>185</b>	<b>5</b>	<b>12</b>	<b>12</b>
<i>Processing Services</i>	452	391	-61	-13	8	6
<i>-Transaction Processing</i>	452	391	-61	-13	8	6
<i>Turnkey Systems</i>	683	683	0	0	7	7
<i>Applications Software</i>	958	958	0	0	13	13
<i>Systems Operations</i>	181	423	242	134	18	17
<i>Systems Integration</i>	331	331	0	0	16	16
<i>Professional Services</i>	465	565	40	9	6	8
<i>Network Services</i>	777	741	-36	-5	23	23



# Discrete Manufacturing Total Number of Applications and Number Using C/S by Category



# Discrete Manufacturing Downsizing Platform Combinations



# Planned Move Toward Total Information Technology Forecasting

- Worldwide scope
- 30 countries
- Global vertical markets

## New Categories

- Equipment and platform
- Staffing
- Data communications

## Goal: Complete IT forecast for all key dimensions

- Country
- Industry market
- Service/product categories

## About INPUT

- INPUT has defined the information services market since 1974
- Consistent forecast structure and methodology
- Analysis and opinions based on primary market research
- Executives with industry experience
- Extensive international presence
- Service portfolio to meet specific client needs

## Some Key Clients

ADP

Andersen Consulting

AT&T

Bell Atlantic

BellSouth

British Telecom

CAP Gemini

Computer Sciences

Digital Equipment

EDS

Ernst & Young

GTE

GEIS

Hewlett-Packard

ICL

IBM

Litton

McKinsey & Co.

NCR

NYNEX

Systematics

Texas

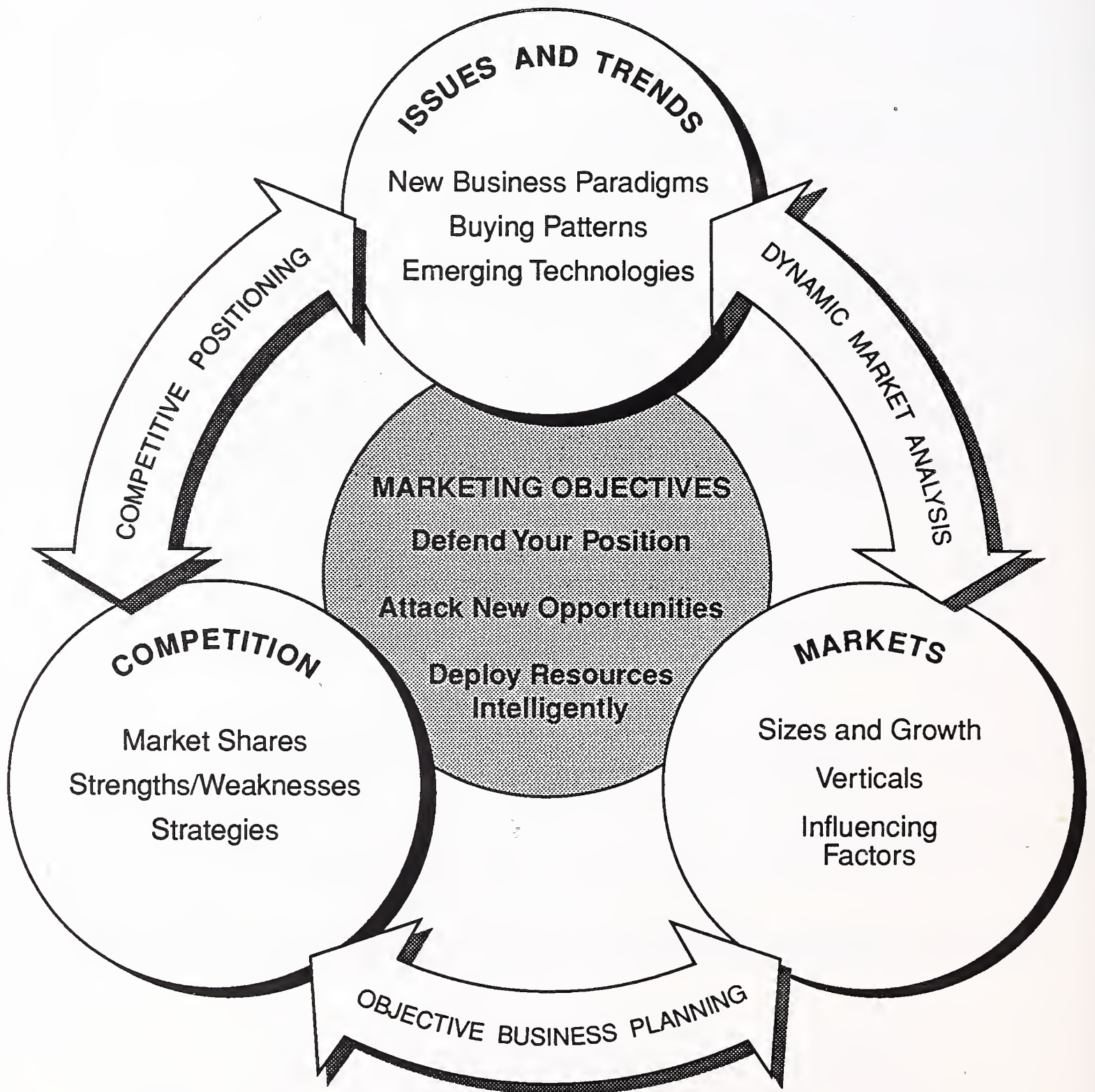
Instruments

TSC

Unisys

Over 400 Clients Worldwide

## The INPUT Client Perspective



# Annual Subscription Programs

- **Packaged Reports**
  - Market forecasts (5 year)
  - Strategic issue reports
  - Competitive analysis
  - Research bulletins
- **“Hotline” to Analysts**
  - Specific questions
  - Industry expertise
- **Annual Executive Conference**
  - Strategic planning focus
  - Network with industry executives
- **On-site Briefing**

# U.S. & European Program Offerings

INPUT Program Offerings	U.S.	Europe
Information Services Market Analysis	*	*
Worldwide Market Analysis	*	
Canadian Market Analysis	*	
Systems Integration	*	*
Outsourcing Information Systems	*	*
EDI/Electronic Commerce	*	
Customer Services		*
Information Services Vendor Analysis	*	
Client/Server Markets & Applications	*	
Federal Procurement and Trends	*	



# **PETER A. CUNNINGHAM**

## **PRESIDENT**

---

### **PROFILE**

- Mr. Cunningham has 28 years of experience in the information technology industry, including over 20 years of P&L responsibility in consulting.
- Mr. Cunningham provides information and advice to users and vendors of information technology. He specializes in analysis and forecasting of major trends in the industry, particularly in software, services, and the impact of information technology on people and organizations.
- In 1974, Mr. Cunningham founded INPUT to provide planning services, market research and consulting to buyers and vendors of IT products and services on a worldwide basis. The company specializes in analyzing and forecasting the applications and use of IT, particularly through the information services industry. This industry is now over \$250 billion per year in size and is being driven by trends in outsourcing, systems integration, and downsizing. INPUT's mission is to provide its clients the ability to benefit from these and other IT trends and opportunities.
- Previously, he was a founder and President of J.W. Goodhew and Associates, Inc., a Washington, D.C. data processing consulting company specializing in the Medicaid, association, and manufacturing industries, as well as the federal government. Prior to that, Mr. Cunningham was with Management Science America, responsible for data processing projects in government and industry.
- Mr. Cunningham came to the United States with C-E-I-R, for whom he performed systems development and management.
- Mr. Cunningham started his career with ICL in 1964 in systems software development.

### **EDUCATION**

- B.Sc. (Physics), Associate of the Royal College of Science, Imperial College, London
- M.P.A. (Technology of Management), The American University, Washington, D.C.

### **MEMBERSHIPS**

- Fellow of the British Computer Society
- Member of the Worshipful Company of Information Technologists (Guild of the City of London)

**ROBERT L. GOODWIN**  
**MANAGER,**  
**INFORMATION SERVICES**  
**MARKET ANALYSIS PROGRAM**

---

**PROFILE**

**CAPABILITIES**

- Twenty-five years of successful sales, marketing, and general management in the computer equipment, remote processing services, and software industries.
- Expertise in business plan development, strategic partnering and acquisitions, industry marketing, VAR and reseller operations.

**BACKGROUND**

- Robert (Bob) Goodwin brings to INPUT and its clients comprehensive experience in executive management in large and mid-size corporations.
- Most recently, Senior Vice President–Marketing, Hotel Information Systems, leading vendor of global information systems to the hospitality industry.
- He has served as President of Command Data Systems, a public safety software and turnkey systems vendor. With Bob's leadership and marketing strategy, CDS became a highly visible and respected vertical market leader.
- Bob's qualifications include the role of Director of Marketing for Xerox Computer Services, in support of all field sales and customer services activities.
- At IBM, Bob served as Branch Manager and Assistant District Manager.
- Chairman, Electronic Forms Transfer Committee, ITAA

**EDUCATION**

- B.A., Psychology, Occidental College.
- Attended the MBA program, Golden Gate University.

# **THOMAS J. O'FLAHERTY**

## **VICE PRESIDENT**

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### **PROFILE**

#### **CAPABILITIES**

- Design and manage research projects for determining market needs, competitive positioning, and the viability of products and services.
- Provide consulting advice on market strategy, new products and services, growth/diversification alternatives. Two systems initiatives added \$13 million and \$21 million to the bottom line.
- Experience includes over 100 research and consulting assignments for clients ranging from start-ups to firms such as ADP, Ameritech, AT&T, Citicorp, Continental Insurance, Coopers & Lybrand, General Motors, GTE, IBM, ITT, Marriott Corporation, McKinsey & Co., Metaphor, Mobil, and Unisys.

#### **BACKGROUND**

- Director of Research, Broadview Associates. Responsible for professional support functions (company analysis, client consulting, proprietary data base development) for an international investment banking firm specializing in information technology.
- Principal, Information Service Strategies. Consultant on markets and products. Marketing director for start-up firm offering innovative PC communications product.
- Principal Consultant, INPUT. Directed research and consulting projects for a variety of clients.
- Hands-on experience at every IS department level, including IS Director.

#### **EDUCATION/PROFESSIONAL ACTIVITIES**

- B.A., Colgate University
- Certificate in Data Processing (CDP)
- Member of the ACM, the Society for Information Management, and a founding member of the American Association for Medical Systems and Informatics. Extensive speaking to professional groups.
- Regular contributor to *Computerworld* Softline column since 1983.

# ***JEAN-PAUL RICHARD***

## ***VICE PRESIDENT***

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### ***PROFILE***

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#### ***CAPABILITIES***

- Mr. Richard has 23 years of experience in the data processing industry. He has served as a systems analyst and has held management positions in marketing, field and headquarters sales, as well as strategic planning.
- Mr. Richard directs the Outsourcing Information Systems Program and has administrative responsibility for INPUT's Vienna office.

#### ***BACKGROUND***

- Prior to joining INPUT, Mr. Richard served as a program manager at Boeing Computer Services, emphasizing acquisition of federal government business. At General Electric Information Services, he held positions as manager of sales planning and sales administration. He also managed commercial sales and marketing offices in Canada and France for General Electric Information Services.
- Mr. Richard began his data processing career as a systems analyst. He moved to a client services environment dealing with a range of firms from insurance companies to chemical manufacturers.

#### ***EDUCATION***

- B.S., Chemistry, Northeastern University, Boston, Massachusetts
- M.S., Industrial Management, Sloan School, MIT, Cambridge, Massachusetts

# **ROBERT W. DELLER**

## **FEDERAL PROGRAM MANAGER**

---

### **PROFILE**

#### **CAPABILITIES**

- Dr. Deller has over 25 years of experience in the information technology industry as a federal government official, U.S. government information technology market analyst and consultant, and international consultant.
- Dr. Deller is responsible for INPUT's federal program of information technology market research, custom studies, and consulting services.

#### **BACKGROUND**

- Prior to joining INPUT, Dr. Deller was Director of Market Research at Selbre Associates, Inc., with responsibility for research market data base development, custom consulting, and preparation of federal government agency profiles.
- Previously, he consulted independently to several market research firms developing market analysis reports and federal agency profiles.
- Earlier he served as Vice President of Research for Information Strategies Group where he directed information technology and market analysis services for federal government managers and information technology vendors.
- Before his market research positions, Dr. Deller was Deputy director for Information Systems at the U.S. Food and Drug Administration.

#### **EDUCATION**

- Ph.D. in Public Administration, The American University, Washington, D.C.
- M.P.A. (Management Information Systems), The American University, Washington, D.C.
- B.S. (Education), Towson University, Baltimore, Maryland

#### **OTHER**

- Dr. Deller holds a professional Certificate in Data Processing (C.D.P.).
- He is on the adjunct faculty at The American University's School of Public Affairs.
- He is a member of the Data Processing Management Association and the American Society for Public Administration.
- He is an international consultant to Aid for International Development.
- Dr. Deller Regularly contributes a column on federal procurement issues to *Government Computer News*.

## ■ ABOUT INPUT

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Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, objective analysis, and insightful opinions to support their plans, market assessments and technology directions particularly in computer software and services. Clients make informed decisions more quickly and save on the cost of internal research by using INPUT's services.

Call us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

## ■ ANNUAL SUBSCRIPTION PROGRAMS

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### *NORTH AMERICAN AND EUROPEAN MARKET ANALYSIS*

*Analysis of Information Services, Software, and Systems Maintenance Markets  
5-year Forecasts, Competitive and Trend Analysis*

- 15 Vertical Markets
- 9 Categories of Software and Services
- 7 Cross-Industry Markets
- The Worldwide Market (30 countries)

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#### *U.S. FOCUSED*

- Outsourcing
- Client/Server
- Systems Integration
- EDI/Electronic Commerce
- IT Vendor Analysis
- U.S. Federal Government IT Procurements

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#### *EUROPEAN FOCUSED*

- Outsourcing
- Systems Integration
- Customer Services

## ■ CUSTOM CONSULTING

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Many vendors leverage INPUT's proprietary data and industry knowledge by contracting for custom consulting projects to address questions about their specific market strategies, new product/service ideas, customer satisfaction levels, competitive positions and merger/acquisition options.

INPUT advises users on a variety of IT planning and implementation issues. Clients retain INPUT to assess the effectiveness of outsourcing their IT operations, assist in the vendor selection process and in contract negotiation/implementation. INPUT has also evaluated users' plans for systems and applications downsizing.

## ■ INPUT WORLDWIDE

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