Report Quality Evaluation

To our clients:
To ensure that the highest standards of report quality are maintained, INPUT would appreciate your assessment of this report. Please take a moment to provide your evaluation of the usefulness and quality of this study. When complete, simply fax to INPUT at (415) 961-3966 or fold, tape, and drop in the mail. Postage has been pre-paid by INPUT if mailed in the U.S.

Thank You.

1. Report title:
   Impact of the Internet on Systems Integration and Professional Services Markets (BIMO)

2. Please indicate your reason for reading this report:
   ☐ Required reading   ☐ New product development   ☐ Future purchase decision
   ☐ Area of high interest   ☐ Business/market planning   ☐ Systems planning
   ☐ Area of general interest ☐ Product planning   ☐ Other _____

3. Please indicate extent report used and overall usefulness:

	Extent		Usefulness (1=Low, 5=High)				
	Read	Skimmed	1	2	3	4	5
Executive Overview	☐	☐	☐	☐	☐	☐	☐
Complete report	☐	☐	☐	☐	☐	☐	☐
Part of report (_____ %)	☐	☐	☐	☐	☐	☐	☐

4. How useful were:

	1	2	3	4	5
Data presented	☐	☐	☐	☐	☐
Analyses	☐	☐	☐	☐	☐
Recommendations	☐	☐	☐	☐	☐

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	1	2	3	4	5
Alert you to new opportunities or approaches	☐	☐	☐	☐	☐
Cover new areas not covered elsewhere	☐	☐	☐	☐	☐
Confirm existing ideas	☐	☐	☐	☐	☐
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6. Which topics in the report were the most useful? Why? _____
   _____

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   _____

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   _____

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Department _____ Company _____

Address _____

_____ Country _____

Telephone _____ Date completed _____

Thank you for your time and cooperation.

INPUT

February, 1996

Dear Colleague:

Enclosed is your copy of INPUT's report, *Impact of the Internet on Systems Integration and Professional Services*. It is one more of the publications from INPUT's Systems Integration and Professional Services Program.
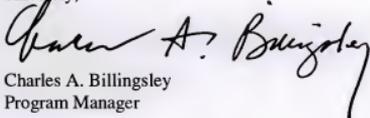
Growth in the systems integration and professional services markets will continue to be strong in the coming years. INPUT estimates the compound annual growth rates (CAGR) for these markets are 16% and 13% respectively. A major factor in this growth will be the Internet. Service providers who are able to help clients understand and tap the potential of the Internet will be the biggest benefactors. Knowing which industries to focus on during this growth will also separate the winners in the market from the "also rans".

This report contains two major sections: the first section explores the continuing expansion of the systems integration (SI) and professional services (PS) markets and examines the factors that account for this growth. A specific focus of the report is the influence of the Internet and how it will help to determine the difference between industry winners and losers. INPUT looks specifically at emerging applications and identifies the applications to watch and the issues to watch out for.

The report also provides an analysis of the systems integration and professional services markets in the United States from 1995 to 2000 and updates the *U.S. Systems Integration and Professional Services Markets, 1994 - 1999*. It summarizes the trends and market factors influencing the size and composition of both the commercial and public sector segments of the U.S. information services markets. It includes highlights of fifteen vertical industry markets.

I am sure that you will find *Impact of the Internet on Systems Integration and Professional Services* both useful and informative. Please contact me if you have any comments or questions about this document or any other INPUT publication.

Sincerely,

Charles A. Billingsley
Program Manager

INPUT

– REPORT –
PRODUCTION QC SCHEDULE

PRINTING/BINDING SPECIFICATIONS

(BIMO)

Project Code: _BIPH_

AUTHOR PLEASE COMPLETE:

Cover: GBC Soft Vinyl ☐ —
      Hot Strip Paper Cover ☐ —
      Binder ☐ —

Soft Vinyl Window Cover ☐
80 lb. White Paper ☐
3-Hole Drill ☐

Color Cardstock ☐
Shrink Wrap ☐

Cover Title—Exactly how it is to appear on the report cover:

Front: _Impact of the Internet on Systems Integration + Professional Services_

Spine: (1 Line) _____
(more than 67 pages only)

    (Binder spine may have 2 lines)

Estimated number of pages: < 32 ☒ 1/16" spine
Please note: 1/16" spine is too small for title to be printed on it.
      OK 33-66 ☒ 1/8" spine
      67-130 ☐ 1/4" spine
      131-196 ☐ 3/8" spine
      197-260 ☐ 1/2" spine
      261-324 ☐ 5/8" spine

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Executive Overviews:
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1. REPORTS: Fulfillment _69_

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2. EXECUTIVE OVERVIEWS Fulfillment _68_

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3. Binding: Cover Color _____ Spine Size _____ Hot Strip Color _____

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EXECUTIVE OVERVIEW

Impact of the Internet on Systems Integration and Professional Services Markets

U.S. Systems Integration and Professional Services Program

To Our Clients:

This summary is an excerpt from a full research report, *Impact of the Internet on Systems Integration and Professional Services Markets,* issued as part of INPUT's U.S. Systems Integration and Professional Services Program. A complete description of the program is provided at the end of this Executive Overview.

If you have questions or comments about this report, please call (415) 961-3300 to contact your INPUT analyst.

Abstract

The Internet represents significant new opportunities for systems integrators and professional services vendors who can exploit the capabilities and accompanying market excitement that it engenders. This report analyzes the opportunities and liabilities of this situation.

This report also updates the *U.S. Systems Integration and Professional Services Markets, 1994 - 1999* forecast. Therefore, a market forecast will not be published separately. Included in this report is a forecast of the size, growth, and driving/inhibiting factors for each industry segment.

Research for this report included data gathered from over 200 North American companies that are actively engaged in Internet activities. Interviews were also conducted with vendors and selected industry experts. A review of secondary information sources was also undertaken to ensure comprehensive coverage of this marketplace.

Overview Contents

II

Executive Overview

A

Systems Integration and Professional Services Marketplace Dynamics

The information technology services markets are being driven by a number of factors:

- Companies are continuing their quest for revenue and productivity gains and cost savings, and are building systems to automate isolated processes or integrate multiple processes.
- Client/server architectures are being embraced as the model to move solutions closer to users. Entire systems are being developed to exploit client/server concepts.
- A growing realization of the need for constituent connectivity (i.e., tying together all the parties to a process--suppliers, sellers, and customers) and the emergence of the Internet as a viable means of creating and maintaining this connectivity has led to a need for Internet site support from service suppliers. (See Exhibit II-1.)
- The ever-increasing complexity of IT solutions and limited in-house resources dictate the use of outside services. Competition among suppliers fuels discounting and creative pricing that enhances this already attractive alternative.

Exhibit II-1

Potential Internet Benefits and Ratings of Importance

Potential Internet Benefit	Average Rating
Delivering More Information	4.4
Receiving Feedback from Customers	4.3
Enhancing Relationships with Customers	4.2
Responding More Quickly to Customers	4.2
Delivering Sales Information Less Expensively	4.1
Promoting Products Through New Media	4.1
Adding New Sales Channels	4.0
Providing Better Sales Information	4.0
Obtaining New Customers	4.0
Supporting Customers Less Expensively	3.8
Targeting Individuals	3.8
Testing New Sales Strategies	3.6

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important" *Source: INPUT*

While the upside factors are increasing, the downside factors seem to be declining:

- *Per diem* rates are holding steady—even declining—while value-based pricing has made outside contracting more rational and less costly.
- The typical adversarial relationship between buyer and seller is frequently replaced by a partnership working toward some common goal. Frequently that goal includes financial rewards for both the customer and the service supplier; this focuses the services vendor on the success of the project and creates a win-win situation.
- The view that outside contracting points up the inabilities of the in-house IT organization has declined with the realization of the complexity of technology and the need to have additional resources to get the work accomplished.

B

Marketplace Forecast

The dynamics discussed above to create a market that is growing considerably faster than the economy, represents sizable expenditures for services and creates opportunities for increased revenues for service providers (see Exhibit II-2).

Exhibit II-2

US Systems Integration and Professional Services Markets, 1995-2000

	1995 ($M)	2000 ($M)	CAGR 1995-2000 (%)
Systems Integration	12,400	25,600	16%
Equipment	5,500	10,600	14%
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Software Development	15,300	26,600	12%

Note: numbers have been rounded   Source: INPUT

The systems integration market will nearly double in size through the forecast period, growing at a CAGR of 16% to $25.5 billion. All components will grow aggressively, with smallest, "Other," growing at 15% and the largest, "Equipment," growing at 14% CAGR.

Though the Federal Government is the largest vertical industry user of systems integration ($5.3 billion by 2000), the telecommunications market will grow the fastest, averaging a 25% CAGR. Each component of this marketplace will see increases in expenditures. Software product components in systems integration projects for banking and finance will show strong growth as well, at a 25% CAGR.

Professional services expenditures will grow at a CAGR of 13% to $47.9 billion. Consulting will show the strongest growth at 15% CAGR. Both education and training and software development will also see strong growth. Discrete manufacturing expenditures for professional services will be the largest vertical market throughout the period.

C
Recommendations for Vendors

The "community spirit" that has become a part of the Internet is reflective of the cooperative spirit desired by most services customers. Vendors who set out with a good neighbor attitude and seek to participate in the community will be rewarded. Those who seek to exploit the opportunity without returning anything to the community will surely lose.

Strategies for influencing growth are outlined in Exhibit II-3.

Exhibit II-3

Strategies for Influencing Growth Scenarios

Growth Scenario	Internet Culture	Supplier Adaptation	Technological Support
High Growth	Actively participate in the Internet community Become a trusted neighbor	Implement new sales paradigms based on partnering or brokering Develop products clearly focused on meeting community constituent needs	Focus efforts on establishing links from the Internet to practical, useful applications Support the development of a ubiquitous information infrastructure
Most Likely Growth	Find the immediate needs of Internet users, match them with your products and exploit the medium to establish this relationship	Adapt current paradigms and materials to this new medium	Expand Internet offerings and applications as technologies are developed
Low Growth	Accept and adapt to the culture of the Internet user	Move current sales materials to this new channel	Control investments in technology until the market matures

Source: INPUT

Beyond the business "style" there are other opportunities, especially for SI and PS vendors with breakthrough thinking.

• We have only now begun to understand the potential of the Internet. The focus has been on its sales and marketing potential when, in fact, far greater opportunities are likely in business-to-business functions such as purchasing, inbound or outbound logistics, operations and customer service. Data mining—as opposed to surfing—represents one benefit of the Internet that should be developed.

- True client/server applications are needed. Installing software developed by SAP and others is an attractive opportunity for services vendors, but developing custom solutions based on the architecture is even more attractive, especially to systems integrators. Why not, for example, allow customers to freely access their account information and show the company what information they want and how they want it presented?

- Management consulting, where the focus is on the business and technology is seen only as an enabler, is much needed. Boundaryless behavior must be envisioned and fostered through redesigned processes and extensive training.

The keys to the market are simple to state—and hard to execute: partnerships with the customer and breakthrough thinking.

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Exhibits

B

BOOK BINDING LAYOUT

Date 2/2

Project Code B1m0

Title Impact of the Internet on Systems Integration and Professional Services

Fulfillment Quantity _____   TOTAL Quantity _____

☐ Velobind
☐ Hotstrip
  ☐ Soft Vinyl Window
  ☐ Soft Vinyl Solid
  ☐ 80# White
  ☐ Preprinted
☐ Binder—Drill holes ____   ☐ Shrink Wrap

Color _____
Cover _____

Paper _____

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| chp3 11 - 22 | Chp 4 23 - 28 | Chp5 29 - 46 | App A 47 - 48 | App B 49 - 54 | | | |

Impact of the Internet on Systems Integration and Professional Services Markets

About Input.

Abstract

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This report contains 52 pages, including 37 exhibits.

Systems Integration and Professional
Services Program

*Impact of the Internet on the Systems
Integration and Professional Services
Markets*

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Exhibits

I

Introduction

A

Scope and Purpose

The systems integration and professional services markets continue to expand, even in the face of corporate downsizings, megamergers, and an economy that is somewhat anemic. How to account for the increases? That's the focus of this report, one in a series of annual reports issued by INPUT that identify the key trends and directions of the information services market and forecast the size of the market over the next five years.

This report also provides an analysis of the systems integration (SI) and professional services (PS) markets in the United States for the period 1995 to 2000. It summarizes the trends and market factors that influence the size and composition of both commercial and public sector segments of the U.S. information services markets. Fifteen vertical industry markets are highlighted.

A specific focus of this report is the influence of the Internet: what will make the winners—and losers? INPUT looks at emerging applications and identifies the applications to watch and the issues to watch out for. Specifically:

- Its impact by service type

- Perceived user benefits from Internet usage

- Areas of user businesses that will require Internet-related services

- Recommendations for new service offerings

This report also identifies vendor and buyer issues and discusses trends that affect vendors. In addition, INPUT makes strategic recommendations for vendors.

The objectives of the report are to help vendors:

- Plan for new services

- Identify areas of required training

- Identify resources and skill requirements

- Plan for new marketing and sales approaches

- Plan for methods to achieve additional economies

B
Methodology

The data presented in this report has been compiled from a number of sources. Primary research was conducted with both vendors and clients. The Internet data-gathering effort involved 199 telephone interviews conducted with leading North American companies across a number of industries. Exhibit I-1 presents a profile of the survey respondents by industry.

Exhibit I-1

Industry and Revenue Profile of Respondent Companies

Vertical Market	Frequency (%)	Minimum Sales ($B)	Maximum Sales ($B)
Discrete Manufacturing	16	$0.07	$14
Process Manufacturing	44	0.10	45
Transportation	11	0.13	7
Utilities	14	0.20	11
Communications	6	10.0	17
Retail	14	0.17	52
Wholesale	9	0.13	4
Banking/Finance (assets)	12	2.00	40
Insurance	10	2.00	29
Health Services	2	1.00	3
Services	37	<0.01	63
Education	10	NA	NA
State/Local Government	4	NA	NA
Other Industry Specific	10	<0.01	8

Note: number of respondents = 199   *Source: INPUT*

The amounts in the charts and tables of market and forecast expenditures shown in the body of this report are rounded as follows:

- Markets greater than $1 billion are rounded to the nearest $50 million

- Markets of $100-999 million are rounded to the nearest $10 million

- Markets less than $100 million are rounded to the nearest $5 million

C
Report Organization

Chapter I—*Introduction*—describes the purpose, methodology, and organization of the report.

Chapter II—*Executive Summary*—presents an overview of the emerging applications of Internet and its equivalents.

Chapter III—*Systems Integration and Professional Services Environment*—analyzes factors driving the use of SI and PS, user buying patterns, and vendor competition

Chapter IV—*Market Analysis and Forecast*—provides the forecast for SI and PS markets as well as a discussion of trends.

Chapter V—*Vertical Markets for Systems Integration and Professional Services*—considers the size and growth of SI and PS in each of the 15 vertical industry

Appendices

- Appendix A provides a definition of terms used in this report

- Appendix B shows the detailed forecast for 1995-2000 and supplies a reconciliation with the forecast produced in the corresponding report for 1994-1999.

D
Related INPUT Reports

Other reports from INPUT that could be of interest in relation to this report include:

- *U.S. Systems Integration and Professional Services Markets, 1994-1999*

- *U.S. Information Services Industry Forecast Report, 1994-1999*

- *Emerging Internet Marketing Applications*

- *Pricing and Marketing of Professional Services*

- *Vendor Profiles* on companies such as: Adia, Andersen Consulting, CAP Gemini America, Bellcore, Ciber, Compuware, Coopers & Lybrand, Ernst & Young, Keane, Inc., KPMG, Technology Solutions and others

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The keys to the market are simple to state—and hard to execute: partnerships with the customer and breakthrough thinking.

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III

Systems Integration and Professional Services Environment

A
Factors Driving Use of Systems Integration and Professional Services

1. User Needs/Issues and the Influence of the Internet

The Internet and other on-line equivalents, such as America Online, CompuServe and Prodigy, are influencing information technology changes and, in turn, creating new opportunities for services vendors. In telephone interviews with representatives from 199 leading North American companies across a number of industries, the impacts across the corporation were clear. As indicated in Exhibit III-1, all functional areas are being influenced by on-line capabilities.

Exhibit III-1

Business Functions Affected by the Internet

Business Function	Ratings of Impact (1=No Impact, 5=Significant Impact)
Support Functions	
Corporate Infrastructure—general management, including planning, accounting, and legal	2.9
Human Resource Management—recruiting, training, developing, and compensating personnel	3.0
Procurement—purchasing raw materials, supplies and other consumable and nonconsumable assets	3.4
Technology—knowledge and tools used by the corporation	4.2
Primary Functions	
Inbound Logistics—receiving, storing, and disseminating inputs to the product such as warehousing, inventory control, scheduling, returns to suppliers	3.2
Operations—transforming inputs into the final production form; packaging, assembly, testing, printing, etc.	3.1
Outbound Logistics—collecting, storing, and physically distributing finished goods; warehousing, materials management, order processing, scheduling	3.2
Sales & Marketing—inducing buyers and providing a means for purchase; advertising, quotes, channel selection, channel relations, pricing	4.1
Service—after-sale support such as installation, training, product enhancements, customer service	3.9

Note: number of respondents = 199

Source: INPUT

Exhibit III-2

Expectations of Future Internet Activities

Business Area	Activities	
Support Applications:		
Corporate Infrastructure	Availability of corporate information	Public relations
	Electronic mail	
Human Resource Management	Recruitment	Internal communications
	Virtual employees	Personnel directory
	Recreational use by employees	Procedures manuals
		On-line registration
Procurement	On-line shopping for products	On-line ordering
Technology	Client/server applications	Firewall development
	Access to vendors for support	Employee training
	Vendor access to system for troubleshooting	Internal network component
		Help desk
	Access to all employees	
Primary Activities:		
Inbound Logistics	Product research (data mining)	Receiving files of information
	Competitive information	On-line (electronic magazine) subscriptions
	Receipt of electronic-based products	
Operations	Intracompany coordination	Production tracking
	Conferencing (e.g., white boards)	Process monitoring
Outbound Logistics	Product delivery (files vs. hard copy)	Product availability notifications
		Shipment tracking
Sales & Marketing	Pricing, terms and conditions	On-line catalogs
	Product delivery (e.g., tickets)	Product information and demonstrations
	Payment systems	
	On-site sales presentation support	On-line product applications, registrations
	On-line order entry	
Service	Customer access to own accounts	Product support
	Post-sale product status (e.g., delivery date)	Return authorization
		Inventory information

Source: INPUT

What businesses want—and could get from the Internet—may be best depicted in the following useful scheme for identifying factors that technology influences in a company and the benefits that these influences have (Hammer, M. and Mangurian, G. "The Changing Value of Communication Technology," *Sloan Management Review*, Winter 1987. Pg. 65-67). The items of this model were recently presented to the sample of 199 respondents as part of a survey on Internet activity to determine perceived Internet influences and benefits (see Exhibit III-3).

Exhibit III-3

Perceived Importance of Influences and Benefits of Internet Use

		Efficient	Effective	Innovative	Composite
Influence	**Time Compression**	Accelerate Business Process 3.5	Speed Information Flow 4.3	Improve Quality 3.5	3.8
	Overcome Geographical Limits	Access All Markets 3.7	Ensure Complete Management Control 3.0	Penetrate New Markets 3.8	3.5
	Change Relationships	Bypass Intermediaries 3.3	Obtain Scarce Knowledge 3.7	Build Binding Relationships 3.5	3.5
	Composite	3.5	3.7	3.6	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

Speeding information flow is clearly the leading benefit perceived by the respondents. Businesses value the networks' ability to move information rapidly and effectively.

Profound impacts will be felt throughout the technological underpinnings of networked corporations. Respondents to the Internet survey listed numerous impacts— some technical and others on the style of the IS organization.

- Unlimited possibilities will call for endless changes

- Quicker life cycles and shorter implementation time

- Technology more easily available to all employees

- Changes in ability of all constituents (e.g., suppliers, employees, customers) to communicate will impact flow, speed and access

- Direct access to account and other information by customers will create a need to protect corporate information

- Wider bandwidth to support intensive applications such as video

- New channels to support users (e.g., direct access to vendors)

- Demand for faster, bigger PCs with modems and direct access to on-line services

- Rethinking the technical infrastructure to incorporate public networks when it makes sense

- More up-to-date information from vendors on bugs, updates, etc.

2.   Technology Factors and Internet Solutions

The impacts on technology are also increased by technical issues with the Internet itself. The barriers indicated in Exhibit III-4 all have a local component, a corporate impact that may require the services of systems integrators or other professional services vendors.

Security, for example, requires firewalls that stand between corporate users and the external services they use. Although software packages may satisfy some of this requirement, some companies will require unique solutions. A closer analysis of each of these barriers is presented below in the context of opportunities for systems integrators and professional services vendors.

Exhibit III-4

Criticality of Technical Issues to Internet Success

Issue	Rating*
Security	4.6
Ease of Use	4.3
Line Speeds	4.1
The World Wide Web	3.9
HTML	3.7
Image Resolution	3.6
Payment Systems	3.5

Note: Scale 1-5, 1 = "Not Critical"; 5 = "Very Critical"   Source: INPUT

a. Security

Risks of reliability and vulnerability must be reduced to acceptable levels if corporations are to enjoy public Internet advantages. The threat of fraud in electronic commerce is of critical concern to vendors who plan to sell goods and services via the networks. This threat is located at two points: the data and systems at each node that intend to have both publicly available and inaccessible components, and the integrity and authenticity of the data that is actually transported over the network and represents the transactions of commerce.

There are a number of possible solutions that favor either security or ease of use. Security-weighted solutions are: sole use of message cryptography; user authentication; user certification; or a combination of two or more of these methods. One additional technique that will require support to develop and implement is "dynamic keys" with "time-to-live" features. Each dynamic key will have a defined life span (e.g., a few hours, a day) during which it is valid. At the end of that time, the key "dies" and will no longer be useful.

b. Ease of Use

The literacy issue will most likely always be a part of the Internet, just as cable and VCR capabilities continue to be issues for some TV viewers. But beyond these questions lies a set of more complex ones having to do with making productive use of the on-line time. Easy solutions are needed for users to access and exploit Internet features for the corporation. Training will certainly address part of this need, but software that sits in front of applications may be necessary. "Softbots" or "knowbots,"—small applications or software agents designed to accomplish a specific task—could be target opportunities for vendors.

Browser capabilities have increased, but user messages tend to be cryptic, uninformative, and intimidating. Worse, the lack of central control in Internet use suggests that more sophisticated interfaces will not be available soon. Perhaps ease of use and attractiveness will become the purpose of the growing number of subnetworks such as networkMCI and the new AT&T offering.

c.   Line Speeds

Slow speeds leave many users disappointed and frustrated. ATMs, ISDN, fiber, compression and other solutions will be needed to overcome this serious objection. Carriers must build more capacity, but service vendors will need to deploy that new capacity within corporations.

Routing issues will not be solved until users work under a connectivity model where they are not "on" a service but rather go "through" a service to access anything and everything. In this view, these services are themselves gateways to everything else.

d.   The World Wide Web

One of the most significant developments of the Internet has been the World Wide Web. At the very least it represents a set of implied standards and protocols aimed at ease of use, interactivity, and multimedia. Building Web sites has become a very large service business.

e.   Hyper-Text Mark-up Language

As corporations use the Internet to conduct more of their business—not just to sell products—the HTML "standard" will need to be deployed to users. Some users will also need a sister protocol, secure hypertext transport protocol (SHTTP), which provides independent security devices for transaction confidentiality, authentication, integrity, and non-reputability of origin. Integrators and professional services vendors will find opportunities in helping companies bring these capabilities to the organization.

f.   Image Resolution

Last on the list of technical barriers identified by respondents was image resolution. One alternative is to offer higher resolution graphics, which, however, would require more bandwidth and better monitors than users are likely to have.

g.   Payment Systems

For companies that become major players in electronic commerce, payment systems will be critical. Systems for on-line credit cards or the electronic equivalent of cash will likely be developed by third-parties for the Internet, but companies will need to build interfaces to these services from their own sales and accounting functions.

B

User Buying Patterns

1.   Internet-Related Systems Integration and Professional Services Project Trends

The ultimate measure of seriousness about the importance of the Internet may be the investment commitments companies are willing to make. Respondents were asked to indicate planned and anticipated staffing levels by type of staff (see Exhibit III-5).

Exhibit III-5

Internet Staffing Levels by Type of Staff

Resource	1995 Average	Increase by 1997
In-House Staff	8.5	73%
Consultants	1.8	76%
Outside Services	0.6	20%

Source: INPUT

Although the absolute number of outsiders supporting a corporation's Internet activities is small, the sheer number of sites—one million or more in the next few years—suggests a need for significant staff augmentation.

The Internet currently carries the perception of a lower expenditure requirement than alternative marketing vehicles, but it is not free. As indicated in Exhibit III-6, companies are finding the need to spend considerably just to have a site. Expenditures are likely to continue to increase, creating a market for professional services firms that can build and operate sites. Other expenses that are reported are for server equipment, client equipment, related software, firewalls, and the like.

Exhibit III-6

Internet Investments by Function

Function	1995 Average	1997 Average
Research	$97,270	$199,500
Development	76,800	222,700
Operations	99,700	86,400
Sales & Marketing	76,200	104,000
Other	308,600	46,300

Source: INPUT

2. Non-Internet-Related Systems Integration and Professional Services Project Trends

Declining productivity and user satisfaction have encouraged the view that the Internet is a way to extend the IS infrastructure, and expand its impact. But services are also being influenced by two other drivers of note: a holistic approach to business integration and client/server technology.

Integration is changing from purely systems integration to a more holistic approach to business integration. Business process reengineering, process innovation, or other terms all indicate that looking only at the technological underbelly is a myopic view. Rather, customers are requiring and vendors are offering a view of technology as an enabler of business strategy. Systems integrators and professional services vendors will need to do it all: consulting, process design and technology support. Customers want—and buy—quantifiable performance improvements. The focus is on return on investment with cost/benefit analysis as the criterion determining whether to undertake a project. Commodity-level integration is fading in favor of a seamless and boundaryless connection to customers and the need to stay close to and exchange information with them.

The key problem is the investments that companies have made in technologies that do not interoperate at all with one another. The goal is to eliminate bottlenecks caused by data reentry, translation, double-checking, and so on. An enterprise integration strategy forces companies to face a multitude of hardware, software, and network configurations. On top of this, suites of systems management tools are being put together by large users to offset the frustrating proliferation of proprietary desktop systems management software. "Plug and play" for networks is not yet a reality.

While information and communications technologies are rapidly advancing-- and converging, users are becoming more aware of and more concerned about

the costs of client/server migration. What is data warehousing and data mining worth? How should the information infrastructure be designed to participate fully in the merging era of electronic commerce in an economic way?

A second driver of note is the move to client/server technology itself. It continues to encourage service expenditures. And client/server access seems to beget more work; electronic mail and inter-networking, for example, have already changed what people demand and expect. The best example seems to be the activity surrounding SAP—a hot offering by one of the few true client/server applications companies. Many, many vendors offer SAP-related services, including installation, related development, and training. This has become an industry in itself.

C
Vendor Competition

1. Analysis of Competition

The competitive landscape continues to change in a number of ways.

- Customer relationships and loyalty are key to securing contracts. "New Age" integrators are small, nimble vendors completing projects in weeks or months rather than years. They may also have ties to the client company—the vendor was started by a group of former MIS staff, for example—and frequently may have key knowledge about the company and its specific systems.

- Hardware vendors (e.g., Sun and Novell) are entering the competition because they see systems integration and consulting as pivotal to doing business. Though they farm out as much of this soup-to-nuts integration as possible, they need to offer "full service" to maintain some control over customers and their hardware selections. They are also entering the services market to supplement reduced margins in hardware. Software vendors, with higher margins, are less likely to enter the services arena at this time.

- Smaller companies have captured client/server niches, forcing larger vendors to link client/server and reengineering methods to compete. BBN Planet for example, a unit of the Cambridge, MA company that helped develop ARPANET, offers systems integration and Internet access. Boutique companies are often faster, cheaper and more skilled in client/server, object-oriented and other technologies than are larger vendors. In this marketplace, losing time is of far greater risk than the size of the partner. Another example: Regency Systems Solutions, a division of the Chicago-based Hyatt hotel chain, plans to offer its previously in-house expertise to the world as a professional services firm specializing in UNIX.

2.   Vendor Selection Criteria

Implied above is the need for systems integration vendors to offer corporate-wide services. No vendors do this better than the Big 6 accounting firms. KPMG, for example, claims to put consulting, assurance, and tax professionals on the same team in each of their target markets: manufacturing, retailing and distribution; information, communications, and entertainment; public services; financial services; and health care and life sciences.

Many of the Big 6 offer a long list of services. A recent Help Wanted ad for one firm shows the breadth:

- Strategic and business planning

- Mergers and acquisitions

- Change management

- Financial and capital planning

- IT strategy and architecture

- Client/server

- Multimedia

- Enterprise networks

- Decision support

- Mobile communications

- Electronic commerce

- Data management

- Commercial software implementation (SAP, Oracle, Baan)

- Business process reengineering

- Knowledge-based reengineering

- Activity-based costing

- Logistics management

- Performance reviews, benchmarking studies, operations reports

- Risk management

- Valuation and financing alternatives

- Quality programs

Vendors without accounting ties are following similar expanded services strategies. For example, EDS—recently freed from General Motors and now having greater access to capital—may step into telecommunications either through alliances with partners worldwide or through acquisitions. EDS will likely expand its electronic commerce activities beyond the work with SpectraVision on video-on-demand systems.

IV

Market Analysis and Forecast

A
Market Overview

1. Definition of Services

The line between systems integration and professional services continues to grow fuzzier. There are a number of contributing reasons:

- The "systems integrator" moniker has an image attached to it that seems to say,"We are more than your supplier, we are your partner—in business issues and in the information services support you require to accomplish your business goals." The notion of a "full service" professional services vendor does not have quite the same shine of the systems integrator.

- Many SI vendors are also PS vendors, depending on what is required and where the better margins are on a given assignment. Services providers have learned that the customer comes first. Each project is unique in scope and requirements and each is tailored to the company and its objectives from a rich experience and resource base.

- The same staff works in both areas because many of the same skills are required. (Systems integrators might argue that "true" systems integration projects require a level of project management that is more complex than is found in PS projects.) There may be differences in given projects, but the overlap is extensive.

By INPUT's definitions, the real differences between systems integration and professional services are that PS engagements include expenditures on people *only,* whereas SI projects have the people component *in addition to* hardware and other related service components (e.g., site preparation, etc.). SI contracts give responsibility for the entire solution to a single prime contractor, the systems integrator.

2. Systems Integration Overview

Systems integration continues to increase in importance as an effective means of aligning business objectives and infrastructure support for those objectives. Integrators now frequently are as much a part of the planning of a project as they are of its execution. This positioning of the integrator as a key member of the reengineering team is likely to be enhanced as companies grapple with Internet issues. As use of the Internet and related on-line services spreads, impacting primary and other support functions of corporations, integrators will be called upon to build and implement the required interfaces among users, suppliers, and customers for use on the Internet.

The complexity—and plethora—of solutions calls for expertise far beyond the capabilities of most internal information services organizations. Systems integrators offer this expertise as well as assume the risk that is inherent in the solutions' complexity. Though the assumption of risk is no assurance of project success, customers have the added advantage of knowing that someone with experience is in charge and has very strong motivation for getting the job done right.

3. Professional Services Overview

Professional services, especially the staff-augmentation aspects, continue to be in demand. This approach is generally seen as a cost-effective solution to getting development efforts completed in the face of shrinking in-house personnel resources. The bad news is that many laid-off employees are forming their own companies and competing directly against more established and well known firms. Frequently, they are successful in attracting contracts from their former employers because they have the advantage of knowing the client's systems better than an outside professional services vendor would. The market is growing, but the number of companies competing in that market is growing as well.

The Internet represents a particularly bright spot where no competitor has a significant edge at the moment. Established vendors should be able to capture Web site development business initially, then help companies integrate Internet-related products throughout the corporation as the need develops.

B
Market Forecast

1. Systems Integration and Professional Services Markets

Exhibit IV-1 shows the strong growth that each of these service delivery modes will experience over the next five years. Together, expenditures are forecast to grow from $38.6 billion in 1995 to 73.5 billion in the year 2000. The 1995—2000 CAGR is forecast to be 13% for professional services and 16% for systems integration.

Exhibit IV-1

U.S. Systems Integration and Professional Services Markets, 1995-2000
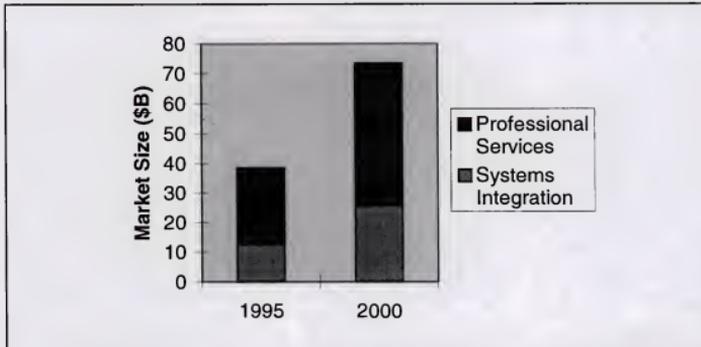
Source: INPUT

A closer look by vertical markets (see Exhibit IV-2) indicates that though the federal government sector currently makes the largest expenditures in systems integration, discrete manufacturing will emerge as the major market by 2000. The telecommunications market segment will grow most rapidly, reaching a CAGR of 25%.

Exhibit IV-2

Systems Integration Vertical Markets, 1995-2000

	1995	2000	CAGR
	($M)	($M)	1995-2000
Banking & Finance	860	2,150	20%
Business Services	360	1,000	23%
Discrete Manufacturing	2,300	5,850	21%
Education	160	340	16%
Federal Government	3,550	5,335	8%
Health Services	440	1,100	19%
Insurance	350	780	18%
Miscellaneous Industries	15	30	19%
Process Manufacturing	580	1,200	15%
Retail Distribution	590	1,200	16%
State & Local Government	1,350	2,500	13%
Telecommunications	470	1,450	25%
Transportation	320	710	17%
Utilities	810	1,450	12%
Wholesale Distribution	280	560	15%

Note: numbers have been rounded   *Source: INPUT*

The vertical markets for professional services (see Exhibit IV-3) also show the dominance of discrete manufacturing in total expenditures. At $12.7 billion it dwarfs most other vertical markets. As with systems integration, the telecommunications industry is growing the fastest, at a CAGR of 25%. Each submode of service is growing as well.

Exhibit IV-3

Professional Services Vertical Markets, 1995-2000

	1995	2000	CAGR
	($M)	($M)	1995-2000
Banking & Finance	3,250	4,950	9%
Business Services	430	670	9%
Discrete Manufacturing	6,700	12,700	14%
Education	120	220	14%
Federal Government	2,600	3,750	8%
Health Services	350	700	15%
Insurance	1,900	2,950	9%
Miscellaneous Industries	170	260	8%
Process Manufacturing	3,400	6,500	14%
Retail Distribution	300	450	8%
State & Local Government	3,700	6,800	13%
Telecommunications	1,900	5,700	25%
Transportation	330	500	9%
Utilities	490	1,000	16%
Wholesale Distribution	490	740	8%

Note: numbers have been rounded   Source: INPUT

2. Systems Integration and Professional Services Forecast by Product/Service Sector

Exhibit IV-4 presents INPUT's forecast by component of each product or service sector. It is clear that professional services will continue to be a major part of systems integration expenditures through the year 2000, with equipment moving into second place. This professional services expenditure in systems integration contracts, coupled with "standalone" professional services contracts totaling $47.9 billion by the year 2000, makes the total professional services market almost $60 billion for the period.

Consulting expenditures, either on an independent basis or as part of integration projects, will be extensive. Expenditures for education and training, while significant at $7.1 billion in 2000, continue to indicate the short-sighted nature of the market that believes that development and installation are far more important than implementation through extensive training or retraining.

Exhibit IV-4

Systems Integration and Professional Services
Growth by Product/Service Sector, 1995-2000

	1995	2000	CAGR
	($M)	($M)	1995-2000
Equipment	5,500	10,600	14%
Software Products	1,000	2,050	15%
Professional Services	5,450	12,000	17%
Other	470	940	15%
Total Systems Integration	12,420	25,590	16%
IS Consulting	6,950	14,200	15%
Education and Training	3900	7,100	13%
Software Development	15300	26,600	12%
Total Professional Services	26,150	47,900	13%

Note: numbers have been rounded   *Source: INPUT*

V

Vertical Markets for Systems Integration and Professional Services

This chapter provides an overview of the size, growth and factors influencing the combined SI and PS markets for major vertical markets. A table presented with each discussion summarizes the salient Internet-related aspects of each marketplace. A second table contains highlights of the forecasts included in Appendix B.

A
Banking and Finance

1. Key Market Forces

Three major forces grip the banking and finance industry sector. Along with other, secondary forces, they shape the needs and service support levels of this industry.

- Merger and acquisition activity

- Increasing competition, especially from nonbank entities

- The relentless pursuit of profits in low-margin areas

In the rush to capture customers, banks have been acquiring or merging with other banks at a furious pace. Technology is at the center of this effort to leverage size and create profits. These new banks require integrated transaction-oriented systems to support the increased volume. They also need an expanded ATM network to replace the branch office networks that are being consolidated.

Competition at the ATM is only the tip of the iceberg for banks. Electronic commerce is growing, and financial institutions that are not participating are watching retailers, third-party service providers, and even network access companies managing financial transactions from network-based sales of goods and services.

Retail banking in particular has come under heavy margin pressure. Customers require more services (e.g., tellers, platform customer service representatives) than they generate in profits. ATMs help to move some customers to self-service, but banks need to find other solutions as well. The Internet and other on-line services show great promise for allowing customers to dip into their own accounts and get information or even create transactions. Home banking may find a new life, but professional services and systems integration will be required to create systems that are effective, yet easy for customers to use.

Exhibit V-1 shows the influence the Internet will have on the demand for systems integration and professional services in the banking and finance industry sector.

Exhibit V-1

Internet Influences on SI and PS in the Banking and Finance Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	58%	Intra-company e-mail service
	WWW	50%	Information on financial products
High Internet Impact Areas	Technology	4.5	Different computer platforms
	Service	4.2	More information accessed by customers
Customer Expectations for On-line Activity, 2000			Full product and service delivery
			Access to customer information
Biggest Revenue Impact of the Internet	Costs will be reduced	3.5	
	Profits will increase	3.5	
Internet Constraints	Security	4.6	
	Ease of use	4.4	
Largest Internet Staffing Increase	In-House	38%	
Largest Internet Expenditure Category, 1995	Research	$227,500	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   Source: INPUT

2. Systems Integration Analysis

Industry consolidations, the emergence of new competition, non-traditional banking venues (e.g., on-line), and new and different relationships with customers (e.g., relationship banking) all point to the need for integrators who can lead these companies to the future of banking and financial services. With much of the equipment in place, the challenge will be to drag as much of the legacy systems into the future as possible and integrate existing functionality with new requirements.

Exhibit V-2

PS and SI Market Forecast Characteristics: Banking and Finance

Characteristic	Component	2000 ($M)	CAGR, 1995-2000
Professional Services	• Total	$4,900	9%
• Largest Component	• SW Dev.	$2,700	8%
• Fastest Growing	• IS Consulting	$1,450	10%
Systems Integration	• Total	$2,150	20%
• Largest Component	• Professional Services	$1,350	23%
• Fastest Growing	• Software Products	$180	25%

Note: numbers have been rounded   Source: INPUT

3. Professional Services Analysis

Staff augmentation will be required throughout banking and finance IT organizations, especially as in-house staff duplications are eliminated. Help desk functions have become particularly intensive in banks where the legacy is long and the breadth of technology is immense. Employees with unique, even esoteric, skills will be needed in this industry because of these legacy systems.

B
Discrete Manufacturing

1. Key Market Forces

Business process reengineering is in full swing in this industry; activity is visible in small and large organizations. The thrust is to continue the integration of islands of automation into a unified process that extends from order placement to post-sales support. A key component of these efforts is *on-demand* or *custom* manufacturing, where rapid changeover and flexible systems allow for customer-specific runs.

Regulatory requirements—although these may abate with the new Congress—also drive new systems. Compliance verification is being automated to reduce the financial drain of this non-revenue-producing activity.

The Internet and other on-line services provide new opportunities for discrete manufacturers. Companies and their customers are anxious for on-line catalogs of products, ordering capabilities, and customer access to status reports.

Exhibit V-3 shows the influence the Internet will have on the demand for systems integration and professional services in the discrete manufacturing industry sector.

Exhibit V-3

Internet Influences on SI and PS in the Discrete Manufacturing Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	32%	Status reports, customer assistance
	FTP	31%	On-line catalogs
High Internet Impact Areas	Technology	4.0	Access by more employees
	Sales	3.8	Delivering real-time quotes
Customer Expectations for On-line Activity, 2000			Data mining
			End-to-end customer transactions
Biggest Revenue Impact of the Internet	Profits will increase	3.2	
	Cost will be reduced	3.3	
Internet Constraints	Security	4.5	
	Ease of use	4.2	
Largest Internet Staffing Increase	Consultants	188%	
Largest Internet Expenditure Category, 1995	Operations	$5,000	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   Source: INPUT

2. Systems Integration Analysis

The end-to-end integration from inbound logistics to post-sale customer access to their own accounts will require a new level of support from integrators. The integration that has been accomplished to date may be extended backward to the supplier and forward to the customer. EDI or equivalents could emerge—again—and the Internet will be integrated into the communications landscape.

Exhibit V-4

PS and SI Market Forecast Characteristics: Discrete Manufacturing

Characteristic	Component	2000 ($M)	CAGR, 1995-2000
Professional Services	• Total	$12,700	14%
• Largest Component	• SW Dev.	$6,450	11%
• Fastest Growing	• IS Consulting	$4,200	17%
Systems Integration	• Total	$5,850	21%
• Largest Component	• Equipment	$3,500	21%
• Fastest Growing	• Equipment	$3,500	21%

Note: numbers have been rounded   Source: INPUT

3. Professional Services Analysis

Although the respondents to INPUT's Internet survey indicated low expenditures for Internet activities so far, the astounding increase anticipated in staffing could represent a key opportunity. Manufacturers are anxious to exploit the capabilities of the public networks for research, for logistics, for sales and service, and will need solid help to make the Internet a real part of their future on-line experience.

C

Insurance

1. Key Market Forces

Dramatic changes in the health care segment are fueling insurance activity. Health care reform has brought with it new insurers, new insurance products, and new pressures to reduce costs, including back office processing. Throughout all of this there is a reemphasis on customer service.

Insurance companies look to on-line services as a means to stay close to their customers on both sides of the equation: producers (i.e., employers and their employees or the self-insured) and providers (i.e., those in the health care network: physicians, dentists, hospitals, ancillary services). Membership and policy information are likely to be the first two on-line services available to be followed later by claims status reporting and electronic payments.

Exhibit V-5 shows the influence the Internet will have on the demand for systems integration and professional services in the insurance industry sector.

Exhibit V-5

Internet Influences on SI and PS in the Insurance Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	60%	Membership information
	WWW	60%	Link to software vendors for support
High Internet Impact Areas	Technology	4.2	HW and SW ordering mix
	Service	4.2	More information accessed by customers
Customer Expectations for On-line Activity, 2000			Full product and service delivery
			Access to customer information
Biggest Revenue Impact of the Internet	Costs will be reduced	3.3	Policy information and servicing
	Revenue will increase	3.1	Policy application
Internet Constraints	Security	4.7	
	Comm. speeds	4.2	
Largest Internet Staffing Increase	Outsourcing	38%	
Largest Internet Expenditure Category, 1995	Development	$125,800	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

2. Systems Integration Analysis

The significant opportunity for integrators may be to provide turnkey IT services to startups in health care insurance. Oxford and Physician's Health Care of New Jersey, for example, represent two new entities that have recently set up entire processing operations, from business concept to claims fulfillment and reporting before they opened their doors for business. Needless to say, such a concerted effort requires an integrator who can make it all happen.

Exhibit V-6

PS and SI Market Forecast Characteristics: Insurance

Characteristic	Component	2000 ($M)	CAGR, 1995-2000
Professional Services	• Total	$2,950	9%
• Largest Component	• SW Dev.	$1,600	7%
• Fastest Growing	• IS Consulting	$870	12%
Systems Integration	• Total	$780	18%
• Largest Component	• Professional Services	$570	18%
• Fastest Growing	• Software Products	$75	18%

Note: numbers have been rounded   Source: INPUT

3. Professional Services Analysis

The insurance market is parochial in the sense that large IT staffs already exist and "homegrown" staff is preferred to seeking help from outside vendors. Even so, with cost-cutting measures under way, the need exists for staff augmentation in such areas as lead generation systems, provider credentialing, policy management, claims processing, and claims and financial reporting.

D
Process Manufacturing

1. Key Market Forces

Process manufacturers suffer under market dynamics similar to those in discrete manufacturing, namely the desire for on-demand, custom production. For this industry, however, that marketplace requirement is far more complex to execute; the output of every step in the process is, in fact, a raw material for the next step. Controlling the timing and the content for each customer requires very sophisticated systems integrated end to end. Even with this added burden, costs are constrained by the amount of competition and manufacturing overcapacity in some segments.

On-line services are becoming more attractive to process manufacturing companies. On-line catalogs, shipment information and product research are all part of the applications companies plan to have.

Exhibit V-7 shows the influence the Internet will have on the demand for systems integration and professional services in the process manufacturing industry sector.

Exhibit V-7

Internet Influences on SI and PS in the Process Manufacturing Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	39%	Catalog of products
	WWW	22%	Research (scientific, legal)
High Internet Impact Areas	Technology	4.4	Virtual employees
	Service	4.0	Question resolution
Customer Expectations for On-line Activity, 2000			Shipment information
			Product data for customers
Biggest Revenue Impact of the Internet	Profits will increase	3.5	
	Costs will be reduced	3.4	
Internet Constraints	Security	4.8	
	Ease of use	4.5	
Largest Interent Staffing Increase	In-House	94%	
Largest Internet Expenditure Category, 1995	Research	$116,500	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   Source: INPUT

2. Systems Integration Analysis

Reengineering efforts will continue to support the need for systems integration. Companies are anxious to reduce their time to market and build the systems required to support this objective. Parallel manufacturing, for example, might speed delivery in some industries and could be accomplished if the results of critical processes were captured and fed to other processes to control their results. Such systems require considerable integration.

Exhibit V-8

PS and SI Market Forecast Characteristics: Process Manufacturing

Characteristic	Component	2000 ($M)	CAGR, 1995-2000
Professional Services	• Total	$6,500	14%
• Largest Component	• SW Dev.	$3,600	12%
• Fastest Growing	• IS Consulting	$2,100	18%
Systems Integration	• Total	$1,200	15%
• Largest Component	• Professional Services	$560	15%
• Fastest Growing	• Software Products	$120	15%

Note: numbers have been rounded   Source: INPUT

3. Professional Services Analysis

Specific systems are also receiving attention. In pharmaceuticals, for example, Computer-Assisted New Drug Applications (CANDA) are now required by the FDA for some drugs. These electronic submissions for approval of drug development require the extraction of related information from disparate databases and compilation of the data in text and graphic form. Other types of manufacturers have similar requirements, generally from regulators.

Client/server technology continues to be spun out to the organization. Much training and help desk support is required in these efforts.

E
Retail Distribution

1. Key Market Forces

Retail markets are enjoying the creeping rise in consumer confidence. During these days of cautious optimism there is a focus on increasing margins through application of technology. POS enhancements and greater use of communications among manufacturers, distributors and retailers is common.

One linkage of strong interest to retailers is the use of online services. They are attracted by the demographics of current online users and the ongoing activities designed to create electronic commerce. Many retailers report having Web pages up or in development, and some report strong sales of selected items. Even the late adopters suggest that new market segments and on-line catalogs are attractive opportunities.

Exhibit V-9 shows the influence the Internet will have on the demand for systems integration and professional services in the retail distribution industry sector.

Exhibit V-9

Internet Influences on SI and PS in the Retail Distribution Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	43%	Research
	News	29%	Company promotion
High Internet Impact Areas	Technology	4.3	PC support through vendor access
	Sales	3.7	New market segments
Customer Expectations for On-line Activity, 2000			Billing inquiries
			Product information
Biggest Revenue Impact of the Internet	Profits will be reduced	3.3	
	Revenue will increase	3.2	
Internet Constraints	Security	4.8	
	Speed	4.4	
Largest Internet Staffing Increase	Consulting	123%	
Largest Internet Expenditure Category, 1995	Operations	$81,900	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

2.   Systems Integration Analysis

Connectivity, perhaps through the Internet, will be the dominant objective of systems integration throughout this forecast period. Facilitating linkages among all constituents (manufacturers, distributors, retailers, customers, credit card clearing houses, etc.) will be critical to maintaining the loyalty of customers who are ever more cautious and skeptical. Key efforts likely will extend to such strategies as POS couponing, in-aisle promotions, and couponing on the Internet.

Exhibit V-10

PS and SI Market Forecast Characteristics: Retail Distribution

Characteristic	Component	2000 ($M)	CAGR, 1995-2000
Professional Services	• Total	$450	8%
• Largest Component	• SW Dev.	$160	8%
• Fastest Growing	• IS Consulting	$140	10%
Systems Integration	• Total	$1,220	16%
• Largest Component	• Equipment	$600	12%
• Fastest Growing	• Professional Services	$490	21%

Note: numbers have been rounded   Source: INPUT

3. Professional Services Analysis

Professional services will be required to bring some of this technology to smaller retailers as well as to supplement efforts being done in-house by larger retailers. Development and operation of Web sites, including developing databases of qualified targets and customizing promotion capabilities, will also require service personnel.

F
Business Services

1. Key Market Forces

Business services are riding the wave of improvement in the U.S. economy. But companies realize that longer-term health lies in the delivery of innovative services and new, more effective marketing strategies.

Exhibit V-11

Internet Influences on SI and PS in the Business Services Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	WWW	51%	Sales
	Electronic mail	49%	Research
High Internet Impact Areas	Sales	4.2	Rapid information dissemination
	Technology	3.9	Video, audio, multimedia
Customer Expectations for On-line Activity, 2000			Product information
			Research
Biggest Revenue Impact of the Internet	Revenue will increase	3.4	
	Profits will increase	3.3	
Internet Constraints	Ease of use	4.2	
	Security	4.2	
Largest Internet Staffing Increase	Consulting	128%	
Largest Internet Expenditure Category, 1995	Operations	$30,600	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

2. Systems Integration Analysis

Integrators will play a critical role in linking businesses and their customers in new types of relationships and through new media such as the Internet.

Exhibit V-12

PS and SI Market Forecast Characteristics

Characteristic	Component	2000	CAGR, 1995-2000
Professional Services	• Total	$670	9%
• Largest Component	• SW Dev.	$370	9%
• Fastest Growing	• IS Consulting	$210	10%
Systems Integration	• Total	$1,000	23%
• Largest Component	• Professional Services	$610	24%
• Fastest Growing	• Professional Services	$610	24

Note: numbers have been rounded   *Source: INPUT*

3. Professional Services Analysis

The Internet will provide many new opportunities in such segments as real estate, travel, entertainment and recreation. Companies that can augment staffs with connectivity expertise and knowledge of how to exploit the power of the Internet will be in strong demand.

G
Transportation

1. Key Market Forces

The transportation industry has not enjoyed much economic improvement. The weight of labor contracts, the increasing costs of supplies such as fuel, and the inability to add significantly to fares because of regional competition all combine to subdue IT expenditures. Worse, the heavy prior investment in mainframe solutions makes it difficult to nimbly respond nimbly to marketplace changes as would be more possible with client/server architectures.

Though transportation companies have been leaders in on-line functionality, they have been slow to embrace the Internet, perhaps because "free" reservation capabilities

Exhibit V-13

Internet Influences on SI and PS in the Transportation Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	WWW	55%	Ticketing
	Electronic mail	27%	File access
High Internet Impact Areas	Sales	4.4	Reservations
	Technology	4.2	Faster networks
Customer Expectations for On-line Activity, 2000			Shipment status
			Rate schedules and reservations
Biggest Revenue Impact of the Internet	Profits will increase	3.5	
	Costs will be reduced	3.4	
Internet Constraints	Security	4.8	
	Ease of Use	4.3	
Largest Internet Staffing Increase	In-House	128%	
Largest Internet Expenditure Category, 1995	Development	$27,700	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

2. Systems Integration Analysis

Integration will continue, especially in the shipping segments. And the interest in the ability to offer status reports to customers in a transparent fashion will provide many opportunities for integrators.

Exhibit V-14

PS and SI Market Forecast Characteristics: Transportation

Characteristic	Component	2000	CAGR, 1995-2000
Professional Services	• Total	$520	9%
• Largest Component	• SW Dev.	$280	7%
• Fastest Growing	• IS Consulting	$170	13%
Systems Integration	• Total	$710	17%
• Largest Component	• Professional Services	$430	19%
• Fastest Growing	• Other	$25	22%

Note: numbers have been rounded   *Source: INPUT*

3. Professional Services Analysis

Transportation companies traditionally have supplied their own labor pool. Although this practice will continue, more outsiders will be brought in to augment downsized staffs.

H
Utilities

1. Key Market Forces

Industry respondents have indicated a strong desire to get closer to customers—the growing interest in privatizing utility services (e.g., municipalities interested in buying bulk electricity and reselling it to local households) has pushed this issue. Access to customer records via the Internet may be a key component of reestablishing customer contact.

Exhibit V-15

Internet Influences on SI and PS in the Utilities Market

ISSUE	RESPONSE	MEASURE*	EXAMPLE(S)
On-line Service Most Frequently Used	Electronic mail	57%	Intra-company e-mail service
	WWW	57%	Information on financial products
High Internet Impact Areas	Technology	4.5	Different computer platforms
	Sales	4.2	More information accessed by customers
Customer Expectations for On-line Activity, 2000			Full product and service delivery
			Access to customer information
Biggest Revenue Impact of the Internet	Costs will be reduced	3.3	
	Profits will increase	3.2	
Internet Constraints	Security	4.8	
	Speed	4.4	
Largest Internet Staffing Increase	Consulting	59%	
Largest Internet Expenditure Category, 1995	Operations	$299,900	

Note: Scale 1-5, 1 = "Not Important"; 5 = "Very Important"   *Source: INPUT*

2. Systems Integration Analysis

As with other industries, utilities are not able to provide the expertise to create the systems they need for resource management and customer service. Integrators are required.

Exhibit V-16

PS and SI Market Forecast Characteristics: Utilities

Characteristic	Component	2000	CAGR, 1995-2000
Professional Services	• Total	$1,050	16%
• Largest Component	• SW Dev.	$440	15%
• Fastest Growing	• IS Consulting	$390	18%
Systems Integration	• Total	$1,450	12%
• Largest Component	• Professional Services	$840	14%
• Fastest Growing	• Professional Services	$840	14%

Note: numbers have been rounded   *Source: INPUT*

3. Professional Services Analysis

Utilities typically have been active users of professional services. Hiring expertise for specific development efforts is common. If utilities are to take advantage of Internet functionality, this trend likely will increase.

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A

Definition of Terms

Systems Integration

Systems integration is a vendor service that provides a complete solution to an information system, networking or automation development requirement through the custom selection and implementation of a variety of information system products and services. A systems integrator is responsible for the overall management of a systems integration contract and is the single point of contact and responsibility to the buyer for the delivery of the specified system function, on schedule and at the contracted price.

The components of a systems integration project are the following:

- *Equipment* - information processing and communications equipment required to build the systems solution. This component may include custom as well as off-the-shelf equipment to meet the unique needs of the project. The systems integration equipment category excludes turnkey systems by definition.

- *Software products* - prepackaged applications and systems software products.

- *Professional services* - the value-added component that adapts the equipment and develops, assembles, or modifies the software and hardware to meet the system's requirements. It includes all of the professional services activities required to develop, implement and, if included in the contract, operate an information system, including consulting, program/project management, design and integration, software development, education and training, documentation, and systems operations and maintenance.

- *Other services* - most systems integration contracts include other services and product expenditures that are not classified elsewhere. This category includes miscellaneous items such as engineering services, automation equipment, computer supplies, business support services and supplies, and other items required for a smooth development effort.

Professional Services

This category includes three submodes: consulting, education and training, and software development.

- *Consulting*: Services include management consulting (related to information systems), information systems reengineering, information systems consulting, feasibility analysis and cost-effectiveness studies, and project management assistance. Services may be related to any aspect of the information system, including equipment, software, networks and systems operations.

- *Education and Training*: Services that provide training and education or the development of training materials related to information systems and services for the information systems professional and the user, including computer-aided instruction, computer-based education, and vendor instruction of user personnel in operations, design, programming and documentation. Education and training provided by school systems is not included. General education and training products are included as a cross-industry market sector.

- *Software Development*: Services include user requirements definition, systems design, contract programming, documentation, and implementation of software performed on a custom basis. Conversion and maintenance services are also included.

B

Systems Integration and Professional Services Forecast and Reconciliation

A

Systems Integration Forecast

Exhibit B-1

U.S. Systems Integration Market, 1994-2000 by Submode

Delivery Mode	1994 ($ M)	Growth 94-00 (%)	1995 ($ M)	1996 ($ M)	1997 ($ M)	1998 ($ M)	1999 ($ M)	2000 ($ M)	CAGR 95-00 (%)
Systems Integration	11235	11%	12417	14639	16849	19366	22252	25578	16%
- Equipment	5067	9%	5514	6562	7422	8376	9407	10589	14%
- Software Products	899	11%	1002	1202	1372	1563	1790	2055	15%
- Professional Services	4849	12%	5429	6307	7414	8704	10231	11999	17%
- Other	420	12%	472	568	641	723	824	935	15%

Source: INPUT

Exhibit B-2

U.S. Systems Integration Market, 1994-2000
by Industry Sector

Market Sectors	1994 ($ M)	Growth 94-95 (%)	1995 ($ M)	1996 ($ M)	1997 ($ M)	1998 ($ M)	1999 ($ M)	2000 ($ M)	CAGR 95-00 (%)
Total All Sectors	11235	11%	12417	14639	16849	19366	22252	25578	16%
Banking and Finance	719	19%	859	1028	1242	1500	1817	2147	20%
Business Services	296	22%	362	448	549	675	826	1008	23%
Discrete Manufacturing	1953	17%	2285	2800	3396	4124	4910	5846	21%
Education	138	20%	165	198	231	266	305	344	16%
Federal Government	3641	-2%	3556	4143	4438	4704	4997	5335	8%
Health Services	369	20%	441	522	623	745	889	1067	19%
Insurance	298	17%	349	411	485	565	666	782	18%
Miscellaneous	11	18%	13	15	20	22	25	31	19%
Process Manufacturing	514	13%	580	675	774	879	1019	1181	15%
Retail Distribution	501	17%	586	680	789	916	1059	1218	16%
State and Local Government	1197	12%	1346	1517	1720	1955	2208	2480	13%
Telecommunications	373	25%	466	586	734	919	1153	1443	25%
Transportation	270	19%	320	380	448	520	605	706	17%
Utilities	709	14%	805	910	1027	1150	1285	1430	12%
Wholesale Distribution	246	15%	284	326	373	426	488	560	15%

Source: INPUT

B

Professional Services Forecast

Exhibit B-3

U.S. Professional Services Market, 1994-2000
by Submode

Delivery Mode	1994 ($ M)	Growth 94-95 (%)	1995 ($ M)	1996 ($ M)	1997 ($ M)	1998 ($ M)	1999 ($ M)	2000 ($ M)	CAGR 95-00 (%)
Professional Services	23101	13%	26184	29427	33332	37619	42481	47898	13%
- IS Consulting	5982	16%	6950	7986	9234	10675	12312	14192	15%
- Education & Training	3492	12%	3915	4402	4957	5583	6296	7114	13%
- Software Development	13627	12%	15319	17039	19141	21361	23873	26592	12%

Source: INPUT

Exhibit B-4

U.S. Professional Services Market, 1993-1999
by Industry Sector

Market Sectors	1994 ($ M)	Growth 94-95 (%)	1995 ($ M)	1996 ($ M)	1997 ($ M)	1998 ($ M)	1999 ($ M)	2000 ($ M)	CAGR 95-00 (%)
Total All Sectors	23101	13%	26184	29427	33332	37619	42481	47898	13%
Banking and Finance	2925	11%	3257	3554	3862	4185	4542	4926	9%
Business Services	387	11%	430	474	525	572	619	670	9%
Discrete Manufacturing	5935	13%	6683	7573	8691	9931	11255	12703	14%
Education	100	16%	116	132	152	174	197	223	14%
Federal Government	2315	13%	2606	2735	2990	3222	3470	3758	8%
Health Services	307	15%	352	403	466	539	620	703	15%
Insurance	1765	9%	1918	2096	2293	2487	2704	2942	9%
Miscellaneous	158	10%	174	190	208	225	242	259	8%
Process Manufacturing	2957	15%	3407	3897	4455	5068	5761	6490	14%
Retail Distribution	269	12%	301	330	364	393	422	452	8%
State and Local Government	3271	14%	3737	4237	4781	5367	6072	6801	13%
Telecommunications	1546	22%	1884	2319	2880	3600	4514	5680	25%
Transportation	298	11%	332	367	401	438	475	517	9%
Utilities	420	17%	493	577	669	774	897	1036	16%
Wholesale Distribution	448	10%	494	543	595	644	691	738	8%

Source: INPUT

C
Systems Integration and Professional Services Reconciliation

Exhibit B-5

U.S. SI and PS Market
Forecast Reconciliation—1994 Market

Delivery Mode/Submode	1994 Market (Forecast) ($M)	1995 Report (Actual) ($M)	Variance from 1994 Forecast ($M)	Variance from 1994 Forecast (%)
Professional Services	23000	23101	101	0%
- IS Consulting	5830	5982	152	3%
- Education & Training	3430	3492	62	2%
- Software Development	13740	13627	-113	-1%
Systems Integration	11184	11235	51	0%
- Equipment	5059	5067	8	0%
- Software Products	848	899	51	6%
- Professional Services	4879	4849	-30	-1%
- Other	398	420	22	6%

Source: INPUT

Exhibit B-6

U.S. SI and PS Market
Forecast Reconciliation—1999 Market Expenditure

Delivery Mode/Submode	1999 Market			
	1994 Market (Forecast) ($M)	1995 Report (Forecast) ($M)	Variance from 1994 Forecast ($M)	Variance from 1994 Forecast (%)
Professional Services	37994	42481	4487	12%
- IS Consulting	10548	12312	1764	17%
- Education & Training	5640	6296	656	12%
- Software Development	21806	23873	2067	9%
Systems Integration	22673	22252	-421	-2%
- Equipment	9868	9407	-461	-5%
- Software Products	1750	1790	40	2%
- Professional Services	10269	10231	-38	0%
- Other	786	824	38	5%

Source: INPUT

Exhibit B-7

U.S. SI and PS Market
Forecast Reconciliatio—CAGR

Delivery Mode/Submode	1994-1999 CAGR per data 1994 report (%)	1994-1999 CAGR per data 1995 report (%)
Professional Services	11%	13%
- IS Consulting	13%	16%
- Education & Training	10%	13%
- Software Development	10%	12%
Systems Integration	15%	15%
- Equipment	14%	13%
- Software Products	16%	15%
- Professional Services	16%	16%
- Other	14%	14%

Source: INPUT

Differences between the federal and commercial markets provide the rational for the variance between the Professional Services 1994 forecast and actual expenditure. The commercial market is strong and growing with renewed optimism coupled with rapid changes in technology. This is expected to continue—particularly with the influence of the Internet. The federal market, however, spent far less than the government forecast and this constrained the overall growth of the professional services and systems integration markets.

Looking forward, the mix of expenditure within Systems Integration contracts is forecast to change, with the hardware portion falling in line with rapidly reducing hardware costs. This change is reflected in the reduced CAGR for the equipment expenditure, 14% falling to 13%.

INPUT EDITING CHECKLIST

Check program:

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☐ EDI	☐ MAR	☐ CSP
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☐ DSP	☐ YCU	☐ OSP
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☐ YCU		☐ XMC
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☐ Check TOC outline against text

☐ Check LOE against exhibit titles

☑ Check headers and footers
  - Correct name on top
  - Correct code on bottom
  - Correct © year—No copyright on custom reports

☑ Proofread and edit text—**always check against author draft if handwritten**
  - Correct grammar, diction, and punctuation problems
  - Check for correctness and consistency in company/product names and acronyms
  - Exhibits must have exhibit references in text
  - Textual description of exhibit must match exhibit contents

☑ Proofread and edit exhibits—**always check against author draft if handwritten**
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  - Check monetary units and labeling carefully—be sure labels match those in author's draft
  - Similar exhibits must have same numerical scale
  - Check for *x*- and *y*-axis labels
  - Check math unless you know it came from a spreadsheet
  - Changes to the numbers in exhibits must agree with text.
  - Changes to exhibit names must agree with LOE.

☐ Mark formatting problems (problems with bold or italic words, font size irregularities, chapter heading and subheading problems, etc.)
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☑ Discuss all queries with the author, either in person or over the phone, and make the necessary corrections to the text.
  - If any elements are missing, ask author to submit them ASAP. (Note: most reports start with an *Abstract*. Possible exceptions: U.S. MAP and Client/Server vertical-industry reports, some CSP reports, some custom reports). When the author specifies appendix(es) are *standard*, be sure that the author has specified the exact appendix. "Standard Appendix A" is insufficient. "Standard Appendix A from report MVT" is exact.
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Final Draft

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☐ Do a light rereading of the text to catch errors previously overlooked.

☐ Make sure that exhibits appear appropriately in text.

☐ Make sure exhibit numbers in text are sequential by chapter (e.g., II-1, II-2, etc.).

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☐ Check that page numbers in TOC and LOE correspond exactly to report pagination.

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☐ Proof copyright page—(*Published by* instead of copyright page in custom reports)
  - Check report title, program name
  - U.K. reports say "Researched in the U.K." etc.
  - Check report code, author's employee number, program year (year written for) and copyright year (when actually published).
  - Check header.

☐ Make sure all elements of the report are present
  - Title page
  - About INPUT (back page for verticals)
  - Abstract (only a few reports don't require an Abstract).
  - Copyright page (or *Published by*)
  - TOC/LOE
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☐ Check pagination throughout the report. Each chapter starts with page 1 and ends on an even numbered page. The numbers begin with the Roman numeral of the chapter (i.e., page 3 of chapter 4 is IV-3).

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Executive Overview

Most reports have an *Executive Overview* (chapter 2 of the report) printed as a separate document. The *Executive Overview* consists of the following elements:
- Cover
- "To our clients" page (inside cover)
- Abstract (from the report) Author's employee number and program year go above project code.
- Overview Contents
- Executive Overview chapter from the report (usually chapter 2)
- TOC (from the report)
- LOE (from the report)
- Program description
- About INPUT

What to proofread:

☐ Cover page—title.

☐ "To our clients" page—completely
  - U.K. reports read "Programme—Europe"

■ Abstract is pulled directly from the report

☐ Overview Contents—completely
  - U.K. overviews will read "Programme Description"

■ Report Table of Contents and Exhibit list are pulled directly from the report.

☐ Program description (from marketing brochure).

☐ About INPUT—U.S. or U.K. version as appropriate

About INPUT is a one-page description of INPUT and a list of INPUT offices. It is used in publications as follows;
- Hard-Velobound: inside front cover (done by bindery)
- Soft-Velobound: back of title page
- Softbound/Executive Overview: back cover
- Binders: back of title page

When Report is Done

☐ Return copy of edited files on disk to local administrator to be placed in project files.

February, 1996

Dear Colleague:

Thank you for your recent participation in our research for the 1995 INPUT *Impact of the Internet on Systems Integration and Professional Services* report. We have enclosed an Executive Overview of the report, as promised, in appreciation of your efforts.

The report contains two major sections: the first section explores the continuing expansion of the systems integration (SI) and professional services (PS) markets and examines the factors that account for this growth. The specific focus of the report is the influence of the Internet and how it will help to determine the difference between industry winners and losers. INPUT looks specifically at emerging applications and identifies the applications to watch and the issues to watch out for.

The second section of the report provides an analysis of the systems integration and professional services markets in the United States from 1995 to 2000 and updates the *U.S. Systems Integration and Professional Services Markets, 1994 - 1999.* It summarizes the trends and market factors influencing the size and composition of both the commercial and public sector segments of the U.S. information services markets. It includes highlights of fifteen vertical industry markets.

If you are interested in purchasing this report in its entirety, please contact Bob Goodwin, Vice President of Sales at INPUT. You can reach him at (415) 528-6323. If you have any other questions or comments please feel free to contact me directly.

Again, thank you for your participation. We look forward to working with you again.

Sincerely,

Charles A. Billingsley
Program Manager

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TO

CAP GEMINI SOGETI
Alexanre Steiner
11 rue de Tilsitt
75017, Paris,
** C/O INPUT SARL - FRANCE **, France

TO:RC28-18
Order:121236
PO:

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
1		BIMO-RP	Internet S.I. & Prof. Services

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:

SHIPPED VIA:
❏ UPS ground
❏ 2-day Fed X
❏ Overnight Fed X
❏ Mail
❏ DHL
❏ DHL World Mail

ADM 495/C
2/95

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TO

DIGITAL EQUIPMENT CORPORATION
Jane Lincoln
12, Avenue des Morgines
P.O. Box 176, CH-1213
Petit-Lancy 1 Geneva,
Switzerland

TO:RD01-75B
Order:120813
PO:RC-495599

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
1		BIMO-RP	Internet S.I. & Prof. Services
1		BIPR-EO	US Sys Integ. Exec Overview

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:
			❏ UPS ground
			❏ 2-day Fed X
			❏ Overnight Fed X
			❏ Mail
			❏ DHL
			❏ DHL World Mail

ADM 495/C
2/95

INPUT

San Francisco - 1881 Landings Drive
Mountain View, CA 94043-0848 (415) 961-3300

New York - 400 Frank W. Burr Blvd.
Teaneck, NJ 07666 (201) 801-0050

Washington, D.C. - 1921 Gallows Rd., Ste. 250
Vienna, VA 22182-3900 (703) 847-6870

London - Cornwall House, 55-77 High Street
Slough, Berkshire SL1 1DZ, England +44 (0)1753 530444

Paris - 24, avenue du Recteur Poincaré
75016 Paris, France +33 1 46 47 65 65

Frankfurt - Sudetenstraße 9
D-35428 Langgöns-Niederkleen, Germany +49 6447-7229

Tokyo - Saida Building, 4-6, Kanda Sakuma-cho, Chiyoda-ku,
Tokyo 101, Japan +81 3 3864-0531

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TO

INDUSTRY, SCIENCE & TECHNOLOGY
Colleen O'Brien
235 Queen Street
Room 954-A
Ottawa,   K1A OH5
Ontario, Canada

TO:RI79-21
Order:112877
PO:

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
1		BIMO-RP	Internet S.I. & Prof. Services

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:
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TO

JANIAUX
Philippe Janiaux
3, Villa De Bellevue
94120, Fontenay S/Bois,
France

TO:RJ85-1
Order:120610
PO:

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
1		BIPR-EO	US Sys Integ. Exec Overview

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:
			❑ UPS ground ❑ 2-day Fed X ❑ Overnight Fed X ❑ Mail ❑ DHL ❑ DHL World Mail

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San Francisco - 1881 Landings Drive
Mountain View, CA 94043-0848 (415) 961-3300

New York - 400 Frank W. Burr Blvd.
Teaneck, NJ 07666 (201) 801-0050

Washington, D.C. - 1921 Gallows Rd., Ste. 250
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London - Cornwall House, 55-77 High Street
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Paris - 24, avenue du Recteur Poincaré
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Frankfurt - Sudetenstraße 9
D-35428 Langgöns-Niederkleen, Germany +49 6447-7229

Tokyo - Saida Building, 4-6, Kanda Sakuma-cho, Chiyoda-ku,
Tokyo 101, Japan +81 3 3864-0531

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TO

NEC CORPORATION
Koichi Uchida
7-1, Shiba
Minato-ku
Tokyo,   108-01
***C/O INPUT KK - JAPAN   ***, Japan

TO:RN14-7
Order:120899
PO:392

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
2		BIPR-EO	US Sys Integ. Exec Overview
2		BIMO-RP	Internet S.I. & Prof. Services

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:
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2/95

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TO

TRW FINANCIAL SYSTEMS INC.
Linda F. Burton
300 Lakeside Drive
Oakland, CA 94612-3540

TO:RT01-69
Order:121055
PO:CONTRACT

QUANTITY	BACK ORDERED	PROJECT CODE	TITLE
2		BIPR-EO	US Sys Integ. Exec Overview
2		BIMO-RP	Internet S.I. & Prof. Services

DATE	PACKED BY:	NUMBER OF PACKAGES	SHIPPED VIA:	
			❏ UPS ground	
			❏ 2-day Fed X	
			❏ Overnight Fed X	
			❏ Mail	
			❏ DHL	
			❏ DHL World Mail	

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2/95

BIMO

AFFILIATED COMPUTER SERVICES
John Winslow
Manager
2828 North Haskell
Dallas, TX 75204
*** C/O GARY WILLIAMS ***,

ANDERSEN CONSULTING
Martha Jameson
Mgr. Mkt/Competitive Analysis
100 South Wacker Drive
10th Floor
Chicago, IL 60606

AT&T
Lidia V. Huk
Information Research Center
150 Morristown Road
Plaza 202, Room W200-27
Bernardsville, NJ 07924

AT&T IRC
Loraine Mocenigo
Assistant Staff Manager
295 North Maple Avenue
Room 3348G3
Basking Ridge, NJ 07920

AT&T SOLUTIONS
Philipp R. Hornthal
Dir. Market Management
Franklin Square, #1100
1300 I Street N.W.
Washington, DC 20005

BELLCORE
Mary Jo Amari
Manager
290 West Mt. Pleasant Avenue
LCC 3LC213C
Livingston, NJ 07039

C&C INTERNATIONAL, LTD
Isao Kishinoue
Senior Vice President
5-7-1, Shiba
Minato-ku
Tokyo, 108-01

** C/O INPUT KK - JAPAN   *, Japan

CAP GEMINI SOGETI
Alexanre Steiner
Assoc. Corpor. Development
11 rue de Tilsitt
75017, Paris,
** C/O INPUT SARL - FRANCE **, France

COMDISCO, INC
Sandra Stevens
Product Marketing Manager
6111 North River Road
9th FLoor
Rosemont, IL 60018

COMPUTER SCIENCES CORPORATION
Gail Lepard
Dir. Corporate Market Research
2352 Utah Avenue
El Segundo, CA 90245

DIGITAL EQUIPMENT CORPORATION
Tracey Dyson
Serial Coordinator
M/S MR01-2/A94
200 Forest Street
Marlboro, MA 01752-3011

DIGITAL EQUIPMENT CORPORATION
Elise McMullin
Mkt. Strategy MultiVendor C/S
40 Old Bolton Road
OG01-2/F13
Stow, MA 01775-1215

DIGITAL EQUIPMENT CORPORATION
Spitbrook Library
110 Spit Brook Road
ZK01-3/B31
Nashua, NH 03062-2698

DIGITAL EQUIPMENT CORPORATION
Andy Breeding
Manager
30 Porter Road
M/S LJO2/I4
Littleton, MA 01460-1446

DIGITAL EQUIPMENT CORPORATION
Jane Lincoln
EMRA Library
12, Avenue des Morgines
P.O. Box 176, CH-1213
Petit-Lancy 1 Geneva,

Switzerland

GE INFORMATION SERVICES
Abbey P. Alpern
Competitive Marketing Manager
401 N. Washington Street
M/S MN3 C3B
Rockville, MD 20850

GRANT THORNTON LLP
Susan J. Meyer
Manager
800 One Prudential Plaza
130 East Randolph Drive
Chicago, IL 60601

GTE DATA SERVICES INC.
Tom Walters
Manager, Business Development
1 East Telecom Parkway
MS# A3C
Temple Terrace, FL 33687

IBM CORPORATION
Ilse Ruckert
U.S. M&S Information Services
1133 Westchester Avenue
Mail Drop 147 IC-1301
White Plains, NY 10604

IBM CORPORATION
Dennis Hawkins
Senior Market Analyst
1133 Westchester Avenue
M/S 214
White Plains, NY 10604

INDUSTRY, SCIENCE & TECHNOLOGY
Colleen O'Brien
Manager
235 Queen Street
Room 954-A
Ottawa,   K1A OH5
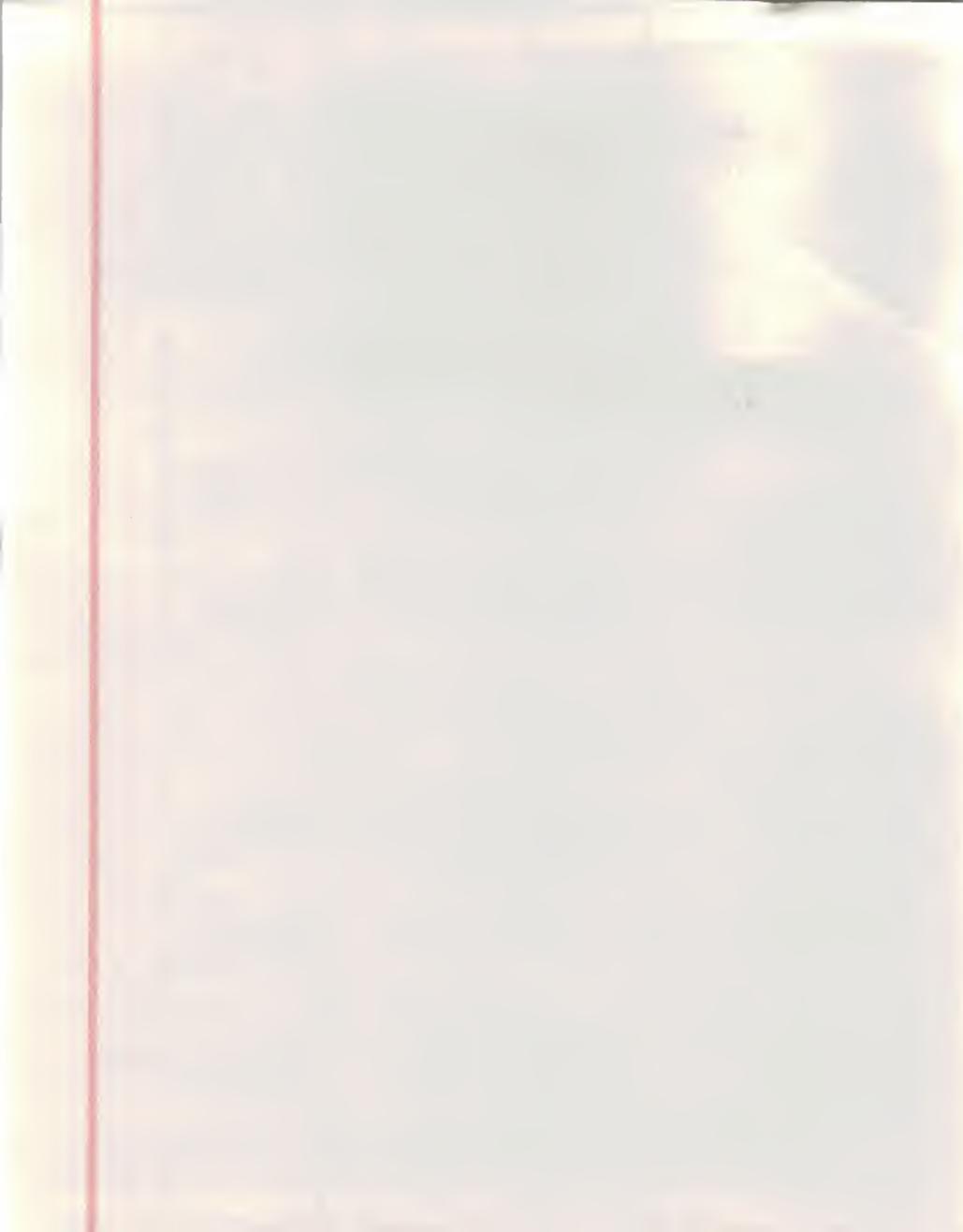
Ontario, Canada

JANIAUX
Philippe Janiaux
Journalist
3, Villa De Bellevue
94120, Fontenay S/Bois,
France

MCKINSEY & COMPANY
Melanie McArthur
Market Research
55 East 52nd Street
New York, NY 10022

MCKINSEY & COMPANY
Librarian
Corporate Resource Center
630 Hansen Way
Palo Alto, CA 94304

BIMO

MCKINSEY & COMPANY, INC.
Susan Porras
Manager, Information Services
2200 Ross Avenue
Suite 5200
Dallas, TX 75201

MITRE CORPORATION
Beth Kersh
Manager
202 Burlington Road
Bedford, MA 01730-1420

MITRE CORPORATION
Beth Roth
Supervisor Information Service
7525 Colshire Drive, J103
McLean, VA 22102-3481

NEC CORPORATION
Koichi Uchida
C&C System Business Plan. Dept
7-1, Shiba
Minato-ku
Tokyo, 108-01

***C/O INPUT KK - JAPAN ***, Japan

TRW FINANCIAL SYSTEMS INC.
Linda F. Burton
Librarian
300 Lakeside Drive
Oakland, CA 94612-3540

SAM ALBERT ASSOCIATES
Sam Albert
President
27 Kingswood Road
Scarsdale, NY 10583

STERLING SOFTWARE
Phillip A. Moore
Senior Vice President
8080 N. Central LB53
Suite 1100
Dallas, TX 75206

STRATUS COMPUTER, INC.
Susan Nosek
Service Product Marketing Mgr
55 Fairbanks Boulevard
M2
Marlboro, MA 01752

SUNGARD DATA SYSTEMS INC.
Richard C. Tarbox
Vice President, Development
1285 Drummers Lane
Wayne, PA 19087

****
Labels Written = 46
Double Labels = 4
****

INPUT

1881 Landings Drive

Mountain View, CA 94043-0848

Tel. (415) 961-3300

Fax (415) 961-3966

February, 1996

Dear Colleague:

Enclosed is your copy of INPUT's report, *Impact of the Internet on Systems Integration and Professional Services*. It is one more of the publications from INPUT's Systems Integration and Professional Services Program.
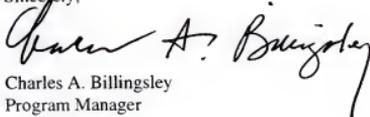
Growth in the systems integration and professional services markets will continue to be strong in the coming years. INPUT estimates the compound annual growth rates (CAGR) for these markets are 16% and 13% respectively. A major factor in this growth will be the Internet. Service providers who are able to help clients understand and tap the potential of the Internet will be the biggest benefactors. Knowing which industries to focus on during this growth will also separate the winners in the market from the "also rans".

This report contains two major sections: the first section explores the continuing expansion of the systems integration (SI) and professional services (PS) markets and examines the factors that account for this growth. A specific focus of the report is the influence of the Internet and how it will help to determine the difference between industry winners and losers. INPUT looks specifically at emerging applications and identifies the applications to watch and the issues to watch out for.

The report also provides an analysis of the systems integration and professional services markets in the United States from 1995 to 2000 and updates the *U.S. Systems Integration and Professional Services Markets, 1994 - 1999*. It summarizes the trends and market factors influencing the size and composition of both the commercial and public sector segments of the U.S. information services markets. It includes highlights of fifteen vertical industry markets.

I am sure that you will find *Impact of the Internet on Systems Integration and Professional Services* both useful and informative. Please contact me if you have any comments or questions about this document or any other INPUT publication.

Sincerely,

Charles A. Billingsley
Program Manager